Table of Contents

Welcome

Welcome to the Department of Water Affairs and Forestry's (DWAF's) Water Management System Procedural Manual! The WMS is a computer-based system specifically developed for DWAF to support decision making, and to provide you, you, with the technology and information needed to effectively manage water resources, sources and monitoring in South Africa. The WMS Procedural Manual is designed to assist you in using this system effectively.

Where to begin?

This WMS Procedural Manual will take you through the processes needed to complete your tasks on the WMS system.

➢ If you are a **previous WMS user** dive right into the Modules section where you will find the specific module(s) needed to perform your function on the WMS system. Follow the steps provided.

➢ If you are a **first time WMS user**, begin by reading through the Getting Started, System Requirements, Basic Steps, How to Access the System, Navigation and Searching and Closing Down sections. Once you have acquainted yourself with the basic system information, decide if you will be working on the **Water Resource Management** sub-system, the **Monitoring Management** sub-system, or the **Arcview GIS** subsystem. Depending on which sub-system you will be working on, log onto the system by following the steps in the How to Access the System section of this manual. Then turn to this manual's module section, and select the module that you need to work on. Follow the steps provided.

Getting Started

WMS is a complex system, and as a user you will probably only need to complete one or two modules when performing your work function. However, when working on WMS, it is important to understand the functioning of each module, and understand how the system and its modules function together to deliver the end results. Here is a basic step-by-step guide that takes you through the steps needed to work on the system, from beginning to end.

STEP 1: Setup Master Lists - This function is performed by a central administrator - *if the information you require does not appear in Master Lists contact your Central Administrator*

- ➢ Classification Management

- ➢ Source Providing Data Maintenance

- ➢ Environmental Survey Method Setup

- ➢ Map Display Properties

- ➢ Seasonal Date Ranges

- ➢ System Administration

- ➢ Stakeholder Administration

- ➢ Layer Administration

- ➢ Address Code Administration

STEP 2: Setup Stakeholders

- ➢ Register Liaison Entity - Person

- ➢ Register Liaison Entity - Organisation

- ➢ Add and Link Addresses

- ➢ Structures - Monitoring Structure

- ➢ Structures - Laboratory Analysis Structure

- ➢ Structures - Employee Structure

- ➢ Structures - Impact or Relationship Structure

- ➢ Structures - Managing Water

- ➢ Structures - Supplying Monitoring Data

- ➢ Structures - Forum Management

STEP 3: Setup Monitoring Network

- ➢ Setup Management Areas

- ➢ Setup Features in Management Areas

> Setup Water Features: Source Features

> Setup Water Features: Destination Features

> Setup Water Features: Transfer Features

> Setup Water Features: Flow Association

> Setup Water Features: Monitoring Point

> Link Monitors at Monitoring Point

STEP 4: Setup GIS

STEP 5: Setup Standards and Objectives

STEP 6: Setup Peripheral Information for Monitoring Programme - Some of these functions* are performed by a central administrator - *if the information you require does not appear in Peripheral Information contact your Central Administrator*

> Setup Peripheral Information - Sample Type*

> Setup Peripheral Information - Monitoring Action*

> Setup Peripheral Information - Container*

> Setup Peripheral Information - Variable Groups

> Setup Peripheral Information - Analysis Methods

> Setup Peripheral Information - Default Transport and Packaging from Monitor to Laboratory

> Setup Peripheral Information - Defaults for Programme Samples

STEP 7: Monitoring Programme Registration and Administration

> Register (Monitoring) Programme

> Register Programme Design

> Edit/(Check) Programme Samples

> Approve/Consolidate Programme Samples

> Print Schedules

> Receive Programme Samples and Input Results

> Check and Release Results

STEP 8: Result Extraction and Graphical Data Representation

➢ Setup Parameters - Monitoring Feature Parameters

➢ Setup Parameters - Monitoring Variable Parameters

➢ Extract Report

➢ Extract Graphs

➢ Compliance Determination

➢ Using Multimedia

General WMS Business Rules:

These rules apply to simplify the names for both data typist and users of WMS.

➢ Do not use full stops and spaces in abbreviations, for example T.L.C. OR T L C

➢ Do not use full stops anywhere not even at the end of a name

➢ For standardisation and to ease of ranging on subjects everything must, as far as possible, be translated into **English**

    ➢ Rioolwerke of R/W   -   Sewage Works

    ➢ Vaste Afval/Stortterein -   Solid Waste

    ➢ **Exception to rule:** if the "subject" is known only in Afrikaans or any other language.

➢ No spaces before and after hyphen. Use the hyphen just as according to the following example: African Breweries-Wadeville (to indicate a City/Suburb/Town)

➢ All letters must be **capitals** (UPPER CASE) Exception – see 15

➢ A word like **Vanderbijl Park** will be written loose (in English)

➢ Do not use the brackets for PTY or LTD

➢ Do not use the: (colon)

➢ Do not use abbreviations in the Name of an Organisation except for:

    ➢ PTY   -   propriety

    ➢ LTD   -   limited

    ➢ GM   -   gold mine

    ➢ PROD   -   product(s)

    ➢ CHEM   -   chemicals

    ➢ CO   -   company

    ➢ SA   -   South Africa

    ➢ CO-OP   -   Co-operation

    ➢ CORP   -   Corporation

    ➢ LC   -   Local Council

    ➢ MC   -   Metropolitan Council

➢ Or for an organisation that is known by the abbreviation of the full name, e.g. **KWV**, **ESKOM**, and **ISCOR**

➢ If in **doubt, don't**

➢ **The Abbreviation** of each Organisation must be unique. The abbreviation is used in Monitoring Management. Create an Abbreviation that will enable other users to identify the specific Organisation.
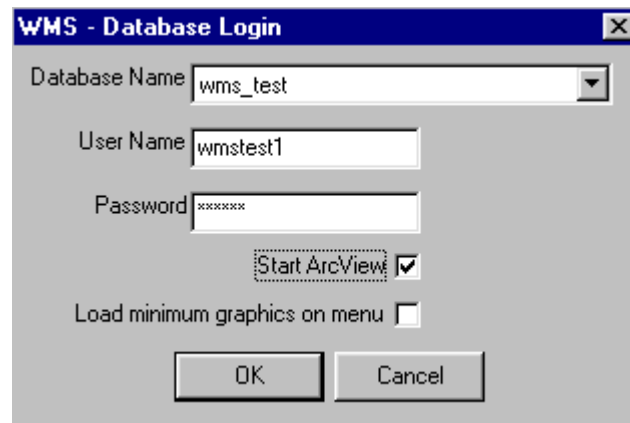
➢ Before adding an Organisation or Person, please make sure that it does not exist in another form (at). E.g. KWV might be entered as PAARL-KWV   Tip: search on *KWV* This last example, PAARL-KWV, should be KWV-PAARL. A search on KWV* will then turn up all the KWV's. Example: KWV-PAARL; KWV-ROBERTSON; KWV-VREDENDAL; etc.

➢ **PLEASE** check the spelling before accepting. If spelling of a name or abbreviation is "wrong", the name will be difficult to turn up in a search. If you discover an obvious error, please inform a senior user to contact the "owner" for rectification.

➢ **Addresses** should be written in UPPER CASE (CAPITAL LETTERS). Most of the addresses have been entered in the format:

   ➢ P O BOX 123 or PRIVATE BAG X1234

   ➢ **Note:** The town and postal code does not form part of the Address. The town or city and the postal code are entered in the **Area** field.

➢ **Dialling codes** Should be created as follows: in the Area field the Type* is "Service Area"; in the Name* field the "name of the service area" in full, e.g. POTCHEFSTROOM. In the Area Code field the Area Code Type* is Dialling Code and the Area Code* is selected from a look up list.

➢ **Cell phone numbers:** 082 and 083 (and others) are considered as dialling codes and can be retrieved by entering **VODACOM** or **MTN (and others)** in the lookup field.

How to access the system (Organisational Login)

The Water Management System makes use of three different sub-systems for its functioning namely the Water Resource Management System, GIS ArcView and the Monitoring Management System. Depending on which sub-system needs to be accessed, a specific login procedure will be used.

Login procedure for Water Resource Management *(on the Delphi programme development tool)***:**

1. Double-click on the [icon] **Water Resource Management Information** icon.

2. A logon screen will appear:

> Ensure the correct Database has been selected in the **Database Name** field. If not, click on the [icon] **Drop Down** button and focus the cursor on the required database.

[icon] *Ensure you provided the correct User Name and Password.*

> Enter you **Name**. *This is your own login name.*

> Enter the required **Password**. *This is your own password.*

> If you require **ArcView**, click on the ArcView checkbox. *Note that ArcView must be loaded onto your system.*

> If you would like to **Load minimum graphics on menu**, click on the Minimum graphics checkbox. *Minimum graphics means that the Water Management System picture will not appear on the main menu's background. (There is no difference in the functioning, and the picture has no specific purpose).*

3. Click on the **OK** button to process the information.

4. The **Organisational Login** screen appears. *(This Login form is used to select an organisation and enter a pin code for the selected organisation in order to obtain access to the Water Management System. This access will only permit you to work on the records for the organisation that you logged in as.)*

Organisation Login

Organisation Id	
Organisation Name	
Pin Code	****

Login   Exit

User :wmstest1 | Database :wmst@inf_09_wmst | ORGANISATIONALLOGIN.DLL (23.0.0.0 | Query | ZOOM | OVF

TIP:

The central access control officer is responsible for granting all organisational access to the Water Management System. If you cannot log into the system, kindly contact your Central Access Control Officer or your System Administrator.

➢ Enter the **Organisational ID** or click on the **Zoom** button to open the Login Organisation Selection form and select the required organisation and tab.

➢ Enter the **Pin Code** in the field. *This is the organisation's pin code.*

➢ Click on the **Login** button to log onto the WMS Monitoring Management System.

5. The WMS **Water Resource Management** screen will appear with its menu options.
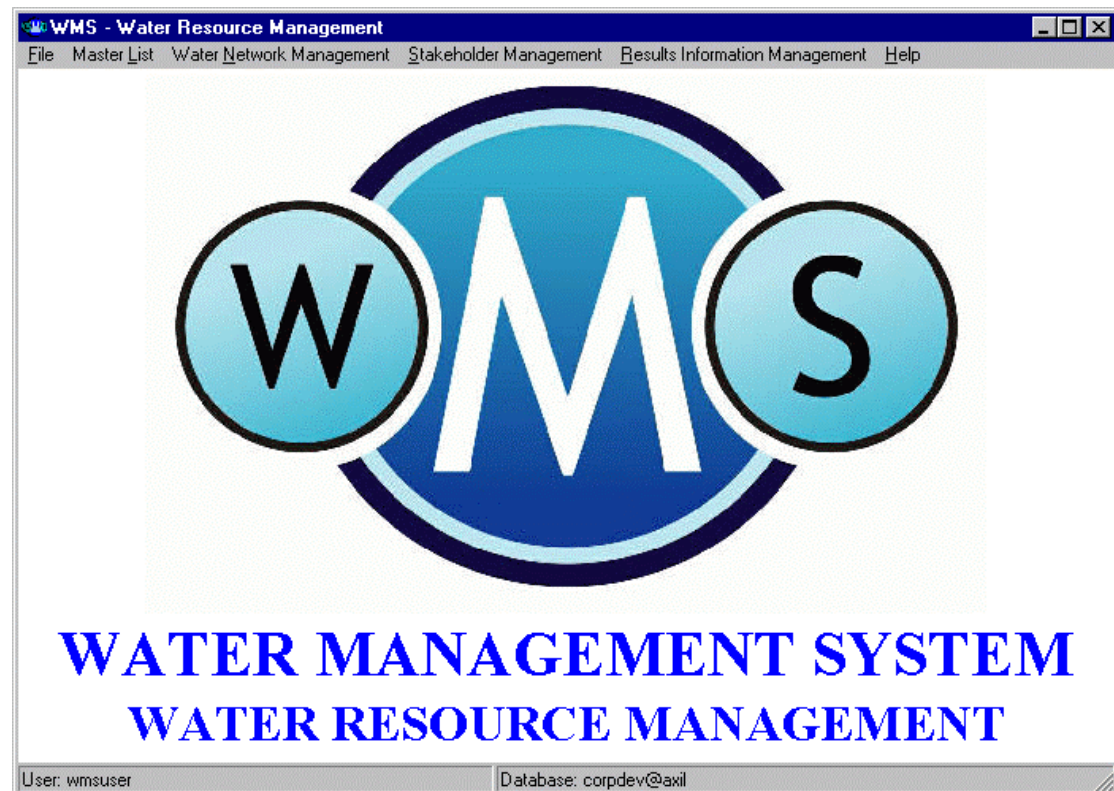
5. To open the **ArcView** (if not opened in no. 2) click on the **File** menu option, and select ArcView from the dropdown list, and load ArcView.

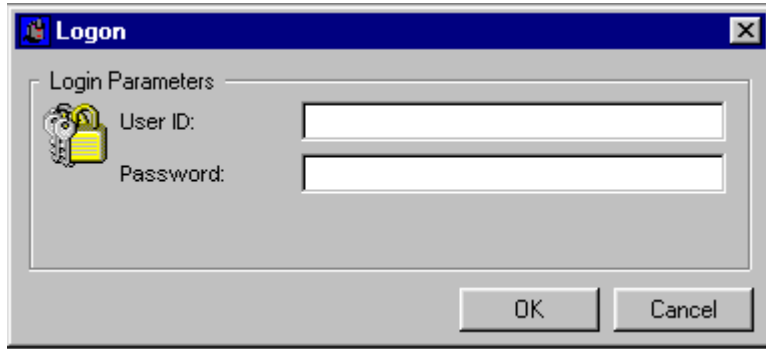6. A logon screen will appear:
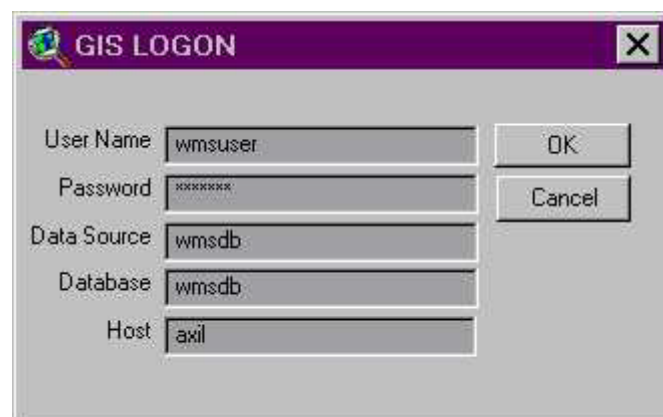
> ➢ Enter you **Name**. *This is your own login name.*

> ➢ Enter the required **Password**. *This is your own password.*

> ➢ Ensure the correct Data source has been selected in the **Data source** field. If not, click on the ⏷ **Drop Down** button and focus the cursor on the required data source.

> ➢ Ensure the correct Database has been selected in the **Database Name** field. If not, click on ⏷ **Drop Down** button and focus the cursor on the required database.

> ➢ Ensure the correct Host has been selected in the **Host** field.

7.   Click on the **OK** button to process the information, and display this successful logon message.

Login Procedure for Monitoring Management *(on the Magic programme development tool)***:**

1.   Double-click on the 🌐 **Monitoring Management** icon.

2.   A logon screen will appear:

> ➢ Enter you **Id**. *This is your own login name.*

> ➢ Enter the required **Password**. *This is your own password.*

🔲 **TIP:** *If you have been working on the Magic System, it is unnecessary to repeat the logon process. Just place the cursor on the File menu option, and click on Open Application. An Application List form will appear. Focus on the Monitoring Management Programme, and click on the Select button.*

3.   Click on the **OK** button to process the information.

4.   The **WMS Monitoring Management** screen will appear with its menu options.

🔲 **TIP:** *Depending on the way your computer system has been set up, either Monitoring Management or Magic runtime will open. If Magic runtime has opened, click on the "Open Application" icon, or the menu option under "File" and select "WMS".*

5. After the normal Magic application login, this Organisational Login form will appear. This form is used to select an organisation and enter a pin code for the selected organisation in order to obtain access to the Monitoring Management system. This access will only permit you to work on the records for the organisation that you logged in as.

> ➢ Enter the **Organisational ID** or click on the **ZOOM** **Zoom** button to open the **Lookup User Organisation** form and select the required organisation.
> ➢ Enter the **Pin Code** in the field.
> ➢ Click on the **Login** button to log onto the WMS Monitoring Management System.

TIP: *The central access control officers are responsible for granting all organisational access to the Monitoring Management system. If you cannot log into the system, kindly contact your Central Access Control Officer or your System Administrator.*

6. The Printer Dialogue Parameters Setup box then appears.
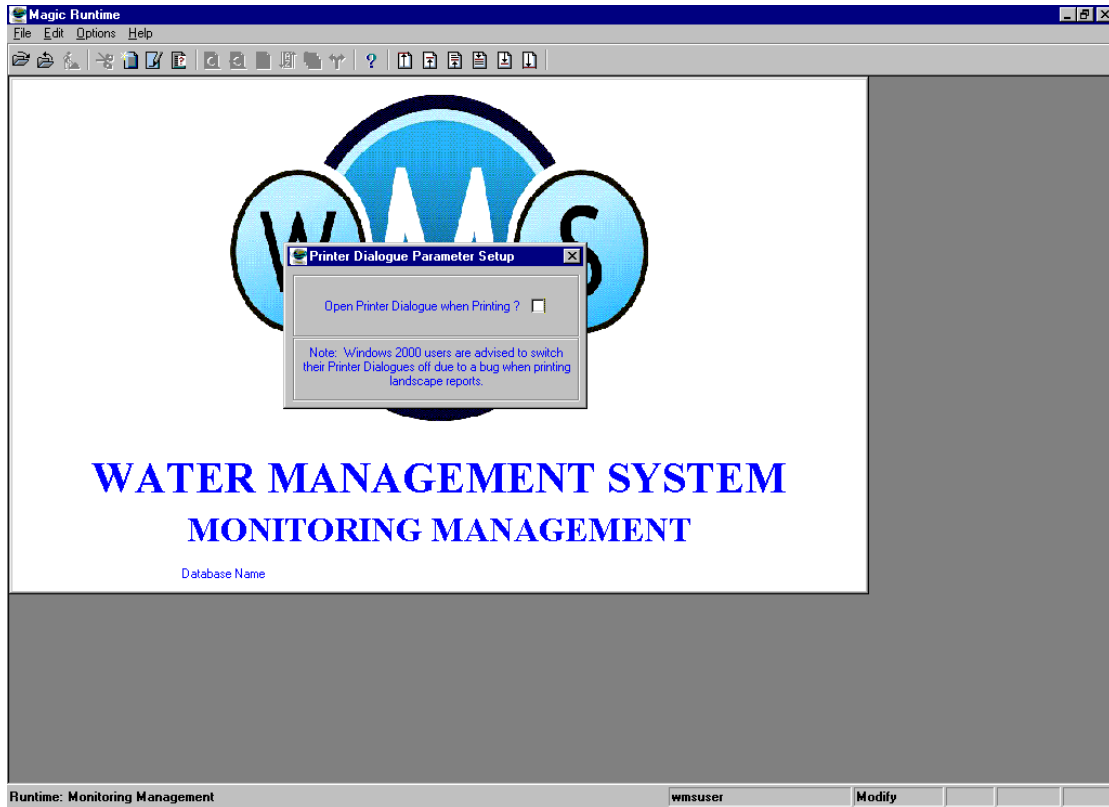
7. Either check the checkbox on to confirm that the system should open the printer dialogue when printing or click on the close box on the top right-hand side of the Printer Dialogue Parameters Setup box.

Navigation and Searching

Row Navigation

Option 1: Menu Navigation Bar

The menu bar contains a menu item "Navigation" with different menu options:

➢ First record/Begin table: By clicking on this button the cursor will go to the first record in the grid.

➢ Previous screen: By clicking on this button the cursor will go to the previous screen. This is only available on the Magic system.

➢ Previous record/row: By clicking on this button the cursor will go to the previous record/row in the grid.

➢ Next record/row: By clicking on this button the cursor will go to the next record/row in the grid.

➢ Next screen: By clicking on this button the cursor will go to the next screen. This is only available on the Magic system.

➢ Last record/end table: By clicking on this button the cursor will go to the next record or last table in the grid.

Field Navigation

Two options can be used to navigate through the field data, by mouse or keyboard:

Option 1: Mouse

By clicking on an available field, you will be positioned on that field.

Option 2: Keyboard

➢ [Tab] will move you to the next field.

➢ At the end of a row, click on the tab to take you to the next row.

➢ [Shift + Tab] will move you to the previous field.

➢ Left and right arrows will move you to the previous and next fields respectively, within the row.

➢ [Alt + down arrow] within a field with a dropdown list box will open the list box for selection.

Short Cuts

Here are a few short cut options to help you work at a faster pace. Remember different shortcuts are used for the two different sub-systems.

Water Resource Management system shortcuts:

➢ Click on the **F1** button for **Help**

➢ Click on the **F3** button to **Delete**

➢ Click on the **F4** button to **Add**

➢ Click on the **F9** button to **Accept**

➢ Click on the **Ctrl and E** button to **Edit**

➢ Click on the **Ctrl and the Z** button to **Cancel**

Monitoring Management system shortcuts:

➢ Click on the **F1** button for **Help**

➢ Click on the **F3** button to **Delete**

➢ Click on the **F4** button to **Create**

➢ Click on the **F2** button to **Cancel/Escape**

➢ Click on the **F6** button to make the screen wide or normal

➢ Click on the **F7** button to obtain a selected report

➢ Click on the **Ctrl + E** button to **Edit**

➢ Click on the **Ctrl + L** button to **Locate**

➢ Click on the **Ctrl + N** button to **Locate Next record used** after one has used **Ctrl + L**

➢ Click on the **Ctrl + R** button to **Range (sort)** records according to the specified value

➢ Click on the **F8** button to **Range To** (used after the value of Ctrl and R was entered)

➢ Click on the **Esc key (top left on the keyboard)** to **Cancel**

➢ Click on the **F10** button to **Exit the form**

➢ Click on the **F5** button to **Zoom**

➢ Click on the **Ctrl + D** button to **Ditto in Create mode**

➢ Click on the **Ctrl + G** button to **open the Report repository**

➢ Click on the **Ctrl + K** button to **View by Key** in order to sort records in a preprogrammed sorting order

➢ Click on the **Ctrl + M** button to **Edit records**

➢ Click on the **Ctrl + Q** button to **Query records** (no editing will be possible)

➢ Click on the **Ctrl + S** button to **Sort records** in an order defined by you (you)

Editing Options

Options to **ADD** new records:

➢ Click on F4 *(this is the easiest option as you can focus anywhere in the form where you want to add a new record, then click on F4. This creates a new line in the form and you can see other entries above and below the new line. The advantage of this method is that one can copy data [Ctrl+D] from any record in the line directly above it to the new line and then alter the record as required.)* **OR**

➢ Ctrl+C **OR**

➢ Click on the Edit menu option Create Line **OR**

➢ Click on the or button **OR**

➢ Go to the last record and click on the next row button or key.

Options to **EDIT** records:

➢ Ctrl+E OR

➢ Click on or button

Options to **DELETE** records:

➢ Click on F3 **OR**

➢ Click on the or button

Closing Down

Closing a screen

➤ **Option 1**

A screen can be closed by using the standard windows closing method of clicking on the ⊠ **cross** at the top right hand corner of the screen. The programme will then go to the main menu option.

➤ **Option 2**

Menu bar

Choose the menu item **File**, and then **Close**.

The programme will then go to the main menu option.

Closing the main menu

➤ **Option 1**

A screen can be closed by using the standard windows closing method of clicking on the ⊠ **cross** at the top right hand corner of the screen. The programmes will then close/shut down.

➤ **Option 2**

Click on the **EXIT** button.

➤ **Option 3**

Click on the **F10** button *(only available on the Monitoring Management sub-system).*

TIP: If you are busy in the Monitoring Management system, and the screen/programme "hangs/freezes", or a "Locked Row" message appears:

Repeatedly click on Esc and F10 on your keyboard until the programme closes. Please be patient, as the system will try and save the changes that were effected before the problem occurred.

If the programme still fails to close after several attempts, click on Ctrl+Alt+Delete on your keyboard to open "Netware Security". Click on the Task List to open the Windows Task Manager. Click on the task that is "Not Responding" to highlight it, and then click on the "End Task" button. IMPORTANT: After you have ended the task, close all other programmes and restart the computer.

Basics of WMS

WMS Overview

The Water Management System (WMS) is a water quality management information system that has been developed to support the objectives of the National Water Act. WMS addresses and manages the monitoring systems component of the National Water Act and then captures the data collected from monitoring to be used for assessing and disseminating information. The **Water Management System** (WMS) is a working computer programme that assists the Water Quality Manager in making decisions that are scientifically sound. **Firstly**, by assessing the impact through the position of the site, and other activities and the water resources in relation to that site. **Secondly** to implement a monitoring programme and to ensure that it is integrated into other existing monitoring programmes. To manage that monitoring programme by ensuring that the required monitoring actions, frequency of monitoring, prescribed analytical methods are followed and that data with a high level of integrity is collected. **Thirdly**, to set the Resource Quality Objectives for the resource, and Standards for Water Users (e.g. discharges), and then to determine the extent of compliance of these objectives and standards.

The Water Management System contains three sub-systems:

1. The **Water Resource Management** sub-system is used to achieve the sustainable use of water, protection for the quality of water resources is necessary to ensure sustainability of the nation's water resources in the interests of all water users. The Water Network defines all the geographical features and the human factors necessary to achieve the given objectives.

    The Water Resource Management sub-system deals with the following sub-modules:

    ➢ **Master Lists** *(used to create and maintain standard reference information and standard processes in WMS)*

    ➢ **Water Network Management** *(used to register stakeholders participating in managing the water resources, define management areas, water resources, transfer facilities, water use sites, water use, and the setting of objectives and standards)*

    ➢ Stakeholder Management *(used to register functional structures and geographical feature stakeholders).*

    ➢ **Result Management Information** *(used to set parameters, and extract reports and graphs in order to accurately manage water resources)*

    ➢ **Multimedia**

2. The **Monitoring Management** sub-system is used to effectively and efficiently manage resource quality operational monitoring on a national basis.

    The Monitoring Management sub-system deals with the following main modules:

    ➢ **Peripheral Information** *(used to create and maintain standard reference information for monitoring management)*

    ➢ **Monitoring Programmes** *(used to register the requirements for recurring monitoring and associated information)*

    ➢ **Sample and Results Registration** *(used to capture monitoring samples and results into the WMS system)*

> **Sample and Results Administration** *(used to ensure the correct monitoring information is gathered through quality control)*

3. The **Water Management System GIS** sub-system is used to geographically display water resource information, in order to assist you in interpreting and determining the quality and status of water resources. Water resource information that can be obtained and viewed via this system includes the geographical location and representation of water features, as well as the orientation and context of one water feature in relation to other water features.

To provide additional customised functionality for the integration of the geographical aspects of water resource features and water resource information, the WMS GIS sub-system also makes use of ArcView GIS, a tool that enables you to visualise, explore, query and analyse data geographically. WMS Geographical information is stored in the database as Layers, and these layers provide a means to distribute geographical information for sharing to all users of the WMS.

MONITORING MANAGEMENT

Why do we need monitoring programmes?

Officers need information on water quality in their Catchments in order to properly manage their Catchments and the industries, mines, sewage works etc that impact on water quality. For instance, if you want to monitor the impact that a sewage works discharge has on a river, you will take a water sample on the actual effluent discharged from the sewage works, and also one upstream and one downstream of where the sewage works discharges into the river. You will also analyse the water sample for specific variables that you know from training and experience that will indicate sewage pollution e.g. nitrates or E. coli. However, if you want to monitor for impacts of a coalmine, you will analyse for other variables such as pH and sulphates.

Observed, derived and sample measurements

Some variables can be measured in various ways:

> **Observed**

Some variables can be measured in the field and are not sent to the laboratory for analysis. For example, you can measure temperature in the field (actually temperature can only be measured in the field because if you send the sample into the laboratory, the temperature will change!). These measurements are therefore OBSERVED in the field. Other examples of observations include pH, electrical conductivity.

> **Derived**

Some variables are calculated from other variable concentrations. For example Total Dissolved Salts can be DERIVED or calculated from adding the concentrations of all the salts in the water sample. Another example is alkalinity, which is calculated from the concentrations of Calcium Carbonate.

> **Sample measurement**

In most cases, a water sample is sent to a laboratory where it is measured (analysed) using specific methods. Most of the variables in the monitoring programmes you will register on WMS will be SAMPLE measurements.

Elements in monitoring programme design on WMS:

On WMS, monitoring programmes have been divided into Monitoring Programme Design, and Monitoring Programme Administration. Monitoring Programme Design involves information on the monitoring points, variables, frequency etc. Monitoring Programme Administration involves operational information which specifies what bottles must be used to take the sample, if any preservative is to be used etc.

Elements in monitoring programme administration on WMS:

Monitor

The monitor is the Organisation that is responsible for taking the actual water sample. On WMS, the monitor for monthly Catchment monitoring programmes in the Gauteng region is always specified as Gauteng Department of Water Affairs and Forestry. In some instances, other Organisations will also be responsible for monitoring. For example, our Department issues a license to Sasol that requires Sasol to conduct monitoring at various points. When you register this monitoring programme, the monitor will be Sasol.

Container and preservative

When you register a monitoring programme on WMS, you must specify what containers will be used to take the sample, and also if any preservative will be used. In the Gauteng region, the officers commonly use one or two-litre plastic bottles supplied by the laboratory that analyses the samples. However, sometimes a glass bottle must be used instead of plastic, depending on what the sample will be analysed for, because the substances in the plastic of the bottle can affect the results. For example, should you want to analyse for fluoride, you will use a glass bottle, because if you use a plastic bottle it can affect the results and make it inaccurate.

Also, sometimes a sample must be kept in a dark bottle because the sun breaks down the substance you are trying to measure and will therefore affect results and make them inaccurate e.g. cyanide.

Preservatives

A sample's consistency changes from the time that it is taken to the time that it is analysed. A good practice is to analyse a sample as soon as possible after it is taken. A special treatment or preservative is used to prevent the breakdown or decay of samples. Preservative measures can range from keeping the sample cold and dark to the adding of a chemical substance. If a preservative is used to preserve a water sample, this must also be registered on WMS.

Laboratory

When you register a monitoring programme, you must register the laboratory that will analyse the water samples. In instances where another organisation must conduct monitoring as discussed above, Sasol for example may use its own in-house laboratory, or might take it to a different laboratory. These laboratories must also be registered on WMS e.g. Sasol laboratory.

Laboratory analysis methods

The method used by the laboratory to analyse the water samples must also be registered on WMS. Note: There will be a method of analysis for each variable or parameter. In Gauteng most of the monitoring programmes you will register will use Erwat laboratory methods – these methods need only be registered once on WMS, and you will then simply link the monitoring points and variables you register to the laboratory i.e. Erwat, and link Erwat to the already registered analysis methods.

Programme Consolidation

Once you have registered a monitoring programme, it must be COLSOLIDATED with existing monitoring programmes. Remember that our officers are not the only people conducting monitoring, and when you consolidate a monitoring programme; WMS will determine or identify any duplication of monitoring.

The aim of **Consolidate Programme Actions** is to consolidate or combine monitoring actions, the number of samples taken at a monitoring point and the analysis in order to meet the requirements of ALL programmes at the point and to save resources. Example, instead of four monitors each going to a site to take a sample and have it analysed at a laboratory, consolidation can have one monitor taking the sample and have it analysed for all the variables that would have been analysed in the four different samples. There are exceptions to the rule.

WMS monitoring programme year

A calendar year has 365 days (non-leap year), 12 months of 28 (or 29 in leap years), 30 or 31 days. Some months therefore have 4 weeks while others have 4.5 or even 5 weeks. A calendar year has 52 weeks.

A year on WMS is somewhat different:

A year is still 365 days, but 1 week is exactly 7 days, and all 12 months have 4 weeks. Therefore, a WMS year has only 48 weeks (of seven days each).

But how does this affect programme registration? If you register a programme with a sampling frequency of twice a year, you must select a 24 weekly (48 weeks divided by 2) sampling frequency, and NOT 52 divided by 2 as would be according to a calendar month! This is important to remember.

Water Resource Management Overview

The **Water Resource Management** sub-system is used to achieve the sustainable use of water, protection for the quality of water resources is necessary to ensure sustainability of the nation's water resources in the interests of all water users. The Water Network defines all the geographical features and the human factors necessary to achieve the given objectives.

The Water Resource Management sub-system deals with the following sub-modules:

➢ **Master Lists** *(used to create and maintain standard reference information and standard processes in WMS)*

➢ **Water Network Management** *(used to define management areas, water resources, transfer facilities, water use sites, water use, and the setting of objectives and standards)*

➢ Stakeholder Management (*used to register stakeholders participating in managing the water resources)*

➢ **Result Management Information** *(used to set parameters, and extract reports and graphs in order to accurately manage water resources)*

➢ **Multimedia**

Water Network Management Overview

The Water Network Managements component of WMS manages the capturing, identifying and displaying of the water resources and sites which may impact on water quality i.e. Water Quality Sites. This includes any type of water body such as rivers and dams, as well as mines, industries etc. The WMS user can either request a list of water feature names, such as a list of river names, or dams, and these features can be displayed spatially e.g. to search for the Klip River, enter "Klip" on a query screen to obtain a list of Klip rivers. By clicking one button, the position of all the listed rivers will be displayed. Not only will you immediately be able to identify the location of the river, but also, should a river be selected to use on the system, the selection of the correct river will be ensured. The same applies to Water Quality Sites such as Sasol.

This module also allows the capturing of flow information i.e. you can specify source and destination features, as well as transfer features. For example, I can capture my source feature as Sasol, my destination feature as the Vaal River, and the transfer feature as a miscellaneous pipeline. This provides extremely valuable information to Catchment Managers.

The Water Network Management component deals with the following modules:

➢ Water Network
➢ Monitoring Network

➢ Management Areas

Stakeholder Management - Person

Introduction:

The objective of this module is to be able to query, add and maintain information pertaining to individuals such as people employed or associated with Government Departments, Provincial Departments, Local Authorities, Companies, Forums, Water Users (Mines, industries, sewage works), Interested and Affected Parties etc.

The functionality gives you the option to maintain the Person's information. The Person validation form will display existing personal records to ensure that duplicate records are not created. This module keeps an audit trail of all the Person record maintenance, changes, and is displayed on the History form.

In the following modules these people may also be related to other information such as organisation structures and multimedia records such as documentation and photographs.

You can also view the History where all historical changes made to the Person's record are shown.

Business Rules:

i.   Stakeholder Management records e.g. Person or Organisation should never be added and then left to stand alone on the system, but should always be linked as employee, member or multimedia.

ii.   The system is set up so that only capital letters may be used in this module. The reason for this is that the system searches are case sensitive.

iii. Always perform a search for the person you are interested in before you add a new entity – this is to reduce /avoid duplication.

iv.   Ensure that the information added to the system is correct and comprehensive.

v.   Follow the "General Business Rules for WMS" for the use of hyphenation, spaces, abbreviations etc.

vi.   In character fields, you will be prevented from entering illegal characters such as ", one (1), or [].

vii. Fields will automatically be trimmed – no spaces in front or behind a value will be stored. When more than one space is entered between characters, all spaces except one will be removed automatically.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Person** from the **Stakeholder Management** menu.

2.   **How to Search for a person by using the Maintenance form:**

2.1   Open the **Person Maintenance** form.

2.2   Click on the ⬛**Range** button and focus on a specific field.

2.3   Type the value in uppercase with the wildcard as postfix, e.g. GP-*, and enter.

2.4   To clear the range value, enter again.
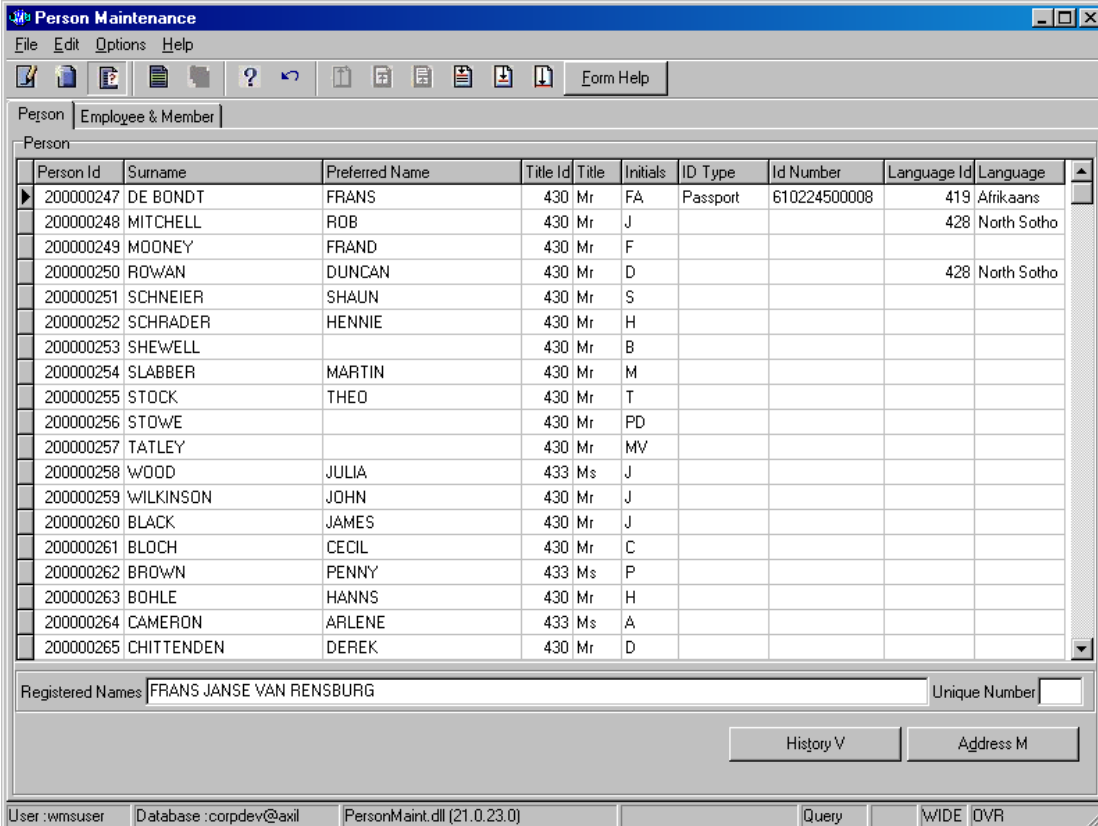
❓*Note: Use the standard-locate functionality while the form is in query mode. Focus on a specific field, and as you enter the system will locate the record according to the entered value. Use the standard filter on any non-lookup fields.*

3.   **How to Add a Person:**

❓*Note: Ensure the person you want to add does not yet exist by first performing a **Search for the Person**.*

3.1   Click on the ⬛**Create** button. An empty row/record displays to allow the creation of a new record.

Person Id	Surname	Preferred Name	Title Id	Title	Initials	ID Type	Id Number	Language Id	Language
1200000951	SADDF	SDFSF	433	Ms	DF	ID	44445454532	428	North Sotho
1200000959	DOOOO	DFFA	430	Mr	ER				
1200000969	ZIKALALA	MPUMI	433	Ms	M	Passport	2984374	420	Zulu
1200000970	MAMADOU	BABA	435	Prof	B	Passport	9322742347	418	English
1200000971	OLISEH	SUNDAY	430	Mr	SM	Passport	2783847	419	Afrikaans
1200000972	DJIMBA-DJIMBA	DJEMBA	430	Mr	M	Passport	123123	419	Afrikaans
1200000975	MATSERO	TSIPA	430	Mr	T	Passport	339013	428	North Sotho
1200000976	MUSHONGA	TSHEKWA	430	Mr	MM	Passport	234343	428	North Sotho
1200000977	FULELANI	LUFUNO	430	Mr	FM	Passport	33433	419	Afrikaans
1200000978	MAMASIA	TEMBA	430	Mr	TM	Passport	344556	419	Afrikaans
1200000981	MULIMA	RAY	430	Mr	R	Passport	2344	419	Afrikaans
1200000985	MUMU	MUTU	430	Mr	MM	Passport	2345	419	Afrikaans
1200000986	TSHENUWO	JAMES	430	Mr	JM	Passport	23344	419	Afrikaans
1200000987	MUMU	MUTU	430	Mr	MM				
1200000982	MALAZA	LUCKY	430	Mr	L				
1200000983	MALAZA	LUCKY	430	Mr	L				
1200001012	BECKER	CHRISTO	430	Mr	CH	ID	7404095105083	419	Afrikaans
1200000908	LEFENYA	PONTSHO	430	Mr	P	ID	4445448887777	429	Tswana

3.2   In the **Surname** field, enter the person's surname, and tab.

3.3   In the **Preferred Name** field, enter the person's preferred name, and tab.

3.4   In the **Title ID** field, press **F5** or click on the ZOOM **Zoom** field to open the **Class Type Selection** form. Select a title and click on the **Select** button to return the selection, or enter a class type id for the title, and tab.

3.5 In the **Initials** field, enter the Person's initials, and tab. *(Important: No spaces or full stops).*

3.6 In the **ID Type** field, click on the ▼ **drop-down** button to specify whether the number is an **ID** or **Passport.** Enter the number. *There is no system validation.*

3.7 In the **Language ID** field, press **F5** or click on the ZOOM **Zoom** button to open the **Class Type Selection** form. Select the language and click on the **Select** button to return the selection, or enter a valid language class type id and tab.

3.8 In the **Registered Names** field enter the person's registered names.

3.9 Accept the changes by clicking on the next record.

3.10 A **Person Validation** form displays. The purpose of this form is to verify that the information is correct and that a person with the same information does not already exist.

3.11 If the Person already exists, focus on the record and click on the **Select an Existing Person** button.

3.12 If the Person does not exist, click on the **Create New Person** button.

Note: Please verify the record for existence before the creation of a new record.

Note*: The Person Validation form displays all the Persons with surnames starting with the same character as the created person's surname.*

*The **Employee** information and **Business Residential Address** information displays for every focused Person's record to enable you to make the correct decision to create a new person or to find an existing one.*

*By clicking on the **Associated Organisation Address** button, you have the option of viewing all the Organisation Address records for the company where the employee is currently active.*

*By clicking on the **Person Address** button, you have the option of viewing the focused Person's Address.*

*When clicking the **Create New Person** button, and a person with the same surname, preferred name, initials and title already exists, a screen will is displayed and request you to enter a unique number. You must enter a number between 0 and 99 to uniquely identify the person.*

4.   How to Edit/Maintain a Person:

4.1.   Select the required person record to be edited, and click on the [icon] **Modify Records** button.

4.2.   Perform the necessary changes to the fields that require editing. *See How to Add a Person.*

4.3.   Accept the changes by clicking on the next record, or by tabbing.

4.4.   A **Person Validation** form displays with the edited information.

Verify the records for existence by either:

4.5.   Clicking on the **Select an Existing Person** button if the Person already exists, OR

4.6.   Clicking on the **Update Person** button if the changes to the Person's record should be accepted.

5.   How to delete a Person:

[icon] ***Note**: Records may only be deleted if the Person is not referenced by another record. The form should also be in Modify mode in order for deletion to take place.*

5.1   Click on the record to be deleted.

5.2   Press F3 to delete a record.

5.3   A message is displayed asking you to confirm deletion.
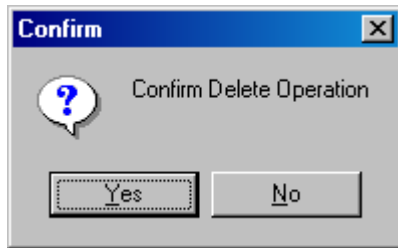
5.5   Click on the **Yes** option.

6.   **Alternative way to Search for a Person by using the Functional Structures:**

Path:

6.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

6.2   Select **Functional Structures** from the sub menu.

6.3   This will open the **Organisation and Person Functional Structure Maintenance** form.

6.4   Click the ☑ **Person Check Box**.

6.5   In the **Surname** field, enter the person's surname or a portion of the surname followed by an Asterisk (*).

6.6   It is possible to focus the search by providing additional information such as "Title", "Initials" and/or "Preferred Name".

6.7   Click on the 🗒 **Range** button. An **Organisation and Person Functional Structure Maintenance** form displays with the Person's details.

TIP: *There are other search methods that relate to how the person is linked to other information e.g. searching on structure information. This will be discussed under the relevant modules.*

Person History

Introduction:

This module is used to view the historical changes made to person records.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Person** from the **Stakeholder** menu.

2.   How to view a Person's History:

Note*: You will be able to view the historical changes made to person records. When the form is opened from the WMS menu, in future all the records can be viewed, including deleted records will be displayed. When opening from the Person Maintenance form, only the records for the focused person record will be displayed.*

2.1   Click on the specific Person's record.

2.2   Click on the **History V** button to open the **Person History View** form.

2.3   A list of all the historical changes made to a specific person record and the dates and the times on which they were changed, appears.

2.4   The records are sorted in descending order per changed date and time. The most
       recent change will be at the top of the list.

Person Reports

Introduction:

This module gives you the ability to print the addresses of Employee, Member or to export
correspondence address information in .csv file. You will get a. csv-exported list of person
information from the **Person Maintenance** form.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Person** from the **Stakeholder Management** menu.

1.3   Open the **Person Maintenance** form.

2.   How to View and Print Person Reports:

2.1   Click on the specific Person's record.
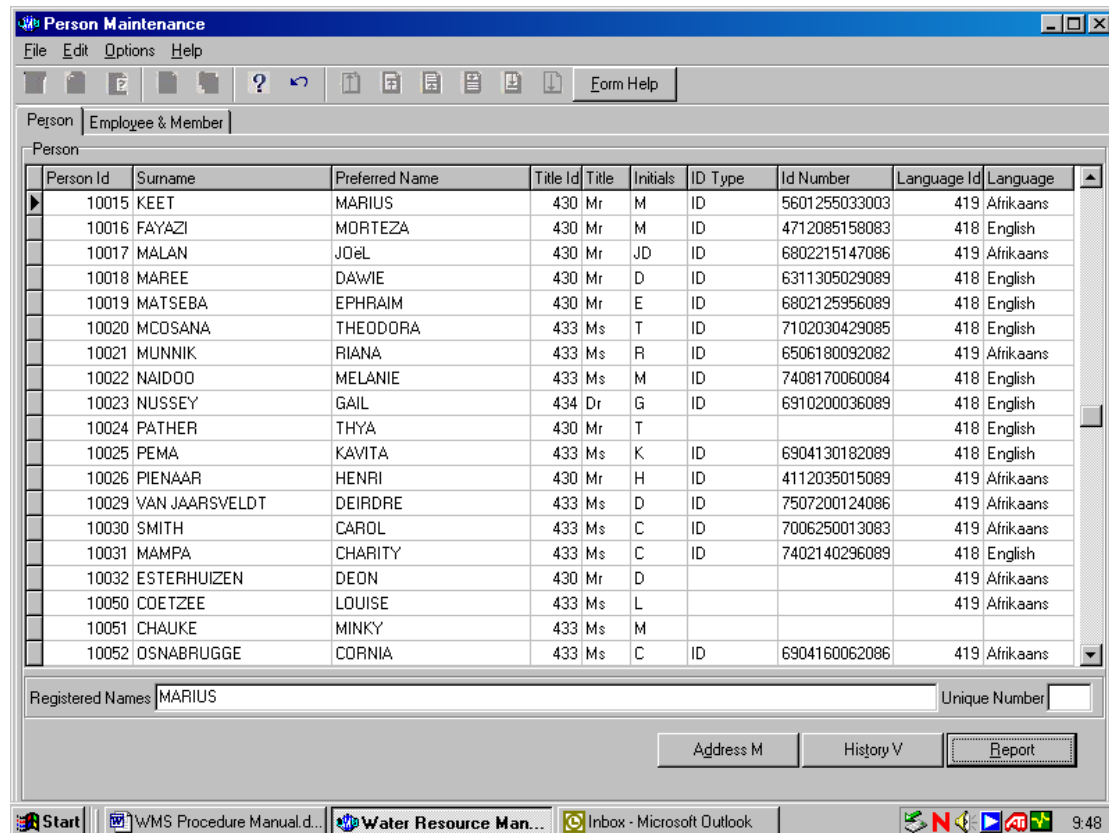
2.2   Click on the **Report** button to open the **Report Decision Criteria** form.

2.3 Select the **Person List** option and click on the **Report** button.

2.4 A **Save As** window opens.

2.5 Give the Document a name and specify the directory where you would like to save it and click on the **Save** button.

2.6 A **File Size Selection** form displays. Specify the **Maximum File Size** by clicking on the applicable option and click **OK**.

2.7   Go to the Directory where you saved the file and double-click on the file to open it.

2.8   A .**CSV Report** displays with a list of the Person records for viewing and/or printing.

Note: Use Excel to open .CSV files.

Stakeholder Management - Person Address

Introduction:

This module is used for creating, viewing and maintaining person address information.

Business Rules:

i.   It is possible to have more than one address and address type for the same Person, e.g. Telephone numbers.

ii.   A Post/Private Bag and Physical Address for a person can only be type 'Home'. If 'Business', it must be added to the appropriate Organisation the Person works for or is a Member of.

iii.   An Organisation/Person may only have one Correspondence/Billing address.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Person** from the **Stakeholder Management** menu.

1.3   Click on the **Address M** button.

2.   How to Create an Address for a Person:

2.1   Select the Person whose address should be created.

2.2   Click on the **Address M** button to open the **Person Address Maintenance** form.

2.3   Click on the 🗋 **Create** button to create an address record.

3.   How to Create a Telecommunication Address:

3.1   Click on the **Telecom and Electronic Address** tab then focus on
       Telecommunication Address Maintenance.

3.2   Click on the 🗋**Create** button.

3.3   *The **Address ID** will be automatically created by the system.*

3.4   On the **Business/Home** field, **Business** is automatically entered by the system, but
       may be changed it to Home.

3.5   The **Local** field is by default already checked. If the number is **Foreign**, uncheck it, and
       tab.

3.6   On the **Telecom Type** field, click on the ⏷**drop-down** arrow to select the Telecom
       Type, and tab. The Telecommunication Types listed are Cell Phone, Fax, Pager and
       Telephone.

3.7   On the **Direct/Switchboard** field, click on the ⏷**drop-down** arrow to select whether
       the call is Direct or will be made via a Switchboard, and tab.

3.8   On the **Dialling Code** field, enter a code allocated to a specific town or regional area,
       and tab. The system validates if the dialling code is entered. If the number is invalid,
       the following error message is displayed:
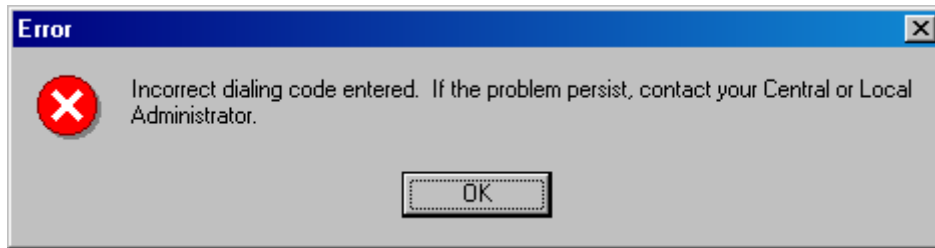
3.9   On the **Telephone** field, enter the telephone number, and tab.

3.10   On the **Extension** field, enter the additional number that must be dialled or requested when dialling, and tab.

3.11   Accept the changes by clicking on the next record.

4.   How to Create an Electronic Address:

Note: The Electronic Address ID and Business/Home fields are automatically populated by the system. The Business/Home field is defaulted to Home.

4.1   In the **Electronic Address Type** field, click on the ▼ **drop-down** button and select the type of electronic address (E-mail, IP Address or WEB), and tab.

4.2   In the **Electronic Address Text** field, enter the electronic address where information can be sent.

4.3   Tab to accept the new record.

5.   How to Create a Post Box Private Bag Address:

*Note: The **Postal Address ID** and **Business Home** fields will be automatically populated by the system, as well as the Postal **Code Country Town Suburb** information.*

5.1   In the **Post/Private Bag Type** field, click on the ▼**drop-down** list and select either PO - Post Box or PR- Private Bag, then tab.

5.2   In the **Bag Box** Text field, enter the address, and tab.

5.3   In the **Postal Code** field, enter the postal code number, alternatively, press F5 or click on the ZOOM **Zoom** button to open the **Postal Code Area Selection** form, and select the required record.

5.4   In the **Parcel Indicator** field, check the ☑ **checkbox** on to verify if parcels will be delivered and collected at this address.

5.5   In the **Correspondence Indicator** field, check the ☑ **checkbox** on to verify if correspondence can be sent to this address.

5.6   In the **Billing Indicator** field, check the ☑ **checkbo**x on to verify if accounts or bills will be delivered and collected at this address.

5.7   Tab to accept the new record.

6. How to Create a Physical Address:

*Note: The **Physical Address ID** and **Business Home** fields will be automatically populated by the system.*

6.1   In the **Post/Location** Type field, click on the ▼**drop-down** button and select Post, Location or Post & Location, then tab.

*Note: If the **Post Location Type** specified is a **"Location"**, the **Country Town Suburb** field must have a value. If it is specified as **"Post"**, the **Postal Code** field must have a value, and if it specified as **"Post Address & Location"**, both the **Postal Code** and the **Country Town Suburb** fields must have values.*

6.1   In the **Country Town Suburb ID** field, enter a valid Country Town Suburb ID, alternatively, press F5 or click on the `ZOOM` **Zoom** button to open the **Country Town Suburb Selection** form, and select the required record.

6.2   In the **Postal Code** field, enter the postal code number, alternatively, press F5 or click on the `ZOOM` **Zoom** button to open the **Postal Code Area Selection** form, and select the required record.

6.3   In the **Building** field, enter the physical location and associated number, and tab.

6.4   In the **Place/Street** field, enter the physical or residential building or area, and tab.

6.5   In the **Residential Indicator** field, check the ☑ **checkbox** on to verify that this address is a residence.

6.6   In the **Parcel Indicator** field, check the ☑ **checkbox** on to verify that parcels will be collected at this address.

6.7   In the **Correspondence Indicator** field, check the ☑ **checkbox** on to verify that correspondence can be sent to this address.

6.8   In the **Billing Indicator** field, check the ☑ **checkbox** on to verify that accounts or bills will be collected at this address.

6.9   *The **Street Code Country Town Suburb** information will be automatically populated by the system.*

6.10   Tab to accept the new record.

Person Address History:

Business Rules:

i.   When the form is opened from the Person Maintenance form, only the historical changes made to the focused address record can be viewed.

ii.   When the form is opened from the Organisation Maintenance form, all the address history records, including the deleted records, can be viewed.

7   How to View a Person's Address History:

7.1   Click on the record to be selected.

Telecom and Electronic Address:

7.1   Click on the **Telecom and Electronic Address** tab, and click on the **History** button on the **top part** of the form to open the **Telecom Address History View** form. *Note: You can use this form to view all the historical changes made to the telecommunications Address records, like the Date and Time when the changes were made to the record, who performed the changes and the organisation which that particular user is part of.*

7.2　Click on the **Telecom and Electronic Address** tab, and click on the **History** button on the **bottom part** of the form to open the **Electronic Address History View** form.

Note: You can use this form to view all the historical changes made to the Electronic Address records, like the Date and Time when the changes were made to the record, who performed the changes and the organisation which that particular user is part of.
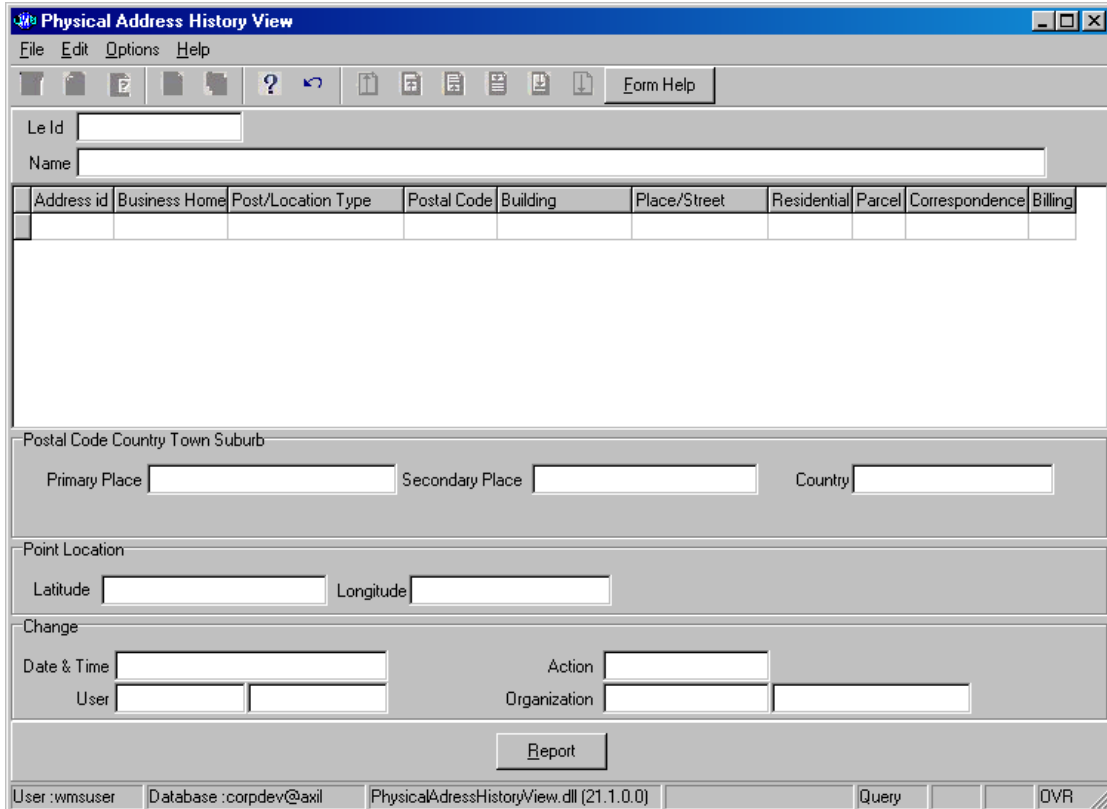
Post Box Private Bag Address:

7.3   Click on the **Post/Private Bag Address Maintenance** tab, and click on the **History**

button to open the **Physical Address History View** form. 🔲 *Note: You can use this form to view all Historical changes made to the Physical Address records, like the Date and Time when the changes were made to the record, who performed the changes and the organisation which that particular user is part of.*

Physical Address:

7.4   Click on the **Physical Address Maintenance** area, and click on the **History** button to

open the **Physical Address History View** form. 🔲 *Note: You can use this form to view all Historical changes made to the Physical Address records, like the Date and Time when the changes were made to the record, who performed the changes and the organisation which that particular user is part of.*

Person Address Reports:

8   How to View and Print Electronic Address Reports:

8.1   Click on the record to be selected.

8.2   Click on the **Report** button to open the **Report Decision Criteria** form.
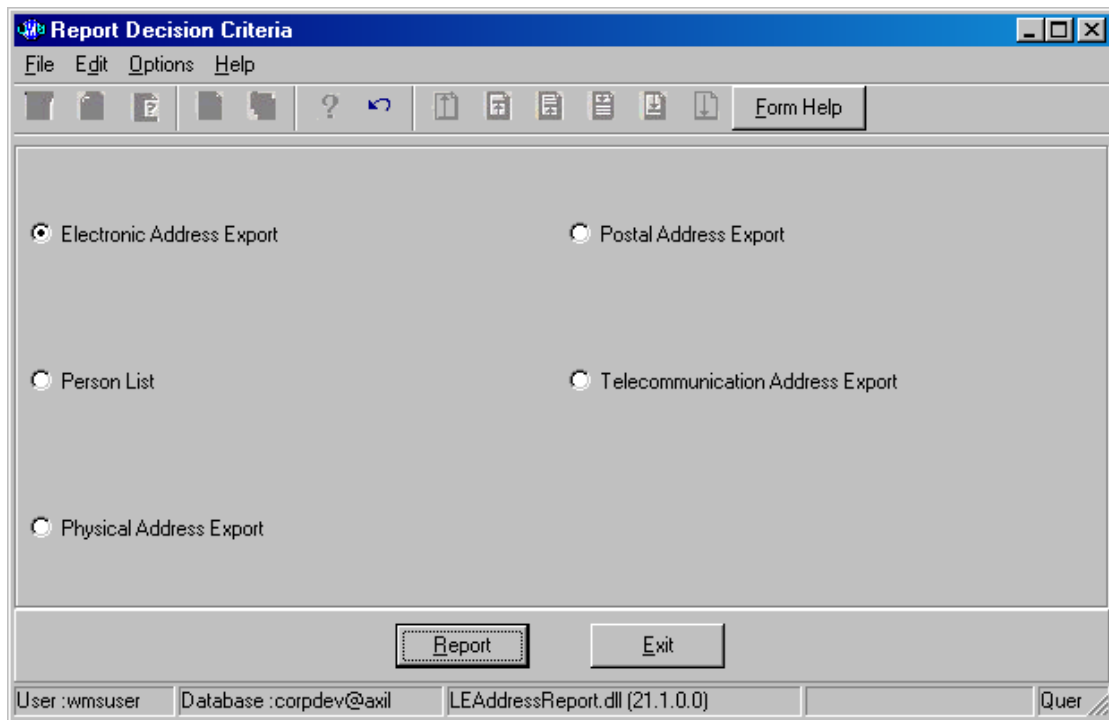
8.3 Select the **Electronic Address Export** option and click on the **Report** button.

8.4 A **Save As** window opens.
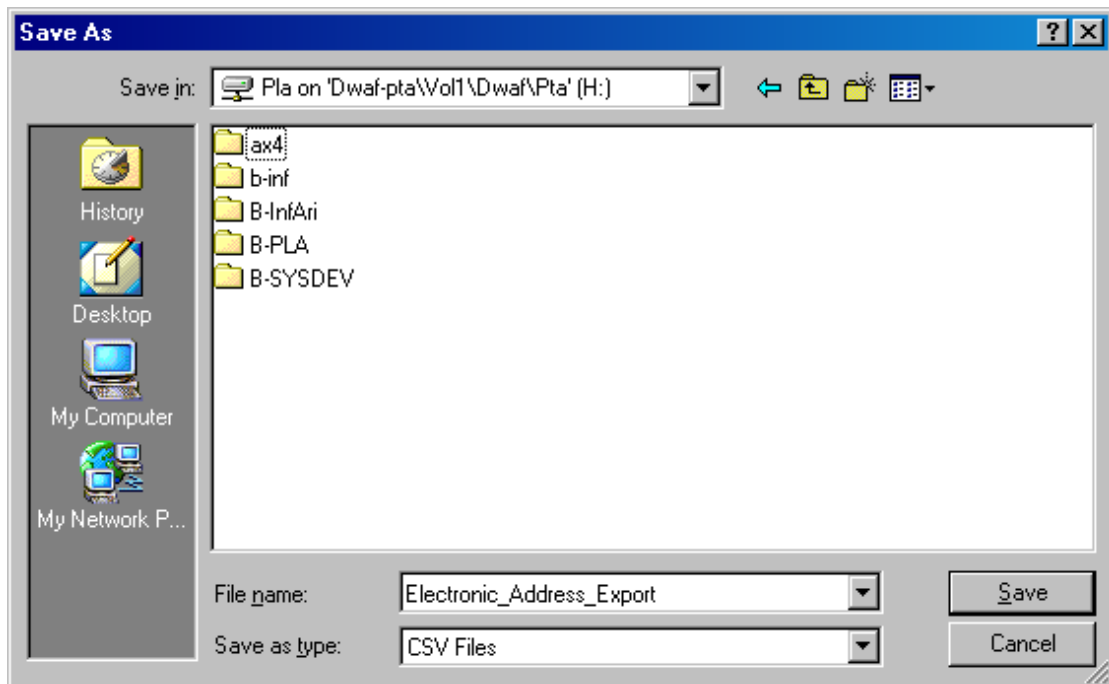
8.5 Give the document a name and specify the directory where you would like to save it and click on the **Save** button.

8.6 A **File Size Selection** form displays. Specify the **Maximum File Size** by clicking on the applicable option and click **OK**.

8.7   Go to the directory where you saved the file and double-click on the file to open it.

8.8   A .**CSV Report** displays with a list of the Electronic Address records to be viewed and/or printed.

Note: Use MS-Excel to open .CSV files.

9   How to view and Print Postal Address Reports:

9.1   Click on the record to be selected.

9.2   Click on the **Report** button to open the **Report Decision Criteria** form.
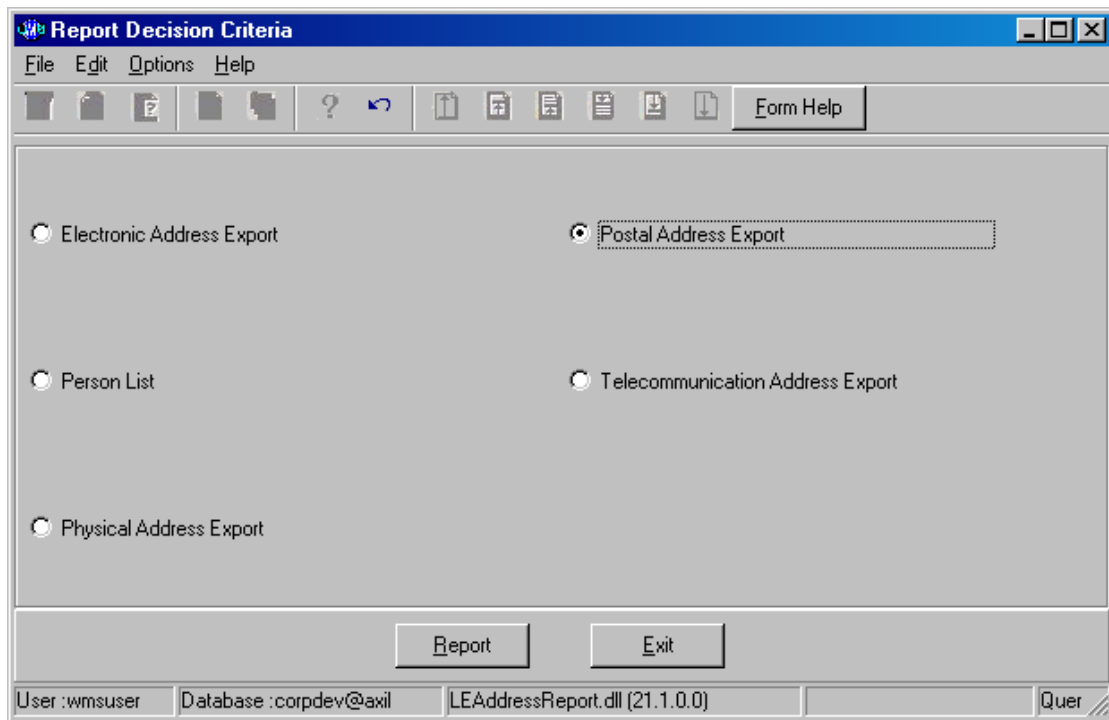
9.3   Select the **Postal Address Export** option and click on the **Report** button.

9.4   A **Save As** window opens.
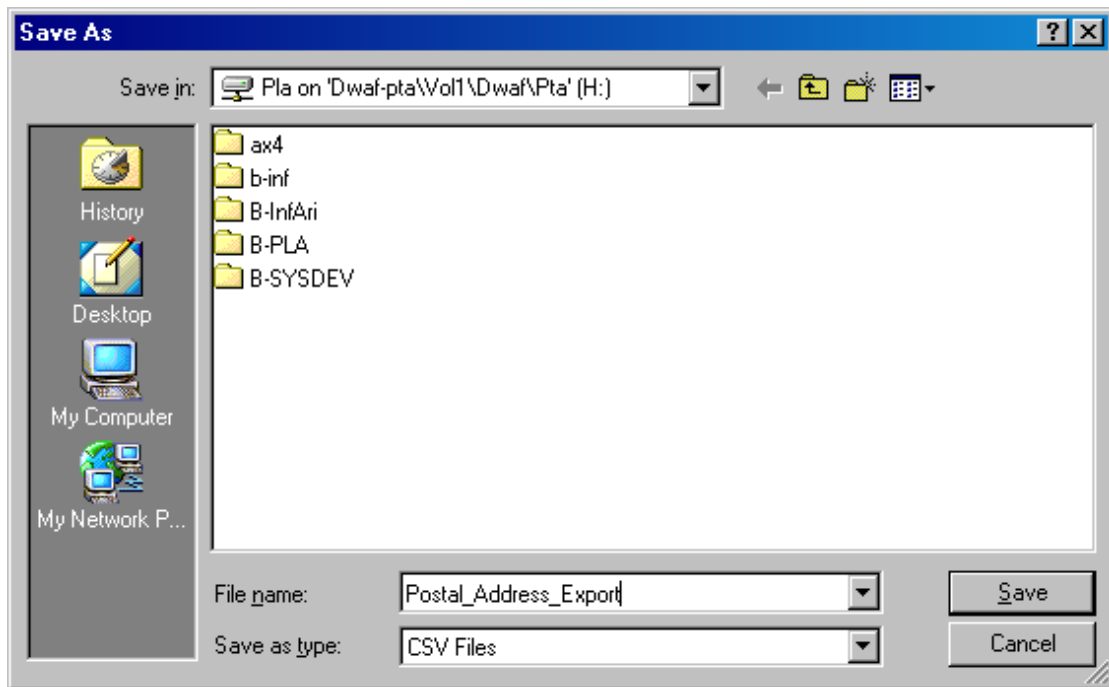
9.5   Give the document a name and specify the directory where you would like to save it
       and click on the **Save** button.

9.6   A **File Size Selection** form displays. Specify the **Maximum File Size** by clicking on the
       applicable option and click **OK.**
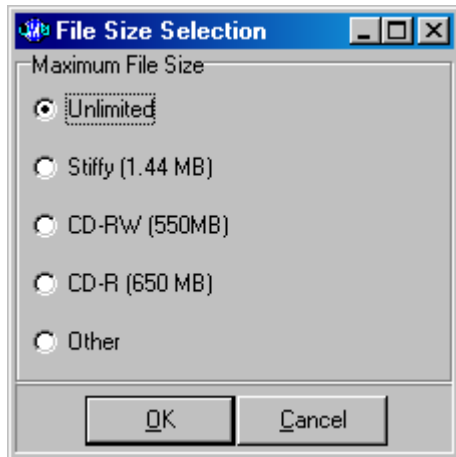
9.7   Go to the directory where you saved the file and double-click on the file to open it.

9.8   A .**CSV Report** displays with a list of the postal address records for viewing and/or printing.

Note: Use Excel to open .CSV files.

10.   How to view and Print Physical Address Reports:

10.1   Click on the record to be selected.

10.2   Click on the **Report** button to open the **Report Decision Criteria** form.
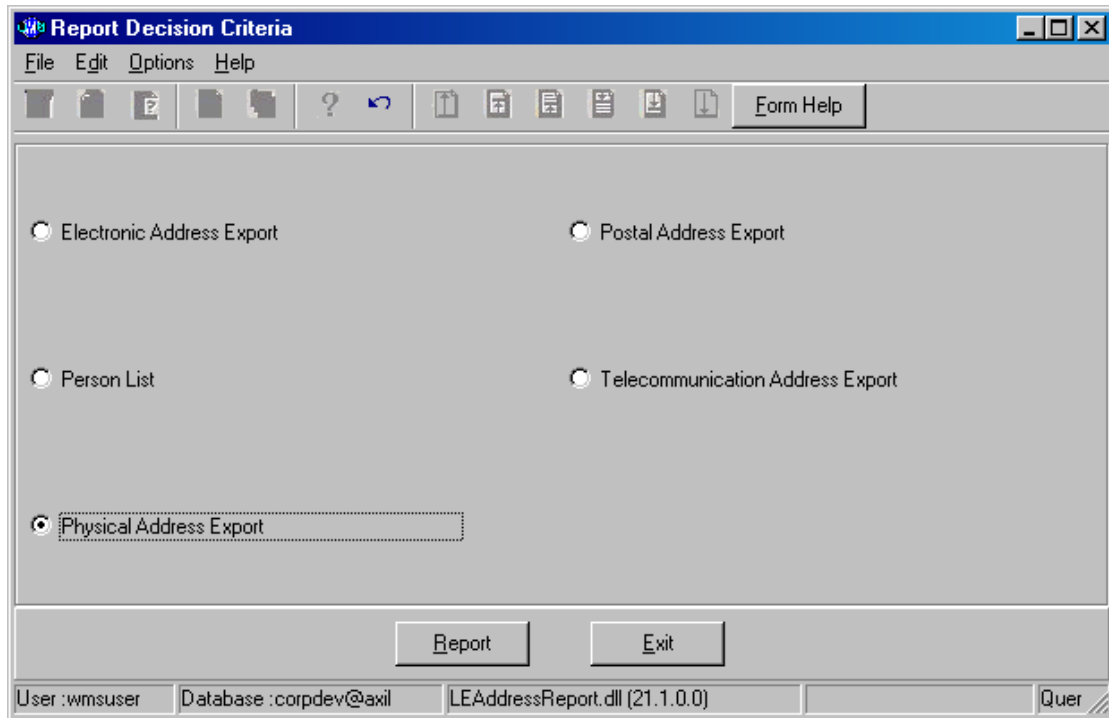
10.3 Select the **Physical Address Export** option and click on the **Report** button.

10.4 A **Save As** window opens.
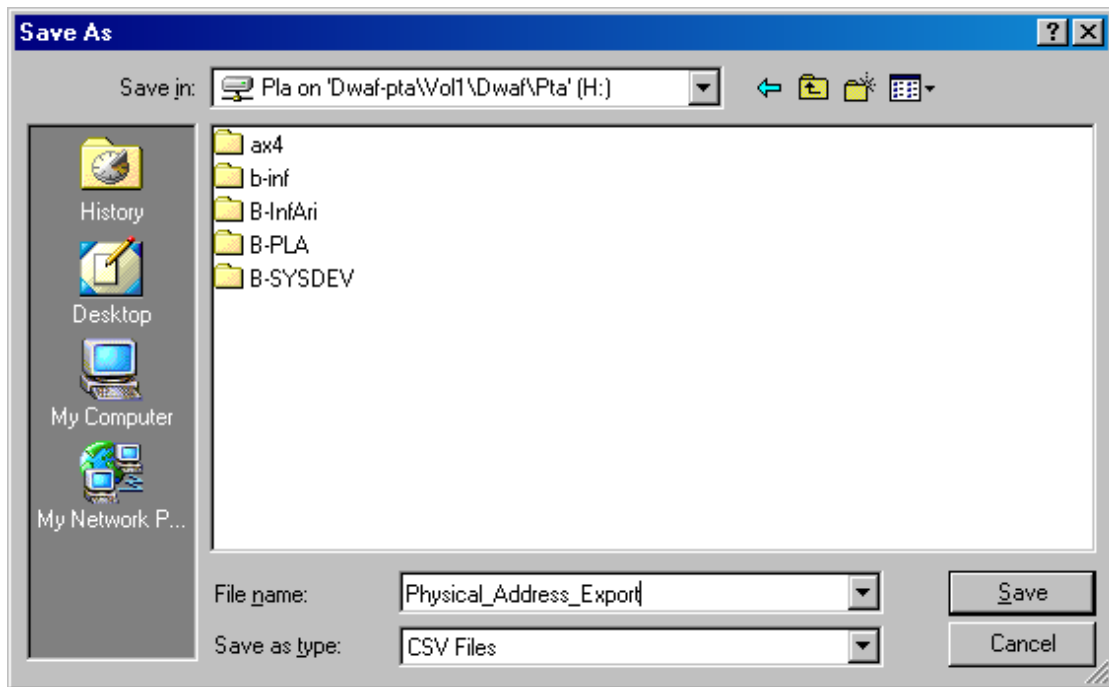
10.5 Give the document a name and specify the directory where you would like to save it and click on the **Save** button.

10.6 A **File Size Selection** form displays. Specify the **Maximum File Size** by clicking on the applicable option and click **OK**.
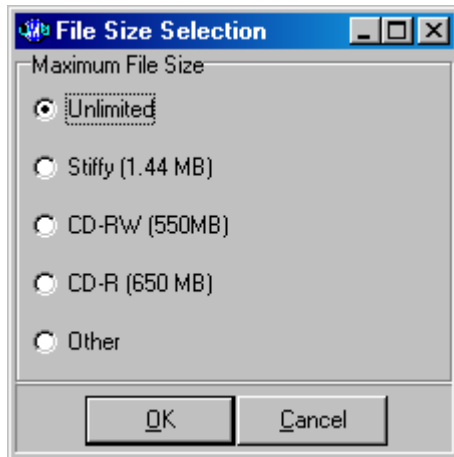
10.7 Go to the directory where you saved the file and double-click on the file to open it.

10.8 A **CSV Report** displays with a list of the **physical address** records for viewing and/or printing.

Note: Use Excel to open .CSV files.

11 How to view and Print Telecommunication Address Reports:

11.1   Click on the record to be selected.

11.2   Click on the **Report** button to open the **Report Decision Criteria** form.
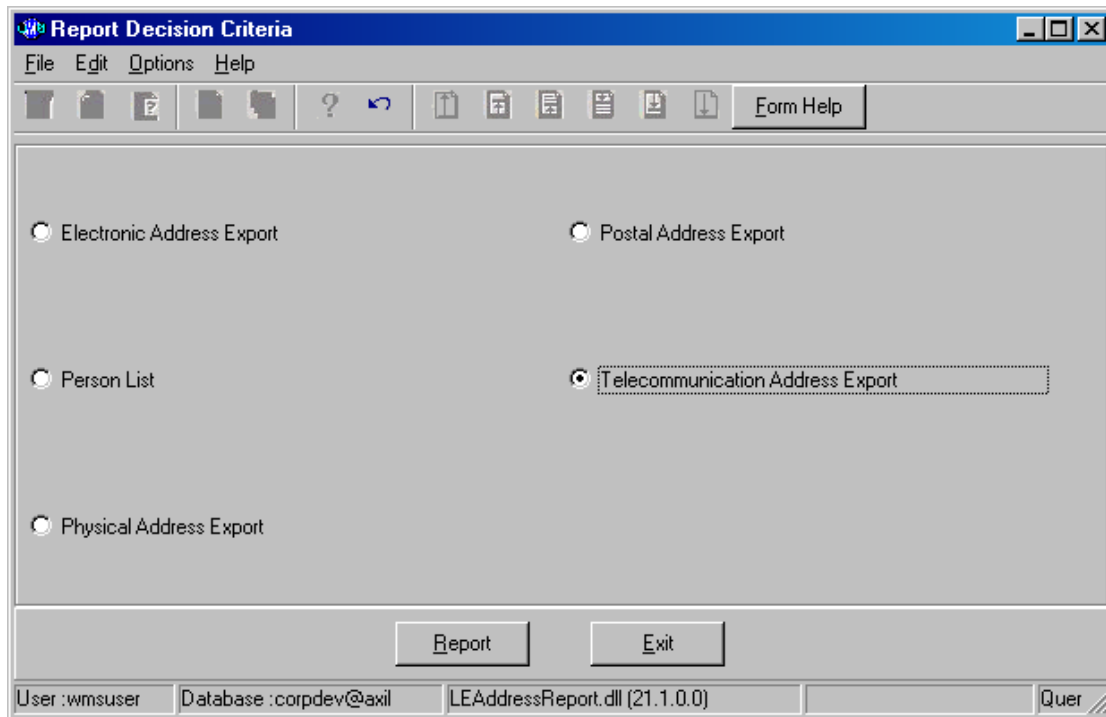
11.3   Select the **Telecommunication Address Export** option and click on the **Report** button.

11.4   A **Save As** window opens.
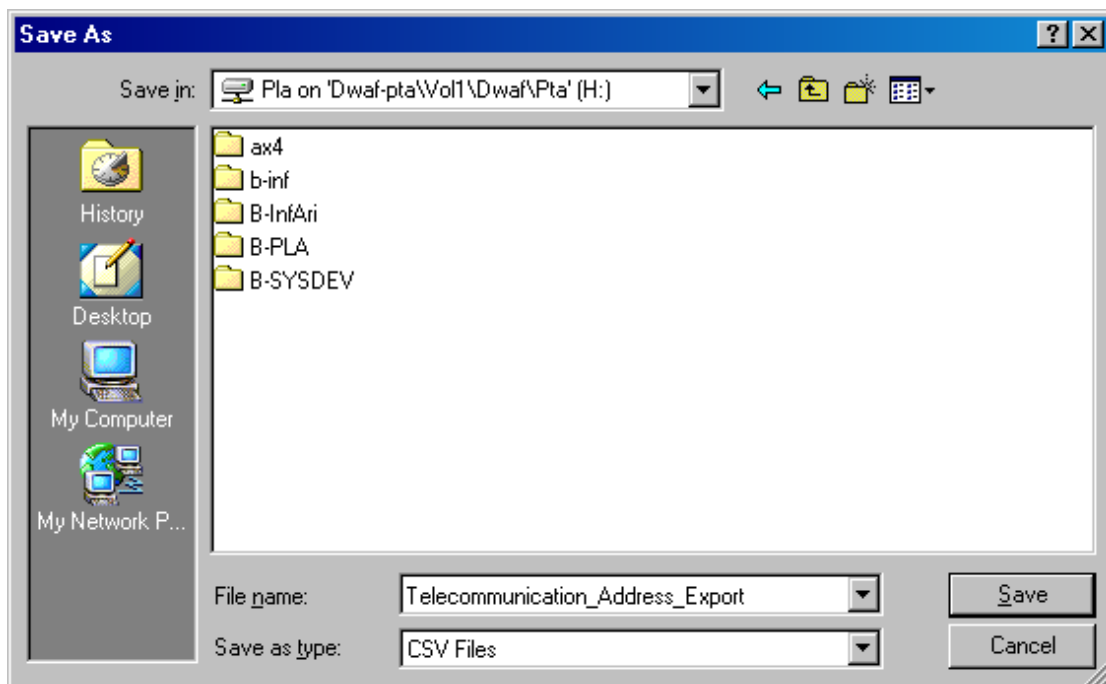
11.5 Give the document a name and specify the directory where you would like to save it and click on the **Save** button.

11.6 A **File Size Selection** form displays. Specify the **Maximum File Size** by clicking on the applicable option and click **OK**.
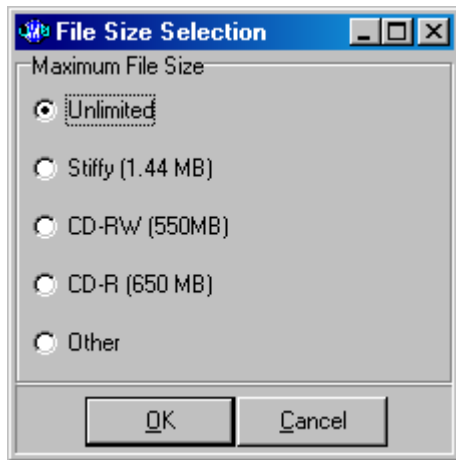
11.7 Go to the directory where you saved the file and double-click on the file to open it.

11.8 A .**CSV Report** displays with a list of the **telecommunication address** records for viewing and/or printing.

Note: Use Excel to open .CSV files.

Stakeholder Management - Organisation

Introduction:

The objective of the **Stakeholder Management - Organisation** module is to be able to query, add and maintain information pertaining to organisations such as Government Departments, Provincial Departments, Local Authorities and Companies, Forums, Water Users (Mines, industries, sewage works), and Non-Governmental Organisations.

In the following modules these organisations may also be related to other information such as employee structures, monitoring points and documentation.

Business Rules:

i.   You should specify a value before exiting a compulsory field.

ii.   Liaison Entity Detail records e.g. Person or Organisation should never be added and then left to stand alone on the system, but should always be linked to a structure e.g. Monitoring Point and Multimedia record.

iii.   The system is set up so that only capital letters may be used in this module. The reason for this is that the system searches are case sensitive.

iv.   Always perform a search for the organisation you are interested in before you add a new entity – this is to reduce /avoid duplication.

v.   Ensure that the detail added to the system is correct and comprehensive.

vi.   Follow the "General Business Rules for WMS" for the use of hyphenation, spaces, abbreviations etc.

vii.   Validation to prevent you from entering 'invalid' characters, e.g., ", [] or one, will be executed on character fields and in query mode when user ranges on character fields.

viii.   To sort records in a grid, you have to click on the heading of the column.

1.   Path:

1.1.   Select **Stakeholder Management** from the **Water Resource Management** (Front-End) menu bar.

1.2.   Select **Organisation** from the **Stakeholder Management** menu.

2.   How to Search for an Organisation by using the Organisation Maintenance Form:

2.1   Open the **Organisation Maintenance** form.

2.2   Click on the **Range** button while focusing on a specific field.

2.3   Type the value in uppercase with the wildcard as postfix, e.g. GP-*, and enter, this will return all the records matching the Search criteria.

2.4   To cancel the range criteria, click on **Enter** again.

[?] *Note: When the form is in query mode, and you press F5 in the Organisation of field, the whole tree view of all the organisations will be displayed.*

3.   How to Add an Organisation:

[?] *Tip: Ensure the organisation you want to add does not yet exist by first performing a Search for the Organisation.*

3.1   To search for records, enter the **Name**, **Area Office**, **Division/Sub Division** and/or **Abbreviation** and click on the **Filter** button to filter the records according to your specified criteria.

3.2   Click on the [icon]**Create** button or press F4 to insert a new line. An empty record displays to allow the creation of a new record.

3.3 In the **Abbreviation** field, enter an abbreviation for the organisation, and tab. *This field is very important! Ensure that the abbreviation is unique as this is used in grids of WMS!*

3.4 In the **Basic Organisation** field, click on the ▼**drop-down** arrow to select **Company** or **Assembly.** 🔣 *Note: A* ***Company*** *has employees and an* ***Assembly*** *has Members.*

3.5 On the **Dwaf** field, double-click on the checkbox to indicate if the Organisation is part of the Department of Water Affairs and Forestry.

3.6 In the **Name** field, alternatively press **F5** or click on the `ZOOM` **Zoom** button to open the **Organisation Name Selection** form.

3.7   If the organisation name is found, make your selection and click on the **Select** button to return the selection and tab, and if not found, click on the **Organisation Name not Found** button to allow you to create a new Organisation Name on the Organisation Maintenance form. The **Organisation Maintenance** form will display with the new organisation name.

3.8   In the **Division/Subdivision** field, alternatively press **F5** or click on the **ZOOM** **Zoom** button to open the **Division/Subdivision Selection** form.
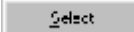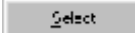
3.9   If the Division/Subdivision is found, make your selection and click on the
       [Select] **Select** button to return the selection and tab, and if not found, click on the
       Division/Subdivision Not Found button to allow you to create a new
       Division/Subdivision Name on the Organisation Maintenance form. The **Organisation
       Maintenance** form will display with the new division/subdivision name.

3.10   In the **Area/Office** field, alternatively press **F5** or click on the ZOOM **Zoom** button to
       open the **Area/Office Selection** form.
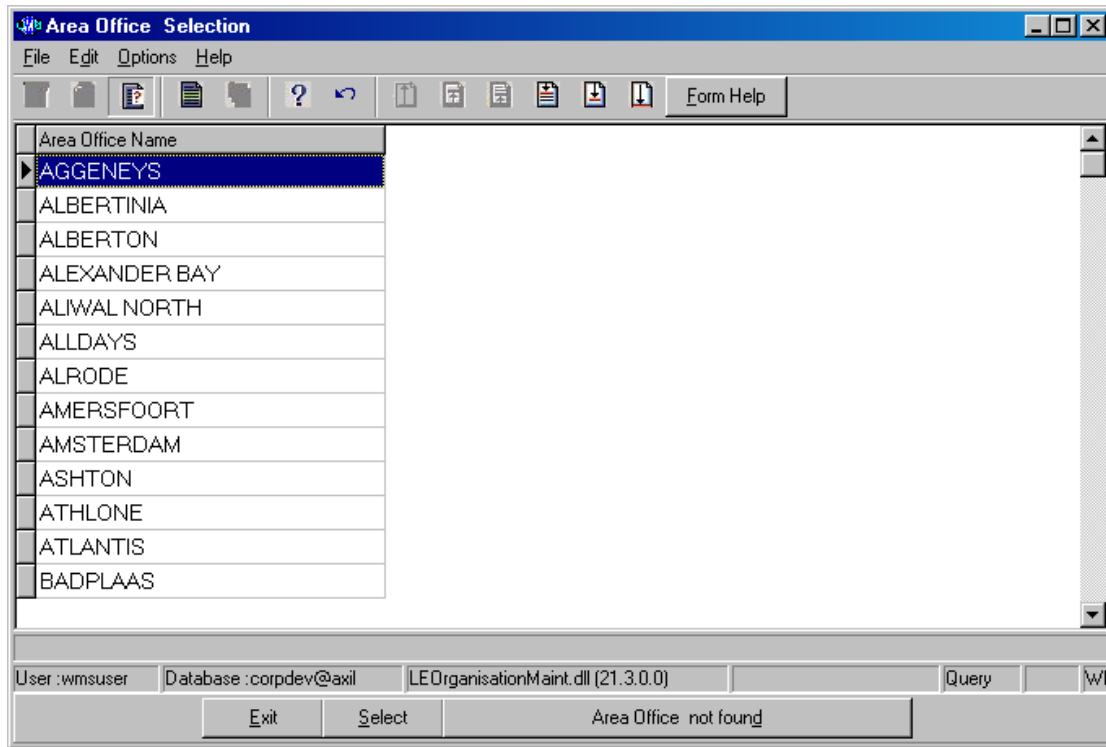
3.11   If the Area/Office is found, make your selection and click on the [Select] **Select**
       button to return the selection and tab, and if not found, click on the **Area/Office Not
       Found** button to allow you to create a new area/office name on the Organisation
       Maintenance form. The **Organisation Maintenance** form will display with the new
       area/office name.

Note: *The combination of Name, Division, and Area must be unique.*

3.12   In the **Organisation Type** field, alternatively click on the ZOOM **Zoom** button or
       press **F5** to open the **Class Type Selection** form. Click on the [Select] **Select**
       button to return the selection and tab or enter the applicable class type id.

3.13 Enter the **Start Date** or select a date by using the **Pop-Up Calendar**.

3.14 The **End Date** will by default be populated as 9999-12-31 and may not be edited unless the organisation becomes inactive*.* **Note: Status of the Record** *is active while to date is 9999-12-31.*

3.15 Specify if a rank is required for the company's employees by clicking on the **Rank Required** checkbox. If **Basic Organisation Type is an Assembly**, **Rank Required** is automatically **True.** **Note:** *When Rank Required Indicator is True, the ranks of the employees must be specified.*

3.16 On the **Addressee** field, alternatively press F5 or click on the ZOOM **Zoom** button to open the **Class Type Selection** form. Double-click on the applicable record to return the selection, and tab.
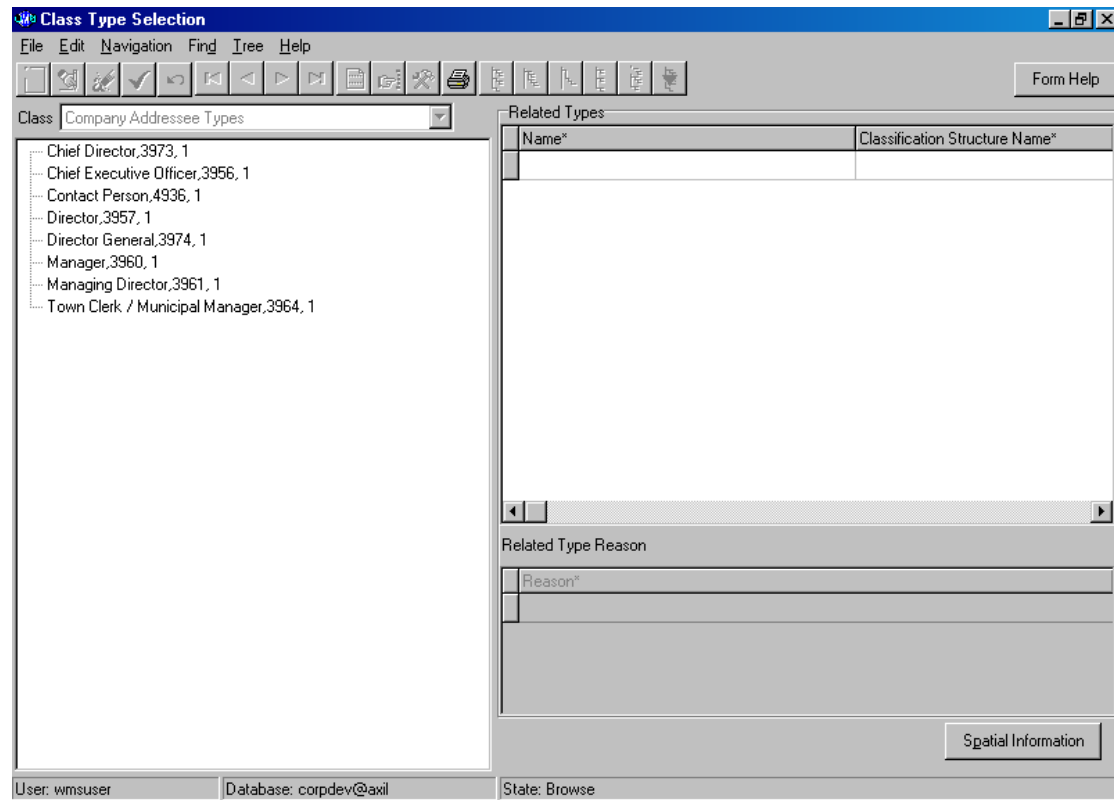
3.17   Enter the Organisation's **Mission Statement,** which is a statement of the organisation's purpose and intent, and tab.

3.18   Accept the changes by clicking on the next record, or tab out of the newly created record.

3.19   On the **Organisation of** field, alternatively click on the **ZOOM** **Zoom** button or press F5 to open the **Organisation Hierarchy Selection** form, if applicable.
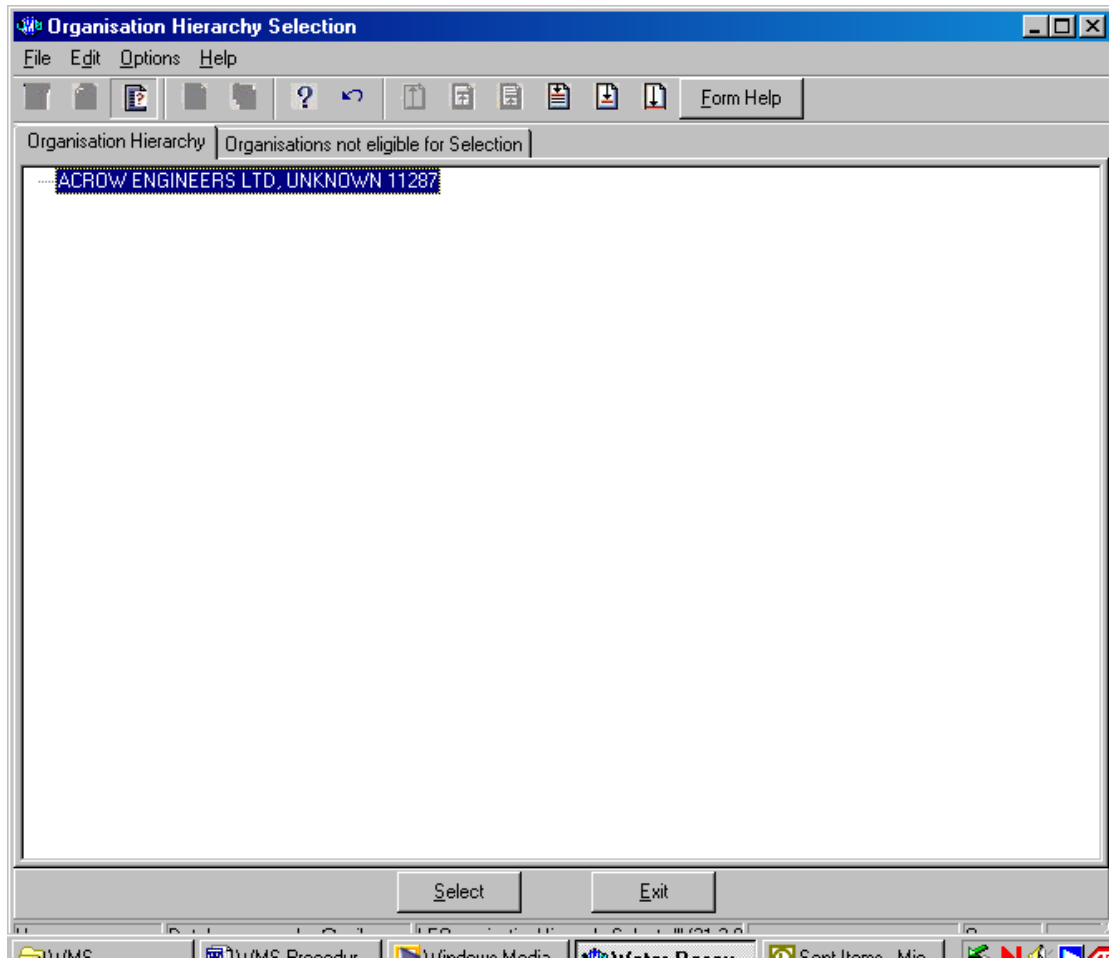
Note: Only Active Organisations with the same basic Organisation Type and Name will be displayed. You will be prevented from selecting an organisation that could cause a circular relationship, e.g. cannot select that organisation's children as Organisation of.

3.20   Search for the applicable Organisation and click on the [Select] **Select** button to return the selection.

3.21   The Organisation Maintenance form displays with the **Parent Of Organisation** details.

3.22 If the **Parent Of organisation** has not been specified yet for an organisation, the following **Warning** screen will be displayed when editing the record. This screen is displayed to remind you to specify a parent organisation when applicable.
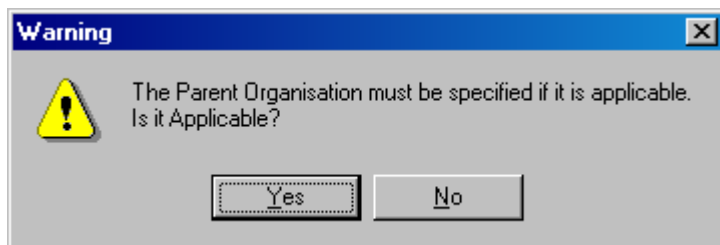
3.23 If the **Parent Of Organisation** does not exist, click on the **No** button, and the changes made to the record will be accepted.

3.24 If the **Parent Of Organisation** does exist, but has not been previously specified, please refer 3.18 – 3.20.

Maintain/Edit an Organisation:

Business Rules:

i.   If the required Organisation has an "Out of Use" status, you will only be able to view the address information, and cannot maintain records.

4.   How to Maintain/Edit an Organisation:

4.1   Select the required **Organisation** record to be edited, and click on the [icon] **Modify Records** button.

4.2   Perform the necessary changes to the fields that require editing. *See How to Add an Organisation.*

4.3   Accept the changes by clicking on the next record.

Deleting an Organisation:

Business Rules:

i.   You may delete records if it's not directly or indirectly referenced by another record irrespective of the Organisation's status.

ii.   An Organisation is directly referenced on Employee and Member and indirectly when the member represents the company.

5.   How To Delete an Organisation:

[icon] *Note: The form should be in Modify Mode.*

5.1   Click on the record to be deleted.

5.2   Press F3 to delete a record.

5.3   A message is displayed asking you to confirm deletion.
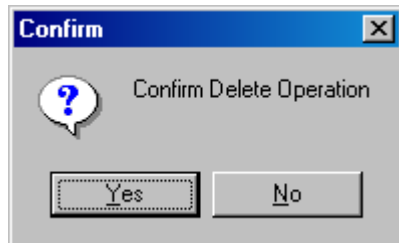
5.4   Click on the **Yes** option.

[icon] **Note:** *An audit trail of all changes made on a record is kept, the information on when it was created and when it was deleted.*

6.   Alternative way to Search for an Organisation by using the Functional Structures:

Path:

6.1   Select **Functional Structures** from the sub menu.

6.2   This will open the **Organisation and Person Functional Structure Maintenance** form.
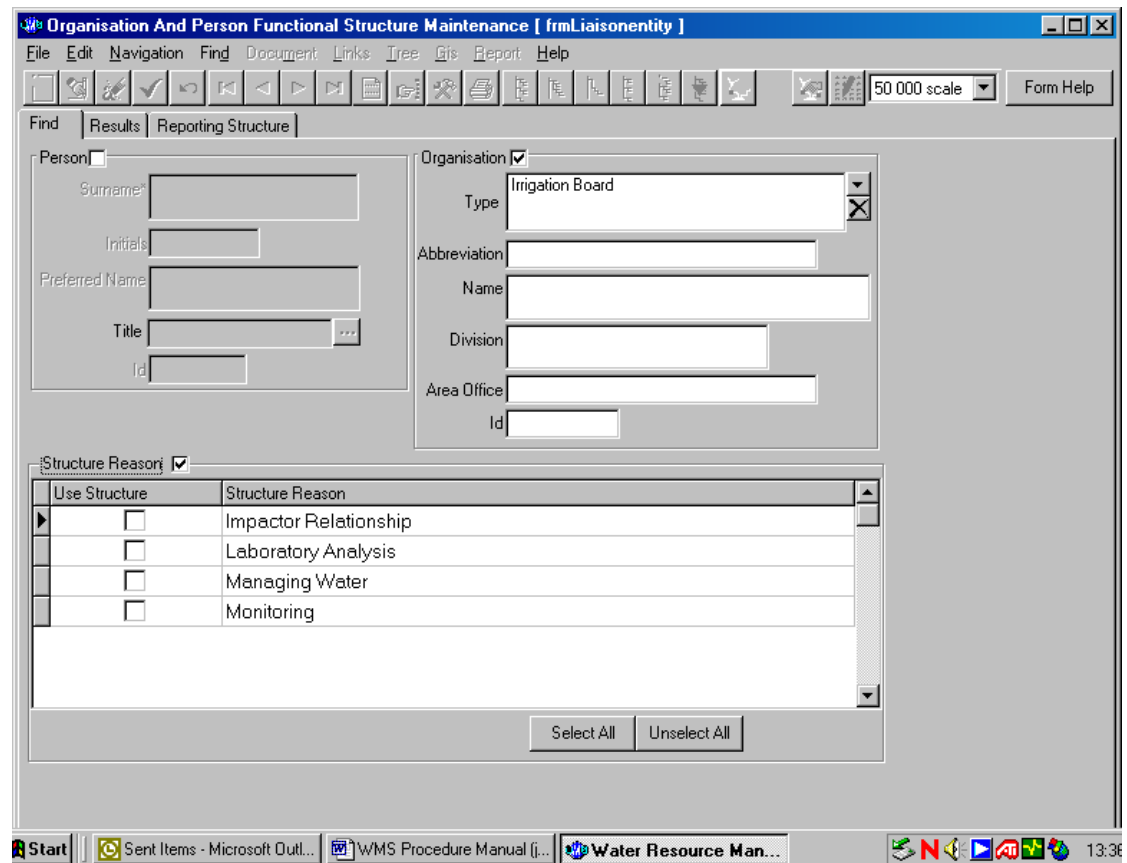
6.3   Click the ☑**Organisation Check Box**.

6.4   You can search with any one or more of the following criteria:

6.4.1   In the type field, click on the ▾**Drop-down** button.

6.4.2   In the Type field, enter the **Organisation Type**, or click on the Drop Down button to open the **Associated Classes – Type Selection** form, and select the relevant **Institution Type** according to the selected **Company** or **Assembly.**

6.5 Click on the ▼**drop-down** button on the **Institution Types** field in order to select the Institution Type as **Company or Assembly**.

6.6   Select the applicable institution type.

6.7   In the **Name** field, enter the organisation's name or a portion of the name preceded
         and/or followed by *. *The "wild card" (*) can be used in many ways to simplify the
         search, e.g. a search for "VAN DER MERWE" can be done by entering *V*D*MER**

6.8   In the **Abbreviation** field, enter the organisation's abbreviation.

6.9   In the **Division** field, enter the division.

6.10   In the **Area Office** field, enter the area office.

6.11   If an organisation in a specific Functional Structure is required, click on the
         ☑**Structure Reason.**

6.12   Select All, One or More functional structures.

6.13   Click on the [icon] **Range** button. An **Organisation and Person Functional Structure
         Maintenance** form displays with the selected Organisation's information.

[icon] *Note: Any combination of the above search criteria can be used.*

6.15   If the Organisation already exists, just verify the information.

Organisation History:

Introduction:

This module is used to view the historical changes made to organisation records.

1. Path:
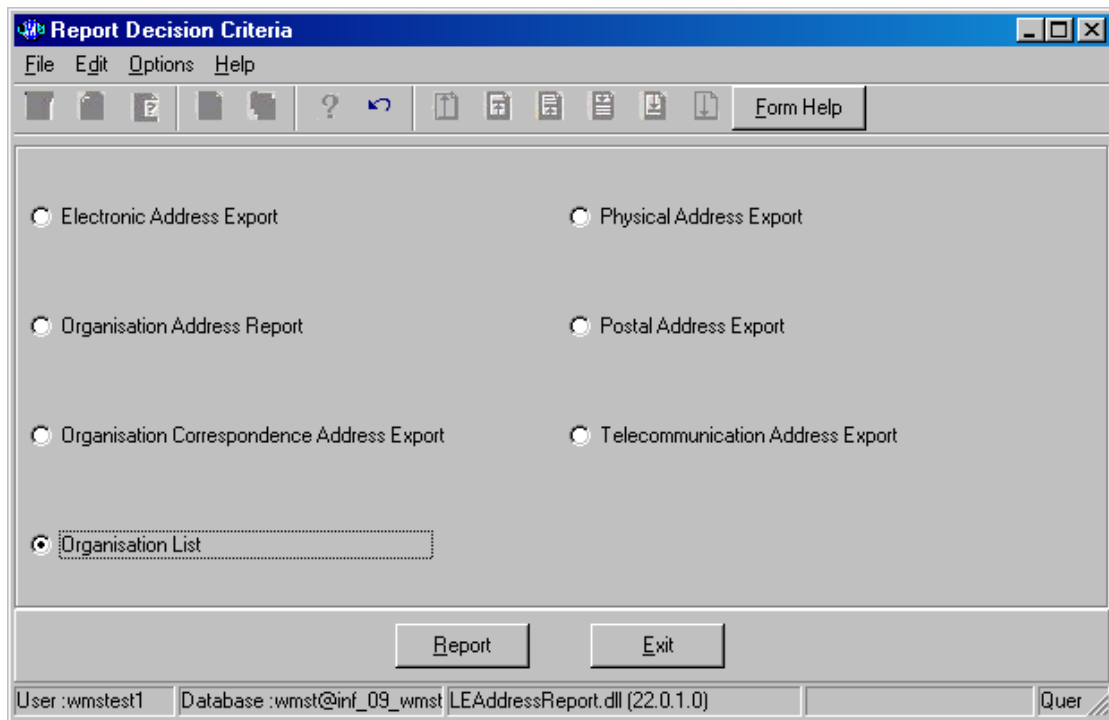
1.1 Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2 Select **Organisation** from the **Stakeholder** menu.

2. How to view the Organisation's History:

Note: *You will be able to view the Historical changes made to Organisation records. When the form is opened from the WMS menu, in future you will be able to view all the records including the records deleted. When the form is opened from the Organisation Maintenance form, you will only be able to view the records for the focused Organisation record.*

2.1 Open the **Organisation Maintenance** form.

2.2 Click on the **History V** button to open the **Organisation History View** form.

2.3   A record of all the organisations and the dates and the times on which they were changed appears.

Organisation Reports:

Introduction:

This module gives you the ability to print a report for all active Organisation(s) with all their business related Address information.

Business Rules:

i.   It is possible to have more than one address for the same Organisation and address type e.g. telephone numbers.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Organisation** from the **Stakeholder Management** menu.

1.3   Open the **Organisation Maintenance** form.

1.4   Click on the **Report** button.

2.   How to View and Print Organisation Reports:
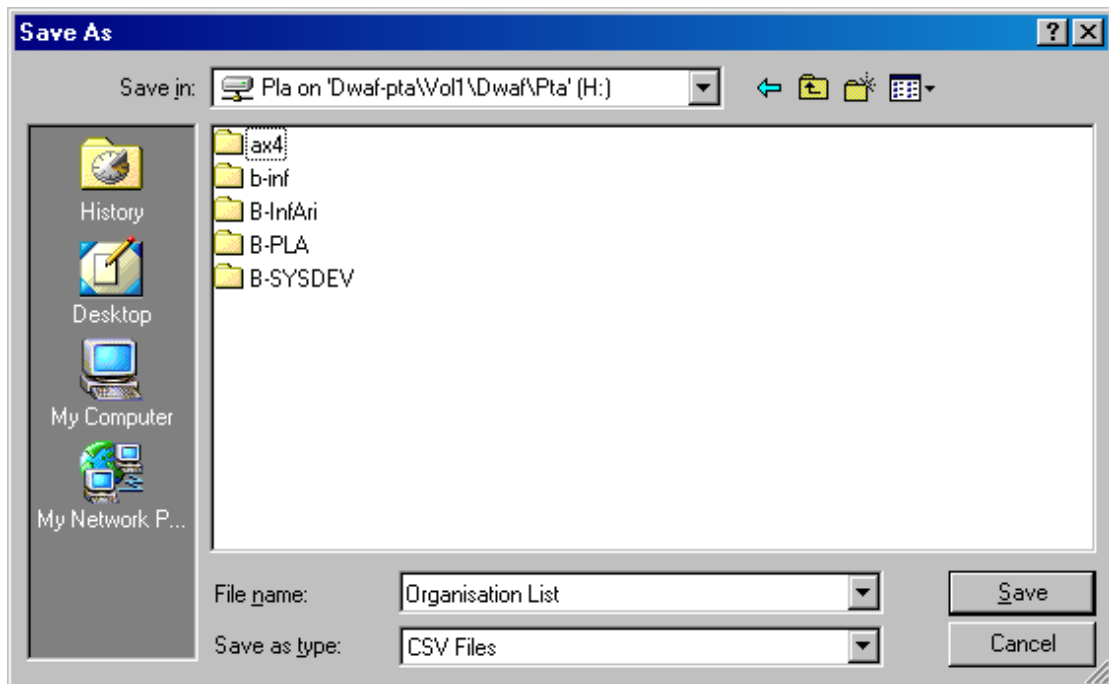
2.1   Click on the Organisation's record.

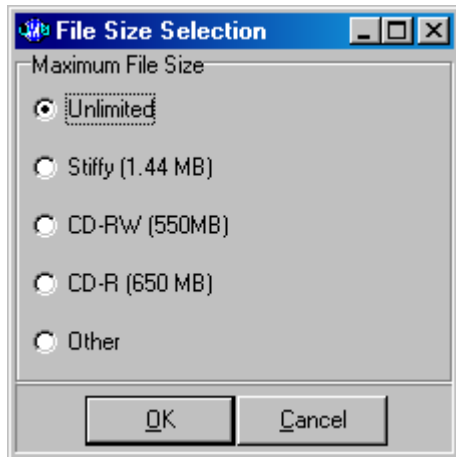2.2   Click on the **Repor**t button to open the **Report Decision Criteria** form.

2.3 Select the **Organisation List** option and click on the **Report** button.

2.4 A **Save As** window opens.

2.5 Give the Document a name and specify the directory where you would like to save it and click on the **Save** button.

2.6 A **File Size Selection** form displays. Specify the **Maximum File Size** by clicking on the applicable option and click **OK**.

2.7   Go to the Directory where you saved the file and double-click on the file to open it.

2.8   A .**CSV Report** displays with a list of the Organisation records for viewing and/or printing.

Note: *Using Excel can open .CSV files.*

Note: *The **Report Decision Criteria** form has seven reports (some are applicable to other modules in the manual) and the same procedure, which is followed above, will be followed for all the reports. However, some reports are **Lists** and some are **Reports**. Lists will be printed out in a .**CSV format** (in this case they will be printed out in Excel) and Reports will be printed out in a **Word format**.*

Stakeholder Management - Organisation Address

Introduction:

Note: *There are different types of Addresses, namely, Telecommunication, Electronic Addresses, Postal/Private Bag and Physical Addresses.*

Business Rules:

i.   An Organisation or Person may have only one correspondence/billing address. This applies for both Postal and Physical Addresses.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Organisation** from the **Stakeholder Management** menu.

1.3   Click on the **Address M** button.

2.   How to Create an Address for an Organisation:

2.1   Click on the selected record to highlight the record for which an address should be created.

2.2   Click on the **Address M** button to open the **Organisation Address Maintenance** form.

2.3   Click on the **Create** button to create an address record.

3.   How to Create a Telecommunication Address:

3.1   Click on the **Telecom and Electronic Address** tab.

3.2   The Address ID is system generated.

3.3   On the **Business/Home** field, Business defaults in as a value.

3.4   The **Local** field is by default already checked. If the number is **Foreign**, uncheck it, and tab.

3.5   On the **Telecom Type** field, click on the **drop-down** arrow to select the telecommunication type, and tab. The telecommunication types available are Fax, Telephone, Cell Phone and Pager.

3.6   On the **Direct/Switchboard** field, indicate whether the call is Direct or will be made via a Switchboard, and tab. When you select Pager or Cellular as Telecom Type, Direct will be the associated value.

3.7   On the **Dialling Code** field, enter a code allocated to a specific town or regional area, and tab. The form validates that it is a valid dialling code. If validation fails, contact your Central Liaison Entity Administrator to create the appropriate record in dialling code functionality.

3.8   On the **Number** field, enter the telephone number, and tab. The form validates that the first three digits correspond with the dialling code, and that the rest of the number is valid for dialling code and first three numbers of the telephone number.

3.9   On the **Extension** field, enter the additional number that must be dialled or requested when dialling, and tab.

? *Note: If a telephone number is not linked to an area code a Warning screen will be displayed. Click OK to continue. The reason for this message might be that a record has not yet been created, and if that is the case, a Central or Local Administrator will have to be contacted in order to create a new record for you.*
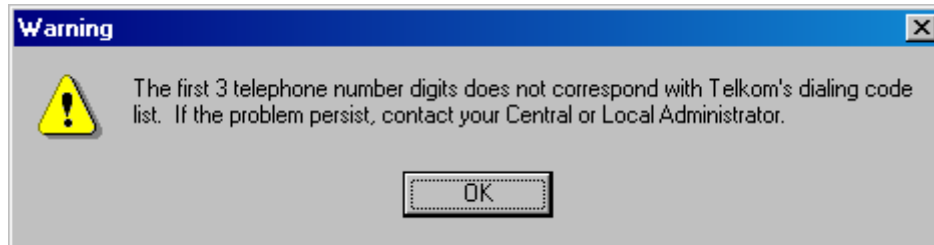
3.9   Tab to accept the new record.

4.   How to Create an Electronic Address:

? *Note: The Electronic Address ID and Business/Home fields are automatically populated by the system. The Business/Home field is defaulted to Business.*

4.1   In the **Electronic Address Type** field, click on the ▼ **drop-down** button and select the type of electronic address (E-mail, IP, or Web), and tab.

4.2   In the **Electronic Address Text** field, enter the electronic address where information can be sent.

4.3   Tab to accept the new record.

5. How to Create a Post Box Private Bag Address:

*5.1   The **Postal Address ID** and **Business Home** fields will be automatically populated by the system.*

5.2   In the **Post/Private Bag Type** field, click on the ▼ **drop-down** list and select either PO - Post Box or PR- Private Bag, then tab.

5.3   In the **Bag Box** Text field, enter the address, and tab.

5.4   In the **Postal Code** field, enter the postal code number or click on the **ZOOM** **Zoom** button to open the **Postal Code Area Selection** form, and select the required record.

5.5   In the **Parcel Indicator** field, check the checkbox on to verify if parcels will be delivered and collected at this address.

5.6   In the **Correspondence Indicator** field, check the checkbox on to verify if correspondence can be sent to this address.

5.7   In the **Billing Indicator** field, check the checkbox on to verify if accounts or bills will be delivered and collected at this address.

5.8   Tab to accept the new record.

[?]*Note: The **Postal Code Country Town Suburb** information will be automatically populated by the system.*

6. How to Create a Physical Address:

*6.1 The **Physical Address ID** and **Business Home** fields will be automatically populated by the system.*

6.2 In the **Post/Location** Type field, click on the [▼]**drop-down** button and select either Post, Location or Post Address & Location, and tab.

[?]*Note: If the **Post Location Type** specified is a **"Location"**, the **Country Town Suburb** field must have a value. If it is specified as **"Post"**, the **Postal Code** field must have a value, and if it specified as **"Post Address & Location"**, both the **Postal Code** and the **Country Town Suburb** fields must have values.*

6.3 In the **Country Town Suburb ID** field, enter a valid Country Town Suburb ID, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Country Town Suburb Selection** form, and select the required record.

6.4 In the **Postal Code** field, enter the postal code number, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Postal Code Area Selection** form, and select the required record.

6.5 In the **Building** field, enter the physical location and associated number, and tab.

6.6 In the **Place/Street** field, enter the physical or residential building or area, and tab.

6.7 In the **Residential Indicator** field, check the checkbox on to verify if this address is a residence.

6.8 In the **Parcel Indicator** field, check the checkbox on to verify if parcels will be delivered and collected at this address.

6.9 In the **Correspondence Indicator** field, check the checkbox on to verify if correspondence can be sent to this address.

6.10 In the **Billing Indicator** field, check the checkbox on to verify if accounts or bills will be delivered and collected at this address.

*6.11 The **Street Code Country Town Suburb** information will be automatically populated by the system.*

6.12 Tab to accept the new record.

Organisation Address History:

Introduction:

This module is used to view the historical changes made to organisation records.

Business Rules:

i.   When open the form from the WMS menu, view all the records including the records deleted.

ii.   When open the form from the Organisation Maintenance form, only view the records for the focused Organisation record.

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Organisation** from the **Stakeholder Management** menu.

1.3   Click on the **Address M** button.

1.4   Click on the **History** button.

2.   How to view the Organisation's Address History:

2.1   Click on the record to be selected.

2.2   Click on the **Address M** button to open an **Organisation Address Maintenance** form.

2.3   Click on the **History** button on the top part of the form.

2.4   A **View Address History** form is displayed.

2.5   Select the applicable option and click **OK**.

2.6   A **History View** form displays with the information according to the option that you selected. All the records for the type of address including the deleted records will display.

2.7   Click on the **History** button at the bottom of each grid to only view the History Records for the focused address record.

Note: *History records are sorted in descending order per changed date. The most recently changed record will be at the top of the list.*

Stakeholder Management - Employees and Members

Adding a Person as an Employee/Member of an Organisation:

Introduction:

This module gives you the option to maintain a Person as an associated Employee/Member of an Organisation.

The functionality gives you the option to maintain the Organisation with their associated Employees or Members. You will be able to maintain the employee with his/her status, rank and supervisor. You will be able to maintain the member with his/her status, rank and represented organisation. This module keeps history of all the Organisation, Employee and Member Record Maintenance.

Business Rules:

i.   You will be able to maintain the employee with his/her status, rank, supervisor and office number.

ii.   This module keeps history of the entire Organisation, Employee & Member record maintenance.

iii.   A Person may only be an Active employee of ONE Company at a given time.

iv.   When an employee or member record changes, you must specify the dates and reason for the change of the fields that are specified on the Employee or Member maintenance form.

v.   You may not insert new employee, member or address records for an organisation whose status is "Out of Use".

1.   Path:

1.1   Select the **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Person** from the **Stakeholder Management** menu.

1.3   Open the **Person Maintenance** form.

2.   How to Add a Person as an Employee or Member of an Organisation:

2.1   Click on the Person record to be added as an employee/member of an organisation.

2.2   Click on the **Employee/Member** tab.

2.3   Click on the **Create** button on the **Employee Maintenance** area.
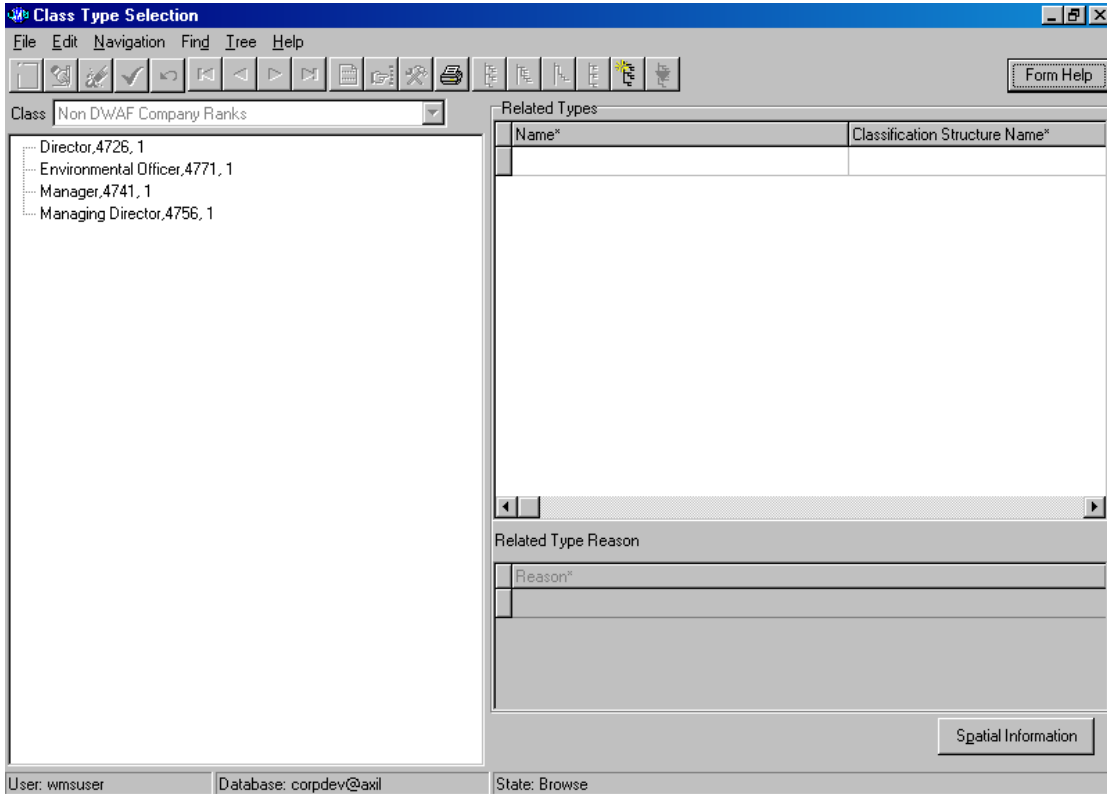
2.4   A new line displays to allow editing.

2.5   Click on the ⏷**drop-down** button to select the status as **Active** or **Out of Use**.
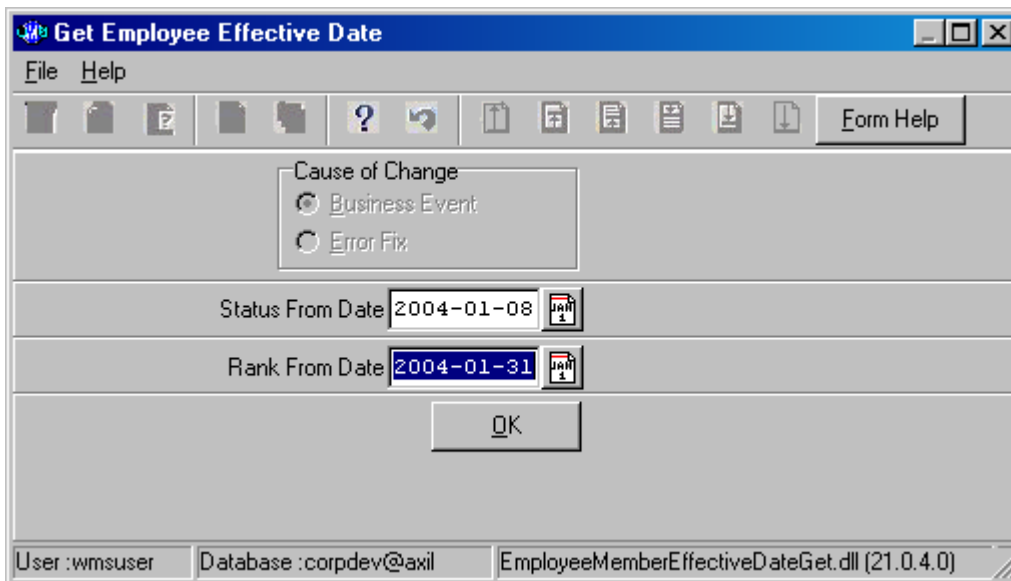
2.6   On the **Organisation ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form and select the applicable record and click on the **Select** **Select** button to return the selection.

Note: Follow these steps to create a Person as an Employee of an Organisation.

2.6   On the **Rank ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Class Type Selection** form and click on the **Select** **Select** button.

2.7   Enter the **Office Number**, and tab.

2.8   A **Get Employee Effective Date** form displays.

2.9   Enter the **Status from Date** and the **Rank from Date** by using the **Date-Picker** or by typing in the date.

2.10   Click on the **OK** button.

Note: If a Member/Employee already exists on the system, this message will be displayed.
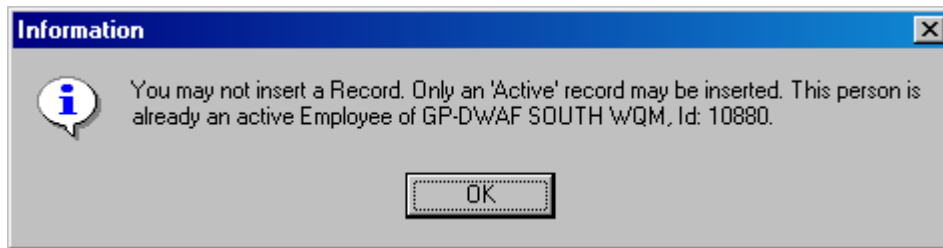
2.11   On the **Supervisor ID** field, alternatively press F5 or click on the ZOOM **Zoom**

button to open the **Employee Hierarchy Selection** form. *Note: If the Supervisor exists for this specific employee, a list of names will be displayed, but if this employee does not have a supervisor there will be no names displaying on the hierarchy.*

2.12   Select the specific Supervisor/Person record and click on the ⟨Select⟩ **Select** button.

2.13   Tab to accept the new record.

 Note: Follow the following steps to create a Person as a Member of an Assembly.

2.14   Click on the **create** button on the **Member Maintenance** area on the **Person Maintenance** form.

2.15   On the **Member Maintenance** area on the **Org ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form. Click on the applicable record, and click on the **Select** **Select** button to return your selection.

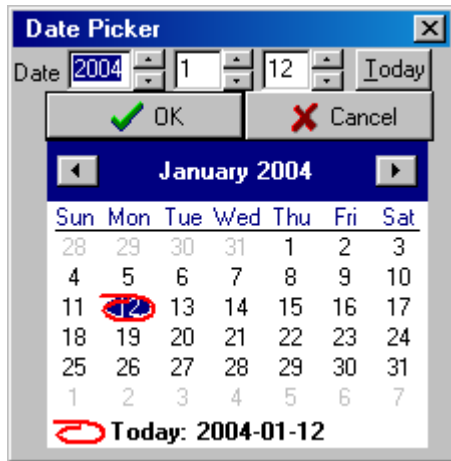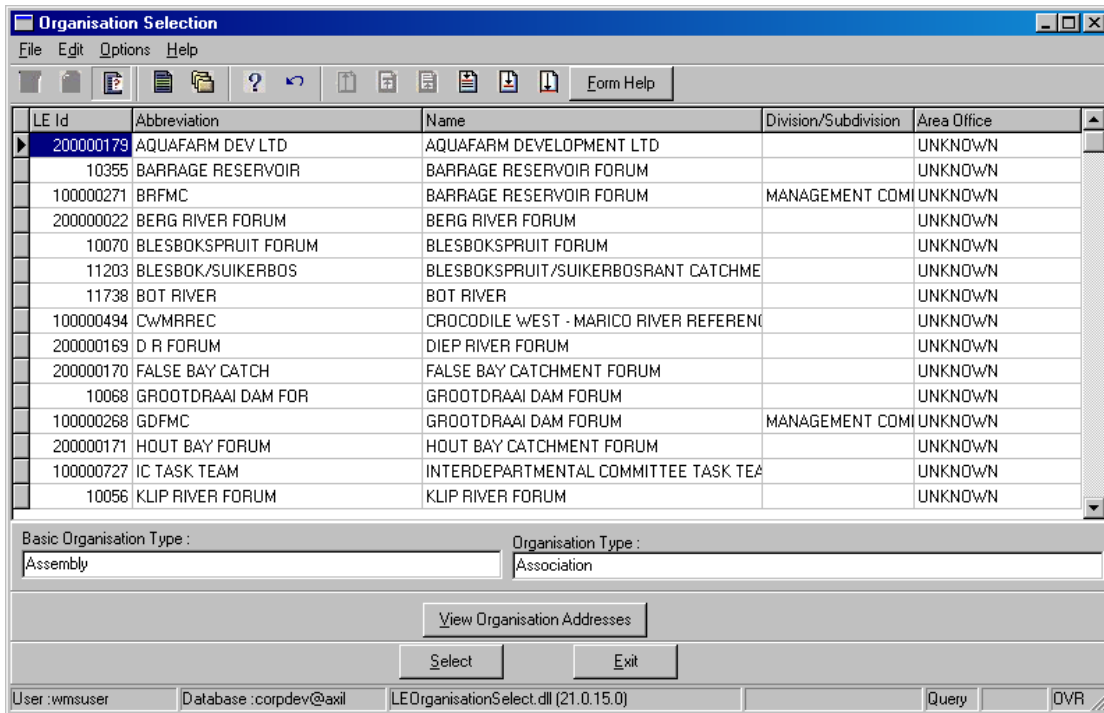*2.16*   On the **Rank ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Class Type Selection** form and click on the **Select** **Select** button on the applicable record to return your selection, and tab.
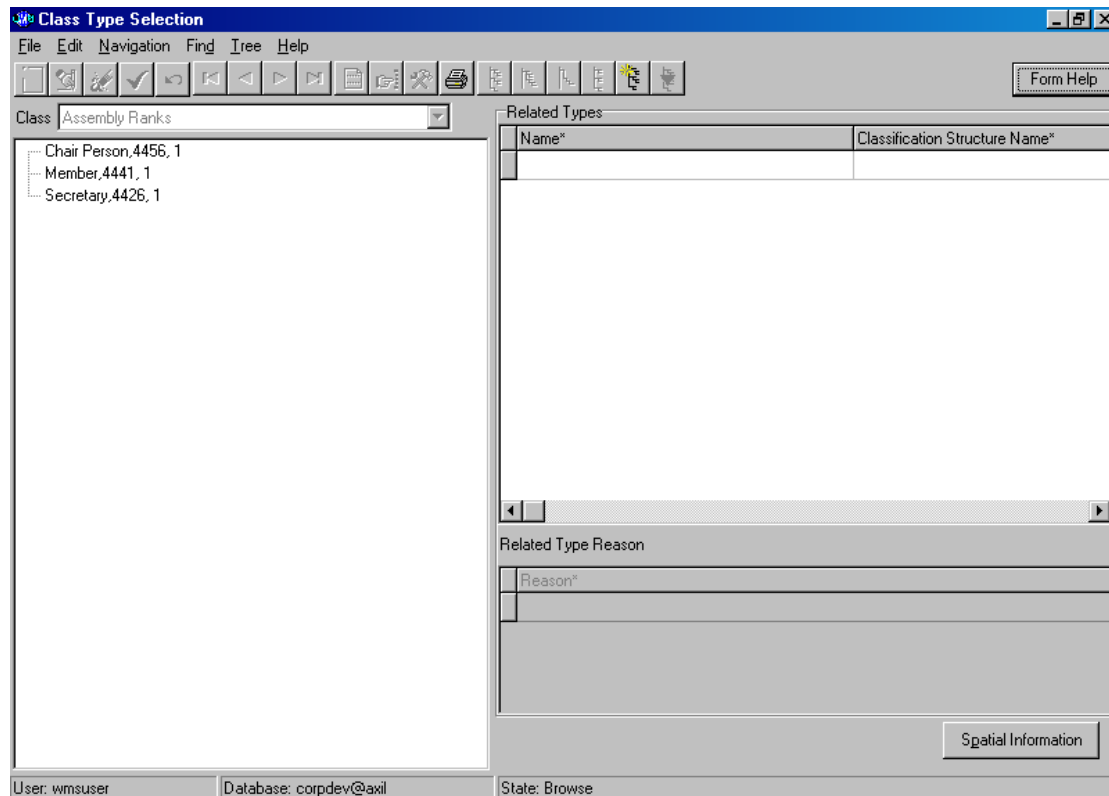
2.17 On the **Rep Type** field, identify which organisation the member represents at this Assembly by selecting the Rep Type from the options listed on the ▼**drop-down** list, and tab.

2.18 When the member represents another assembly on the **Represented Organisation ID** field, alternatively press F5 or click on the `ZOOM` **Zoom** button to open the **Member Organisation Selection** form or enter the member id.

2.19 *When the member represents himself, the Represented Organisation field will remain empty. When the member represents his company, it is automatically displaying its organisation where the member is registered on WMS as the current active employee.*

2.20 Tab to accept the new record.

3. How to Edit the Member/Employee:

3.1 Select the required Member/Employee record to be edited, and click on the [icon] **Modify Records** button.

3.2 Perform the necessary changes to the fields that require editing. *See How to Add a Person as a Member or Employee of an Organisation and How to Add an Employee to an Organisation.*

3.3 Tab to accept the changes.

3.4 A Get **Employee Effective Date** form displays with a **Cause of Change** option.
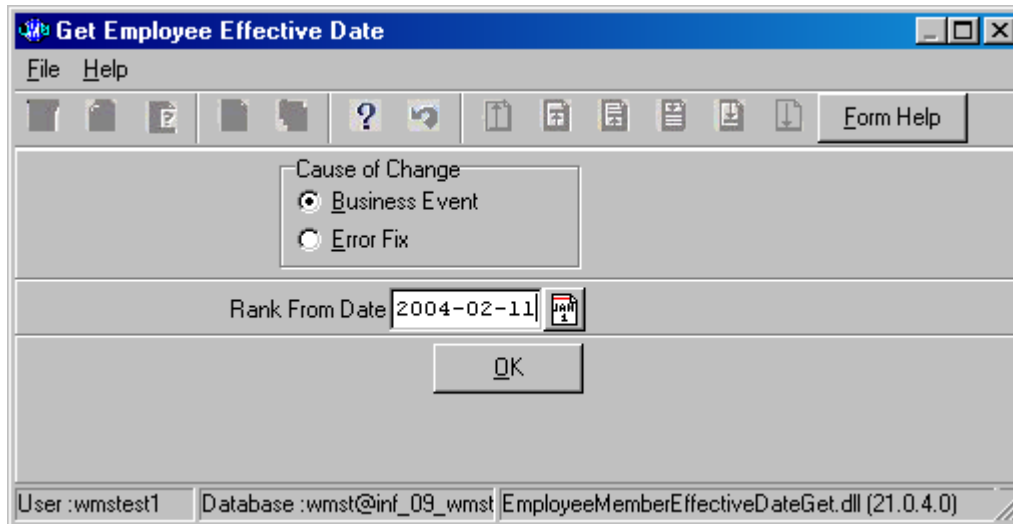
3.5 Select the reason for the change as either **Business Event** or **Error Fix** and enter the date by using the date picker or typing it in.

3.6 Click **OK.**

3.7 Perform the necessary changes to the fields that still require editing.

3.8 Tab to accept the changes.

4. How to Delete a Member/Employee:

4.1 Click on the record to be deleted.

4.2 Press F3 to delete a record.

4.3 A message is displayed asking you to confirm deletion.
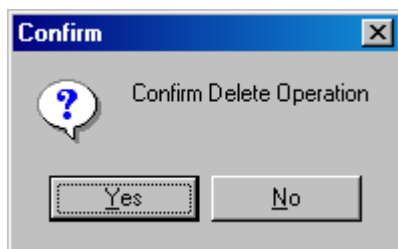
4.5 Click on the **Yes** option.

5. How to View the Member/Employee History:

5.1 Click on the record to be selected.

5.2 Click on the **Member/Employee** tab.

5.3 Click on the **Employee History V** button to open the **Employee History View** form.

Note: You can use this form to view all historical changes made to the Employee's record.

5.4   Click on the **Member History V** button to open the **Member History View** form.

   [icon] *Note: You can use this form to view all historical changes made to the Member's record.*

6.   How to View and Print the Member/Employee's Report

6.1   Click on the record to be selected.

6.2   Click on the **Member & Employee** tab.

6.3   Click on the **Report** button to open the **Report Decision Criteria** form.

Member:

6.4   Select the **Member .csv Export** option and click on the **Report** button.

6.5   A **Save As** window opens.
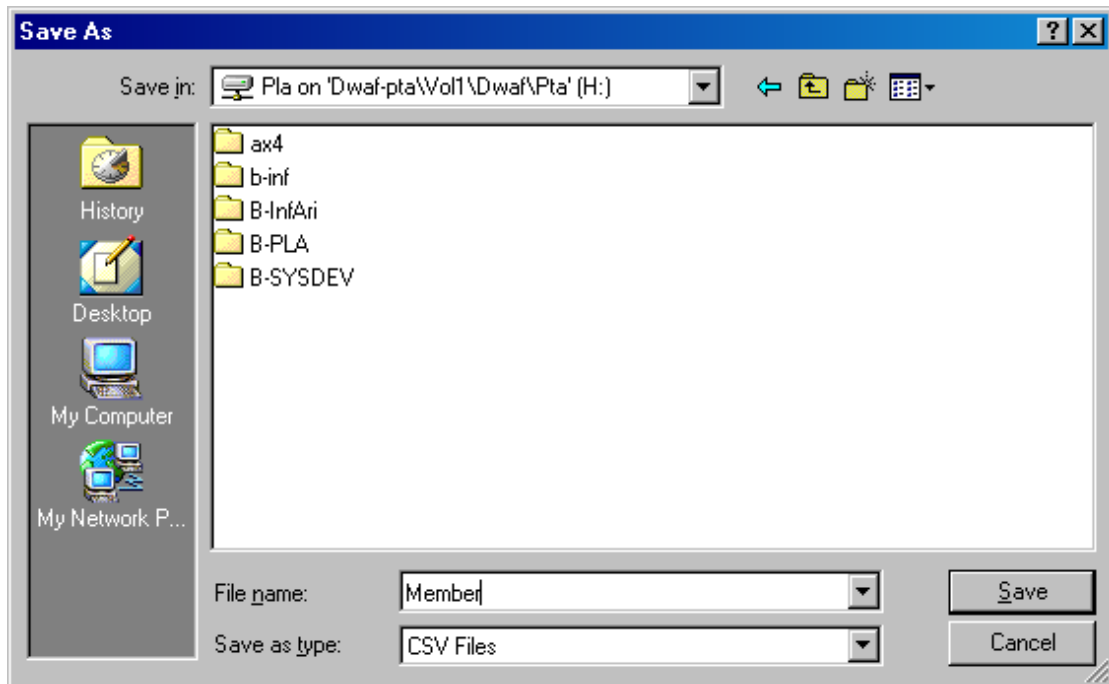
6.6   Give the document a name and specify the directory where you would like to save and
       click on the **Save** button.

6.7   A **File Selection** form displays. Specify the **Maximum File Size** by clicking on the
       applicable option and click **OK.**
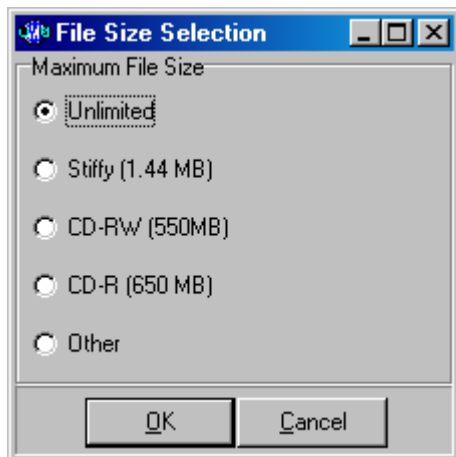
6.8   Go to the directory where you saved the file and double-click on the file to open it.

Note: A .CSV Report displays with a list of the member records to be viewed or printed.

Member Address Report:

6.9   Select the **Member Address Report** option and click on the **Report** button.

6.10   **Member Business Address Report** will be automatically generated by the system. A Word **Report** displays with a list of the member business address records to be viewed or printed.

7.   **Alternative Way of Adding an Employee to an Organisation:**

7.1 Open the **Organisation Maintenance** form, and focus on the **Company** record that you would like to add an employee record to in the **Basic Org** field.

Note: *If the **Basic Organisation Type** is selected as **Company** the **Employee** tab will display and if it is **Assembly** the **Member** tab will display.*

7.2 Click on the **Employee** tab.

7.3 Click on the **Create** button.

*7.4   The **Employee ID** is automatically created by the system.*

7.5   On the **Person ID** field, alternatively press F5 or click on the `ZOOM` **Zoom** button to open the **Person Selection** form, and select the required person record.
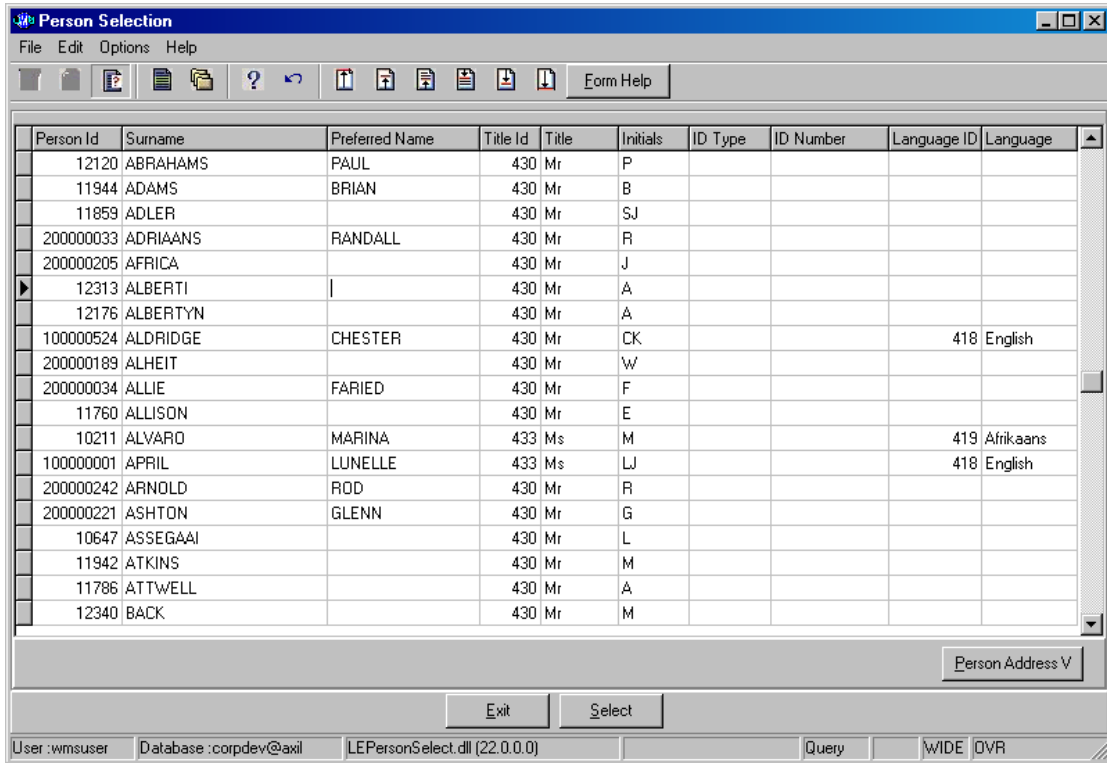
7.6   Select the **Person** by clicking on the [Select] **Select** button, and tab.

*7.7   The **Status** is automatically entered as Active.*

7.8   On the **Rank Type ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Class Type Selection** form, or enter a valid rank type id.
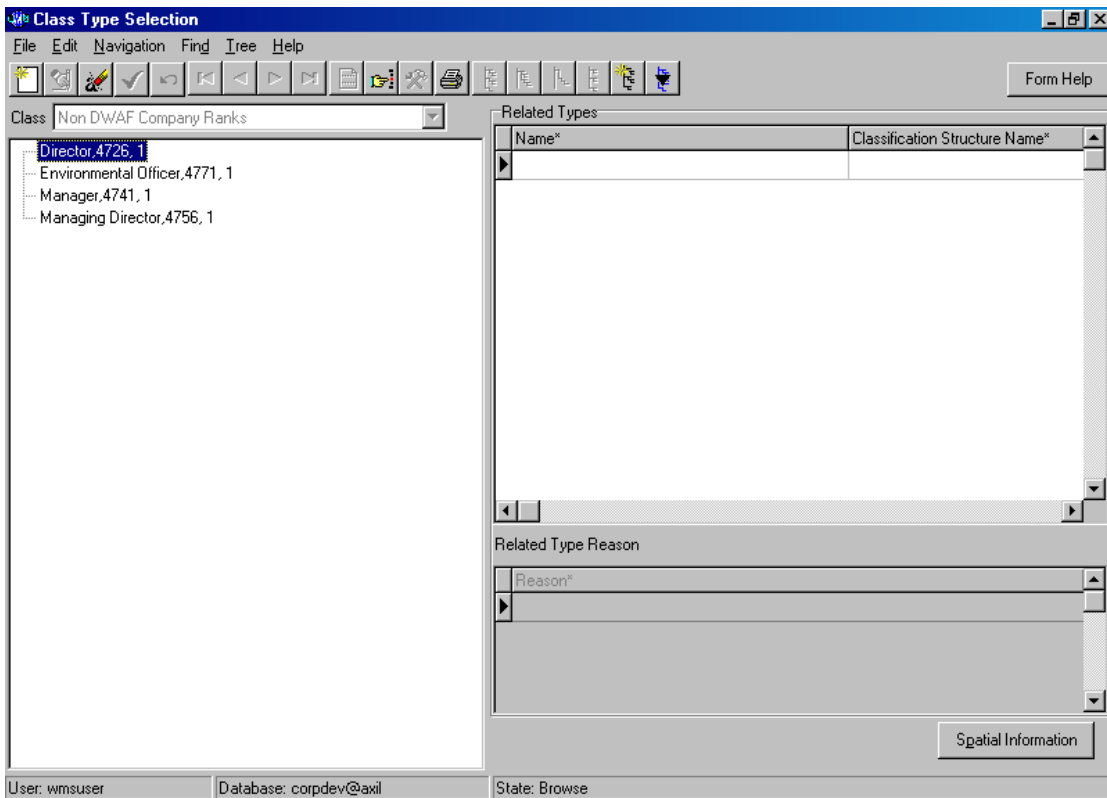
7.9 Select the **Rank** by clicking on the ⬚**Select** button, and tab. ⬚*Note: This is not a mandatory field, if the Rank Required Indicator is false for the company.*

7.10 On the **Office Number** field, optionally enter the office number, and tab.

7.11 On the **Supervisor ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Employee Hierarchy Selection** form.

⬚*Note: This is not a mandatory field. Only Employees for the same company will be displayed for selection.*
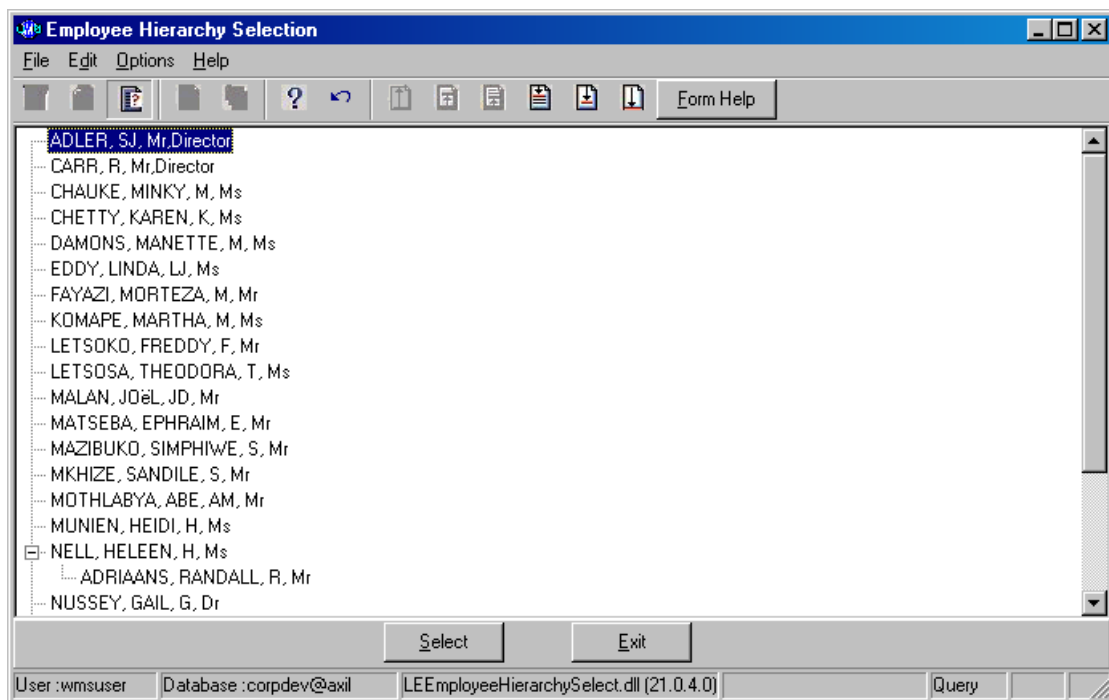
7.12 Select the applicable record and click on the **Select** **Select** button to return the selection.

7.13 *The name will be automatically displayed by the system as it is linked to the Supervisor ID.*

⬚**Note***: When the form is in query mode, and you press F5 in the supervisor field, the whole tree view structure for the company and its Employees will be displayed.*

8. How to View the Organisation's Employee History

8.1   Click on the record to be selected.
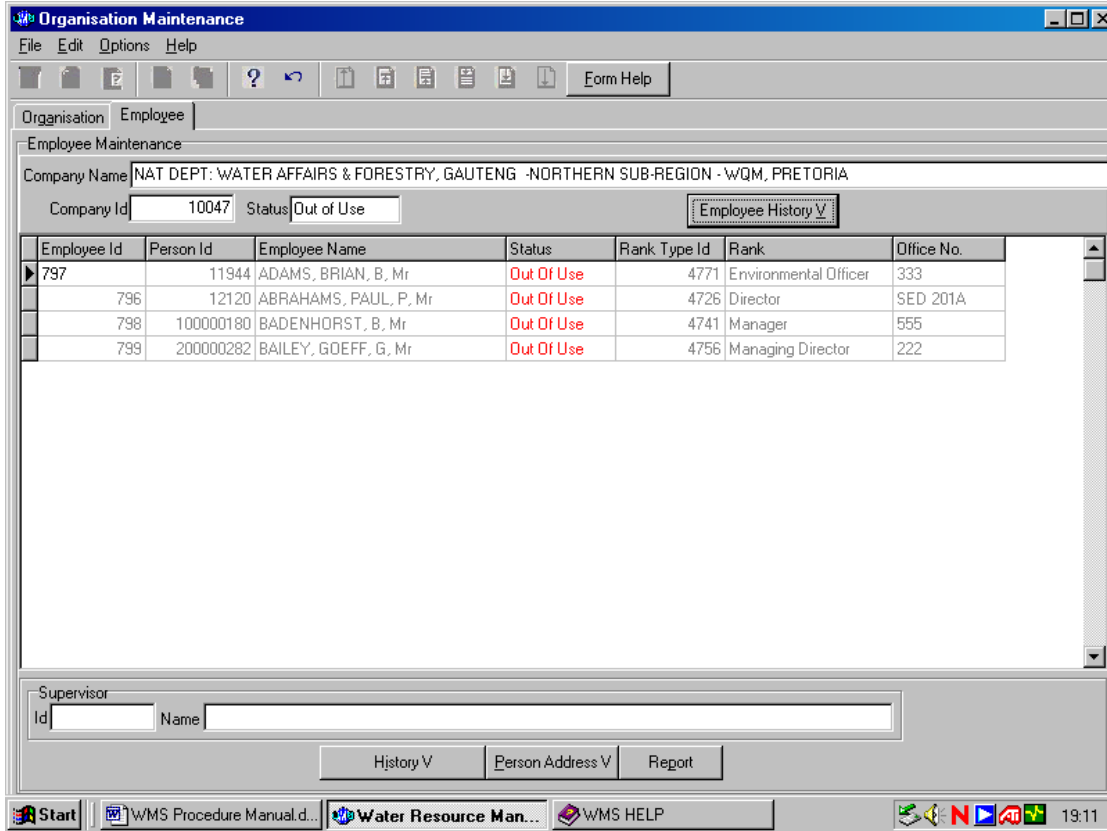
8.2   Click on the **Employee** tab.

8.3   Click on the **Employee History V** button to open the **Employee History View** form.

Note: You can use this form to view all historical changes made to the Employee record.

9. How to Add a Member to an Organisation:

9.1 Open the **Organisation Maintenance** tab and focus on the **Assembly** record that you would like to add a member record to.

Note: *If the Basic Organisation Type is Company the Employee tab will display and if it is Assembly the Member tab will display.*

9.2 Click on the **Member** tab.

9.3 Click on the ⬛**Create** button to open a **Member Maintenance** sub form.

Member Id	Person Id	Member Name	Status	Rank Id	Rank	Rep. Type
61	10080	GELDENHUYS, HENNIE, HL, Mr	Active	4441	Member	Myself
67	10092	STEVENS, MARIUS, MH, Mr	Active	4441	Member	Myself
57	10122	MARAIS, SMUTS, AS, Mr	Active	4441	Member	Myself
53	10160	MCMARTIN, RON, R, Mr	Active	4441	Member	Myself
55	10164	NELUVHALANI, MUKHETHO, MJ, M	Active	4441	Member	Myself
58	10211	ALVARO, MARINA, M, Ms	Active	4441	Member	Myself
65	10212	LAWRENCE, AD, Mr	Active	4441	Member	Myself
62	10213	INGRAM, T, Mr	Active	4441	Member	Myself
56	10214	PELSER, V, Mr	Active	4441	Member	Myself
64	10215	KLEYNHANS, LOUIS, L, Mr	Active	4441	Member	Myself
63	10216	JONAS, A, Mr	Active	4441	Member	Myself
68	10217	SWART, GE, Mr	Active	4441	Member	Myself
69	10218	VAN HUYSTEEN, J, Mr	Active	4441	Member	Myself
70	10219	VAN WYK, S, Mr	Active	4441	Member	Myself
66	10220	LOMBARD, H, Mr	Active	4441	Member	Myself
59	10222	DEARUYO, J, Mr	Active	4441	Member	Myself
*	12120	ABRAHAMS, PAUL, P, Mr	Active	4456	Chair Person	

*9.4 The **Member ID** will be automatically created by the system after the creation of a new record has been accepted.*

9.5 On the **Person ID** field, either enter ID or press F5 to open the **Person Selection** form.

9.6   Select the **Person** by clicking on the [Select] **Select** button, and tab.

*9.7   The **Status** is automatically entered as Active.*

9.8   On the **Rank ID** field, either press F5 to open the **Class Type Selection** form or enter
        the rank's class type id.

9.9   Select the **Rank** by clicking on the [Select] **Select** button, and tab.

*9.10   On the **Rank Type** field, the value will automatically display as it's linked to the Rank Type ID, and tab.*

9.11   On the **Rep Type** field, identify which organisation the member represents at this Assembly by selecting the Rep Type from the options listed on the ▼**drop-down** list, and tab.

9.12   When the member represents another assembly on the **Represented Organisation ID** field, alternatively press F5 or click on the **ZOOM** **Zoom** button to open the **Member Organisation Selection** form or enter the member id.

9.13   When the member represents himself, the Represented Organisation field will remain empty. When the member represents his company, it is automatically displaying its organisation where the member is registered on WMS as the current active employee.

🔲*Note*.   *It is only possible to select certain assemblies for representation. When the Organisation of this Organisation is identified on the Organisation Maintenance form, the Member can only represent Organisation lower in the tree view, and not Assemblies higher in the tree view. You are also prevented from selecting an Assembly that will cause circulating relationship through member records.*

9.14   Select the applicable record and click on the [Select] **Select** button to return the selection.

*9.15   The **Abbreviation** is automatically displayed by the system because it is linked to the **Represented Organisation ID**.*

10. How to View a Member's History:

10.1   Click on the organisation record to be selected.

10.2   Click on the **Member** tab.

10.3   Click on the **Member History V** button to open the **Member History View** form.

Note: You can use this form to view all historical changes made to the Employee record.

Member History View

File Edit Options Help

Form Help

Member Id	Member Name	Cause	Choice	Effective From Date	Effective To Date	Person Id	Represent Type	Member Rank	Status
72	MBETHE, SIPHO, S,	Error Fix	Status	2003-11-14	9999-12-31	10306	Myself	Member	Out Of Use
72	MBETHE, SIPHO, S,	Business Even	Status	1980-01-01	2003-11-13	10306	Myself	Member	Active
73	MCADAM, ALEX, A,	Error Fix	Status	2003-11-14	9999-12-31	10299	Myself	Member	Out Of Use
73	MCADAM, ALEX, A,	Business Even	Status	1980-01-01	2003-11-13	10299	Myself	Member	Active
74	MEYER, ROUX, R, M	Error Fix	Status	2003-11-14	9999-12-31	10279	Myself	Member	Out Of Use
74	MEYER, ROUX, R, M	Business Even	Status	1980-01-01	2003-11-13	10279	Myself	Member	Active
75	NIEUWOUDT, TIELM	Error Fix	Status	2003-11-14	9999-12-31	100000147	Myself	Member	Out Of Use
75	NIEUWOUDT, TIELM	Business Even	Status	1980-01-01	2003-11-13	100000147	Myself	Member	Active
76	MAREE, DAWIE, D,	Error Fix	Status	2003-11-14	9999-12-31	10018	Myself	Member	Out Of Use
76	MAREE, DAWIE, D,	Business Even	Status	1980-01-01	2003-11-13	10018	Myself	Member	Active
77	PRETORIUS, HUGO	Error Fix	Status	2003-11-14	9999-12-31	10283	Myself	Member	Out Of Use
77	PRETORIUS, HUGO	Business Even	Status	1980-01-01	2003-11-13	10283	Myself	Member	Active
78	RAMAKOLO, ALPHE	Error Fix	Status	2003-11-14	9999-12-31	100000097	Myself	Member	Out Of Use
78	RAMAKOLO, ALPHE	Business Even	Status	1980-01-01	2003-11-13	100000097	Myself	Member	Active

Assembly Id 10068   Representation Org Id [   ]   Represent Org Abbr [   ]

Assembly Name GROOTDRAAI DAM FORUM, UNKNOWN

Change

Date & Time 2003-11-14 11:59:08

User maryna   M GOOSEN   Organization [   ] [   ]

Report

User :wmsuser   Database :corpdev@axil   MemberHistoryView.dll (21.1.0.0)   Query   OVR

Associated Address Information

Introduction:

There are two ways of viewing Addresses that are associated with a person (such as the address of the organisation they work for) or the addresses associated with an organisation (such as the addresses of the employees/members). One way is through the Associated Organisation Address V button and the Represented Organisation Address V button. The Associated Organisation Address button is used for viewing the address information for the Organisation employing that particular person and the Represented Organisation Address button is used when an employee is a member of an organisation and it is for viewing the organisation address details associated with that particular member. The other way is to view the addresses of persons by using the Person Address M button. This will display the information of employees/members.

Business Rules:

i.   This module is mainly for viewing Addresses and not for maintenance and capturing new addresses

1.   Path:

Note: *There are two ways to access the information:*

Viewing the information from the Person Maintenance form:

1.1   Open the **Person Maintenance** form.

1.2   Select the **Employee & Member** tab.

Viewing the Information from the Organisation Maintenance form:

1.3   Open the **Organisation Maintenance** form.

1.4   Select the **Employee** or **Member** tab. Note: *Please refer Stakeholder Management- Employees and Member.*

2. How to View Associated Address Information from the Person Maintenance form:

2.1 Click on the Person record to be viewed and click on the **Employee & Member** tab.

2.2 Click on the **Associated Org Address V** button in the **Employee Maintenance** area.

2.3 This will open the **Organisation Address View** form. *Note: This form displays the different types of addresses associated with an employee.*

3.   How to View the Represented Organisation's Address Information:

3.1   Click on the Person record to be viewed, and click on the **Employee & Member** tab.
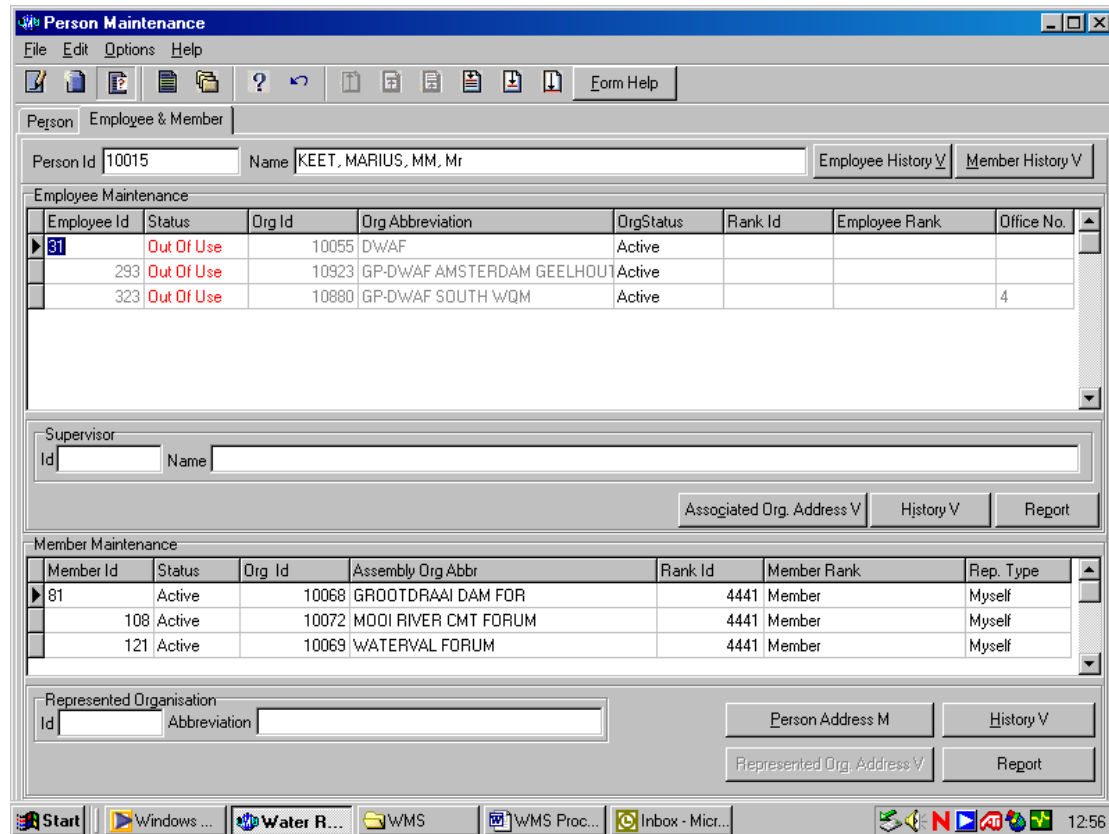
3.2   Click on the **Represented Organisation Address V** button on the **Member Maintenance** area to view the address information associated with the member of this assembly.

Note: You must add a new Employee to an Organisation before Person Address M button is available.

4.   How to View Associated Address Information from the Organisation Maintenance form:

4.1   Click on the Organisation record to be viewed and click on the **Employee** or **Member** tab.

4.2   Click on the **Person Address M** button to open the **Person Address Maintenance** form. *Note: This form is a Maintenance form, but it is highly recommended that you use it only for viewing. Do not do any maintenance on this form; kindly refer **Stakeholder Management – Person Address** if you would like to perform any maintenance on person addresses.*

Monitoring Structure

Introduction:

The objective of the Monitoring Structure module is to set up a structure or hierarchy of **Liaison Entities** for monitoring purposes. In the present version of **WMS** the **Department of Water Affairs and Forestry** is the "owner" of all structures.

Regional offices of the **Department of Water Affairs and Forestry** are "Managing" the structures for the region.

A typical structure has the following format:

Owner DEPARTMENT OF WATER AFFAIRS AND FORESTRY

- ABC-REGIONAL OFFICE   Qualifying relationship   Managing

  - SUBSECTION OF REGIONAL OFFICE   Qualifying relationship   Responsible

    - SUBSECTION OF REGIONAL OFFICE   Qualifying relationship   Executive

    - GHI-LIASON ENTITY   Qualifying relationship   Executive

    - XYZ-LIASON ENTITY   Qualifying relationship   Executive

  - SUBSECTION OF REGIONAL OFFICE   Qualifying relationship   Responsible

    - SUBSECTION OF REGIONAL OFFICE   Qualifying relationship   Executive

Terminology

Child   A liaison entity with Qualifying relationship of "Executive" is considered to be a "**child**" of the liaison entity with Qualifying relationship of "Responsible" and

The liaison entity with Qualifying relationship of "Responsible" is a "**child**" of the liaison entity with Qualifying relationship of "Managing".

Parent A liaison entity with Qualifying relationship of "Managing" is the "**parent**" of the liaison entity with Qualifying relationship of "Responsible" and the "Responsible" LE is the "**parent**" of the "Executive" LE.

Business Rules:

i   The highest level in the structure is **Managing**; the second level in the structure is **Responsible**, and the third, and lowest, level in the structure is **Executive**.

ii   Any operation (monitoring, analysis, supplying data) can only be done on the Executive level.

iii   Each Liaison Entity with a Qualifying relationship of "Managing" must have at least one Liaison Entity on a level of "Responsible" and at least one Liaison Entity on an "Executive" level to enable monitoring.

iv   A liaison entity may be on all three levels of Qualifying relationship.

v   The "From" and "To" dates of a "child" must fall within the period of the "From" and "To" dates of the "parent". This means, a child cannot start to operate before the **From** date of the parent and cannot continue after the **To** date of the parent.

vi   Always and only add to the existing structure belonging to DWAF (no wild keys*)

vii   At the root level, find or ![icon]**add** your regional office (Managing Level)

viii   Under your Regional office, find or ![icon]**add** your subsection of you Regional Office e.g. Limpopo WQM - Polokwane (Responsible Level)

ix   Under your Regional Office's subsection, find or add all Impactors (e.g. Local Authority number X) and also your own subsection of your regional office (executive level)

1.   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2   Select **Functional Structures** from the sub menu.

1.3   This will open the **Organisation and Person Functional Structure Maintenance** form on the **Find** tab. The checkboxes to activate either **Person** or **Organisation**, and the fields in **Search for LE's in the following structures** are active. The menu items Close, Range and Help, and the "Range" button are active. The tabs **Results** and **LE Structure** cannot be selected.

What does this mean?

After ranging the **Result** tab is active (to review your search criteria) and the **LE Structure** tab is active for Liaison Entities with a "Relation Structure Reason" in the "The current Liaison Entity exists in the following relation structure" grid. You can switch from one tab to another.

2.   How to add an Organisation to a Monitoring Structure (Managing Level):

Steps:

2.1   On the **Find** tab click on the Organisation ☑ **checkbox**.

2.2   Perform a range with the following search criteria, abbreviation DWAF, no wild keys (*):

2.3   Click on the 📄 **Range** button.

2.4   On the Results tab only one Liaison Entity will be displayed, DWAF 10055.

2.5   Select the **Monitoring Relation Structure Reason**.
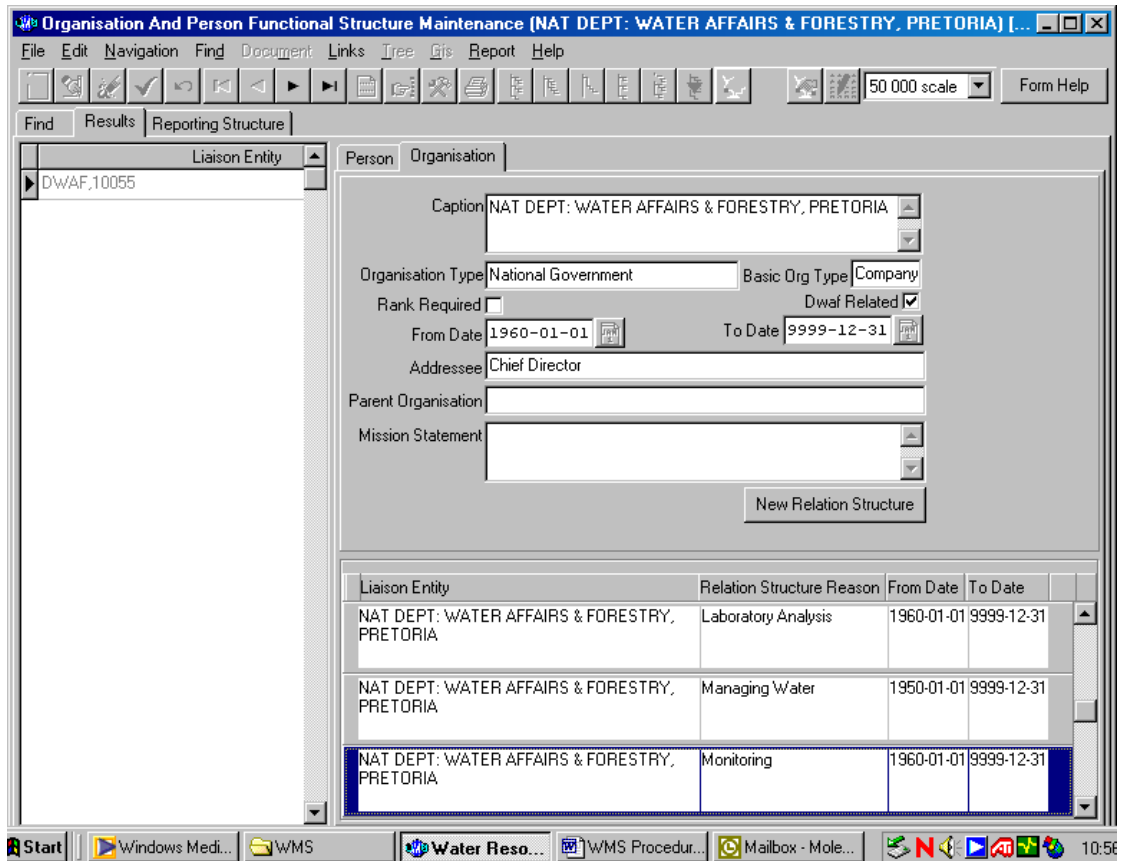
2.6   Click on the **Reporting Structure** tab.
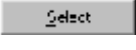
2.7   A list of **DWAF Monitoring Structure** records displays.
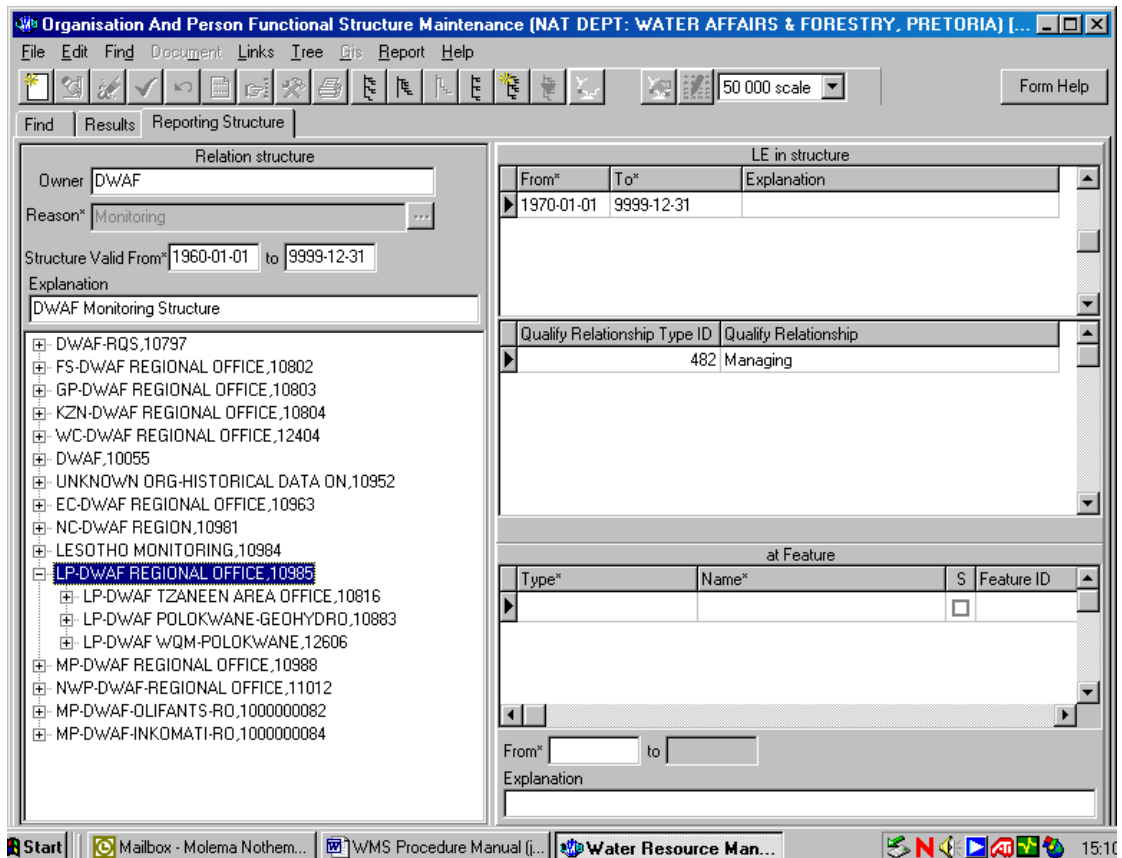
2.8   Search for your Regional Office on the **Managing Structure Level, e.g.** LP-Dwaf
       Region.

2.9   If your Regional Office is not there add it by clicking on the [icon] **Add Root** button to
       open the **Organisation Selection** form.

2.10   Focus on the required record, and click on the [Select] **Select** button to return the
       selection.

2.11   An Organisation and **Person Functional Structure Maintenance** form displays with
       the newly created **Structure Level**.

2.12   Enter the **From** and **To** dates on the LE in structure area. *(If the dates are unknown, use the default From date as 1960-01-01 and the default To date as 9999-12-31).*

2.13   Click on the ✔ **Accept** button.

2.14   Click on the **Qualify Relationship Type ID** and **Qualify Relationship** fields and click on the ⬜ **Add** button.

2.15   The Qualify Relationship Type ID and Qualify Relationship information will be automatically populated by the system as Managing.

2.16   Tab to accept the changes.
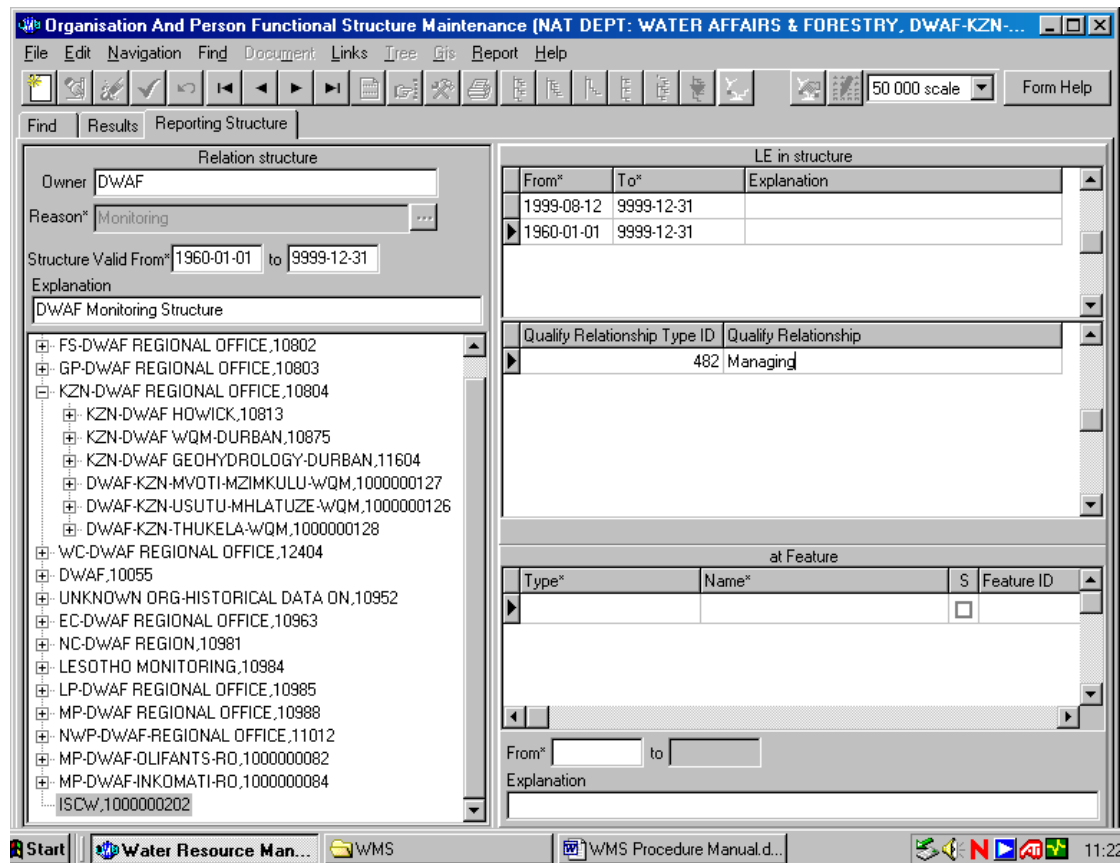
3.   How to Find or Add an organisation on Responsible level:

3.1   Move the cursor to the required Managing Organisation record and highlight it.

3.2   Click on the expand button to find the subsection of your Regional Office, e.g. LP-DWAF-WQM-Polokwane.

3.3   If the subsection of your Regional Office is not available, add it by clicking on the **Add** button to open the **Organisation Selection** form.

3.4   Find the correct organisation by searching (filtering).

3.5   When the correct Organisation is found, click on the [Select] **Select** button.

3.6   An **Organisation and Person Functional Structure Maintenance** form displays
        with the newly created Structure level.

3.7   Enter the **From** and **To** dates on the LE structure area. If the dates are unknown, use the default From date as 1960-01-01 and the default To date as 9999-12-31.

3.8   Click on the ✔ **Accept** button.

3.9   Click on the **Qualify Relationship Type ID** and **Qualify Relationship** fields and click on the 🗋 **Add** button.

*3.10   The **Qualify Relationship Type ID** and **Qualify Relationship** field information will be automatically populated by the system as Responsible.*

3.11   Tab to accept the changes.
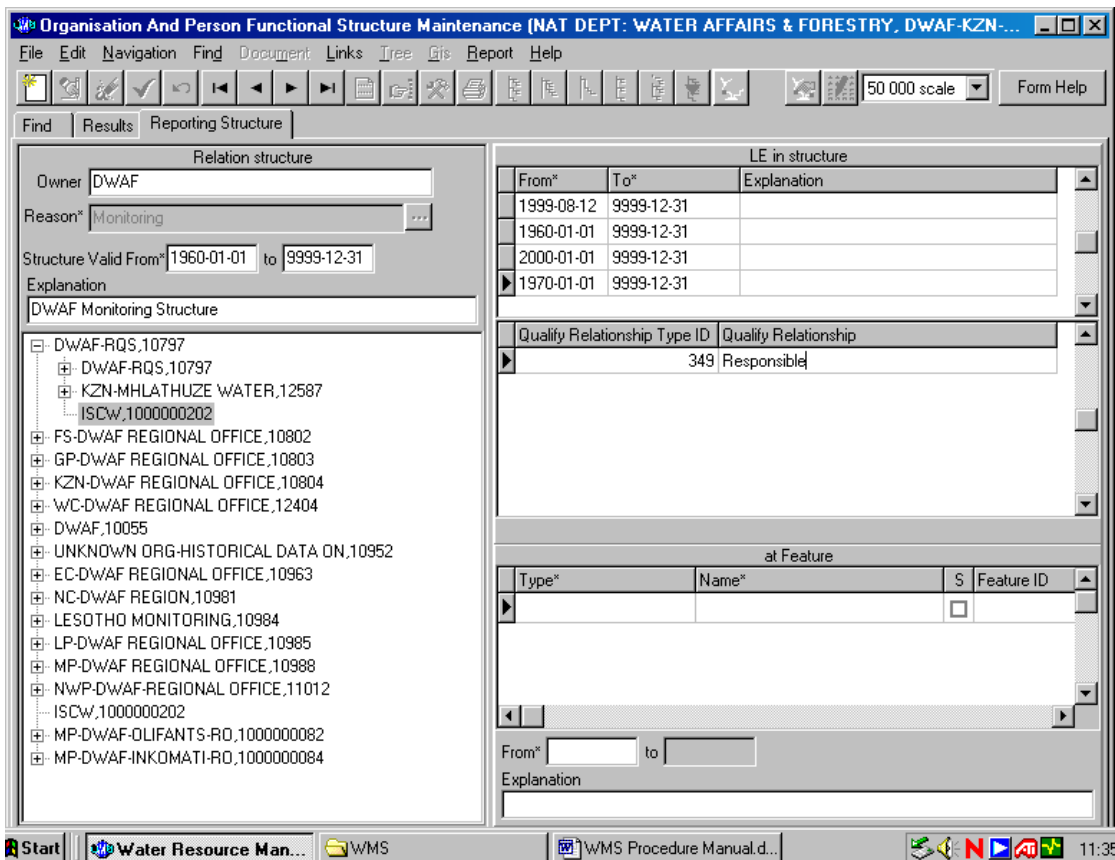
4.   How to Find or Add an organisation on Executive level:

4.1   Move the cursor to the required **Responsible Organisation** and highlight it.

*4.2   Click on the 🗋 **Add** button to open the **Organisation Selection** form.*

4.3   Click on the **Expand** button to find the subsection of your Regional Office/Impactors.

4.4   If the subsection of your Regional Office/Impactors is not available, add it by clicking

on the [icon] **Add** button to open the **Organisation Selection** form.

4.5   Find the correct organisation by searching (filtering).

4.6   When the correct Organisation is found, click on the [Select] **Select** button.

4.7   An **Organisation and Person Functional Structure Maintenance** form displays with the newly created Structure level.
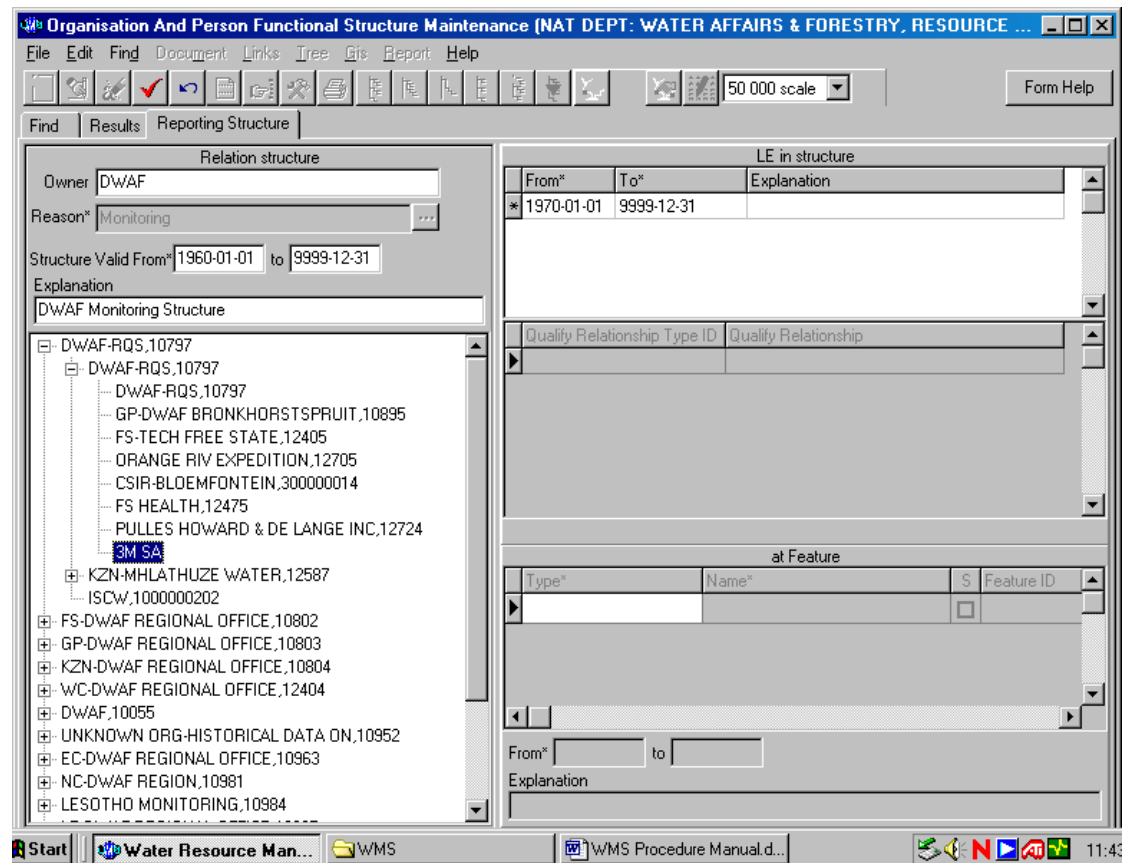
4.8   Enter the **From** and **To** dates on the LE structure area. *(If the dates are unknown use the default From date as 1960-01-01 and the default To date as 9999-12-31).*

4.9   Click on the [✓] **Accept** button.

4.10   Click on the **Qualify Relationship Type ID** or **Qualify Relationship** fields and click on the [ ] **Add** button.

4.11   *The **Qualify Relationship Type ID** and **Qualify Relationship** field information will be automatically populated by the system as Executive.*
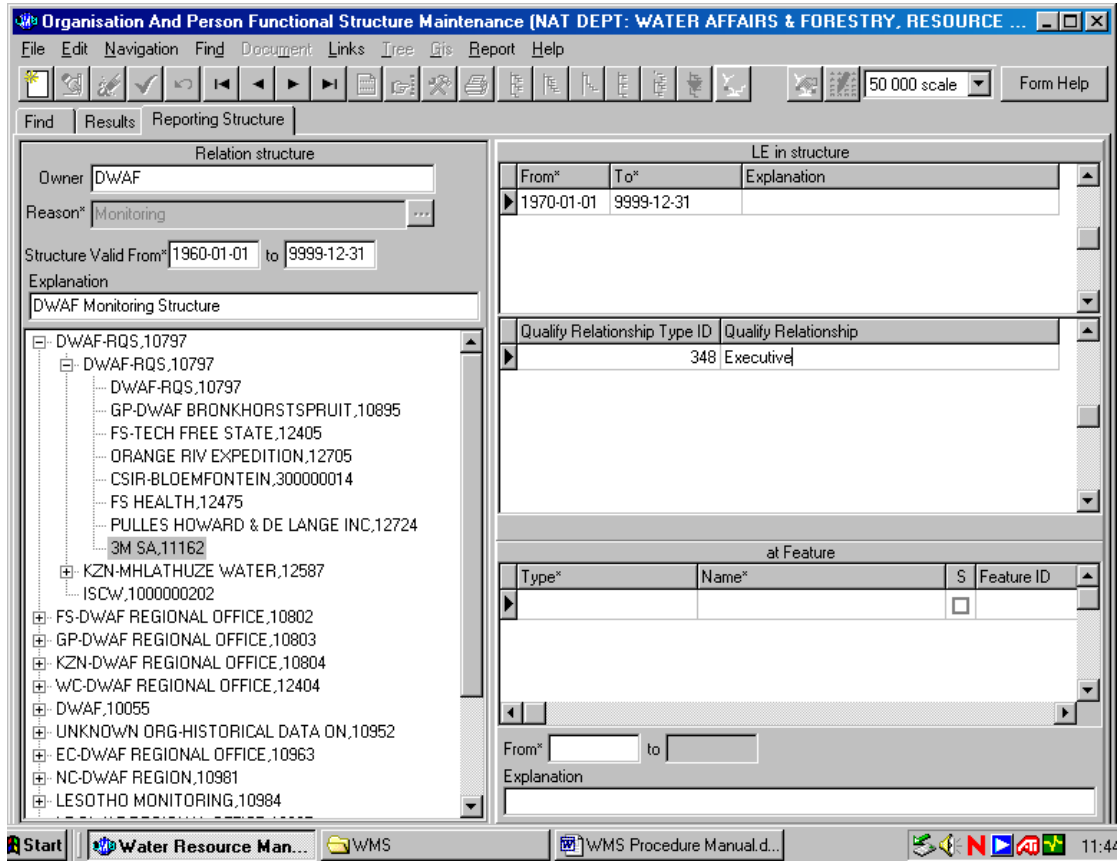
4.12   Tab to accept the changes.

Laboratory Analysis Structure

Introduction:

The Laboratory Analysis structure module allows you to set up a structure or hierarchy of **Liaison Entities** for Analysis purposes. In the present version of **WMS** the **Department of Water Affairs and Forestry** is the "owner" of all structures. In future versions you may be allowed to select other owners. Regional offices of the **Department of Water Affairs and Forestry** are "Managing" the structures for the region.

A typical structure has the following format:

Owner DEPARTMENT OF WATER AFFAIRS AND FORESTRY

- SUBSECTION OF Regional Office   Qualifying relationship
  Managing

  - SUBSECTION OF Regional Office   Qualifying relationship
    Responsible

    - LABORATORY WORKING FOR Regional Office Qualifying
      relationship   Executive

  - IMPACTOR   Qualifying relationship   Responsible

    - LABORATORY WORKING FOR IMPACTOR   Qualifying
      relationship   Executive

Terminology

Child   A liaison entity with Qualifying relationship of "Executive" is considered to be a "**child**" of the liaison entity with Qualifying relationship of "Responsible" and

The liaison entity with Qualifying relationship of "Responsible" is a "**child**" of the liaison entity with Qualifying relationship of "Managing".

Parent   A liaison entity with Qualifying relationship of "Managing" is the "**parent**" of the liaison entity with Qualifying relationship of "Responsible" and the "Responsible" LE is the "**parent**" of the "Executive" LE.

Business Rules:

Note: Always and only add to the existing structure belonging to DWAF (no wild keys*)

i.   The highest level in the structure is Managing, the second level in the structure is Responsible, and the third, <u>and lowest</u>, level in the structure is Executive.

ii.   Any operation (analysis, monitoring, supplying data) can only be done on the Executive level.

iii.   Each Liaison Entity with a Qualifying relationship of "Managing" must have at least one Liaison Entity on a level of "Responsible" and at least one Liaison Entity on an "Executive" level to enable Laboratory Analysis.

iv.   A liaison entity may be on all three levels of Qualifying relationship.

v.   The "From" and "To" dates of a "child" must fall within the period of the "From" and "To" dates of the "parent". This means, a child cannot start to operate before the **From** date of the parent and cannot continue after the **To** date of the parent.

vi.   At the root level, find or add the subsection of your regional office (Managing Level).

vii.   Under your subsection of your Regional Office at Managing level Add or Find your subsection of your Regional Office at Responsible level.

viii.   Under your subsection of your Regional Office at Responsible level, Add or Find your DWAF labs at Executive level.

ix.   Under your subsection of your Regional Office at Managing level, find or add an impactor at Responsible level.

x.   Under impactor at Responsible level, add or find their laboratories at Executive level.
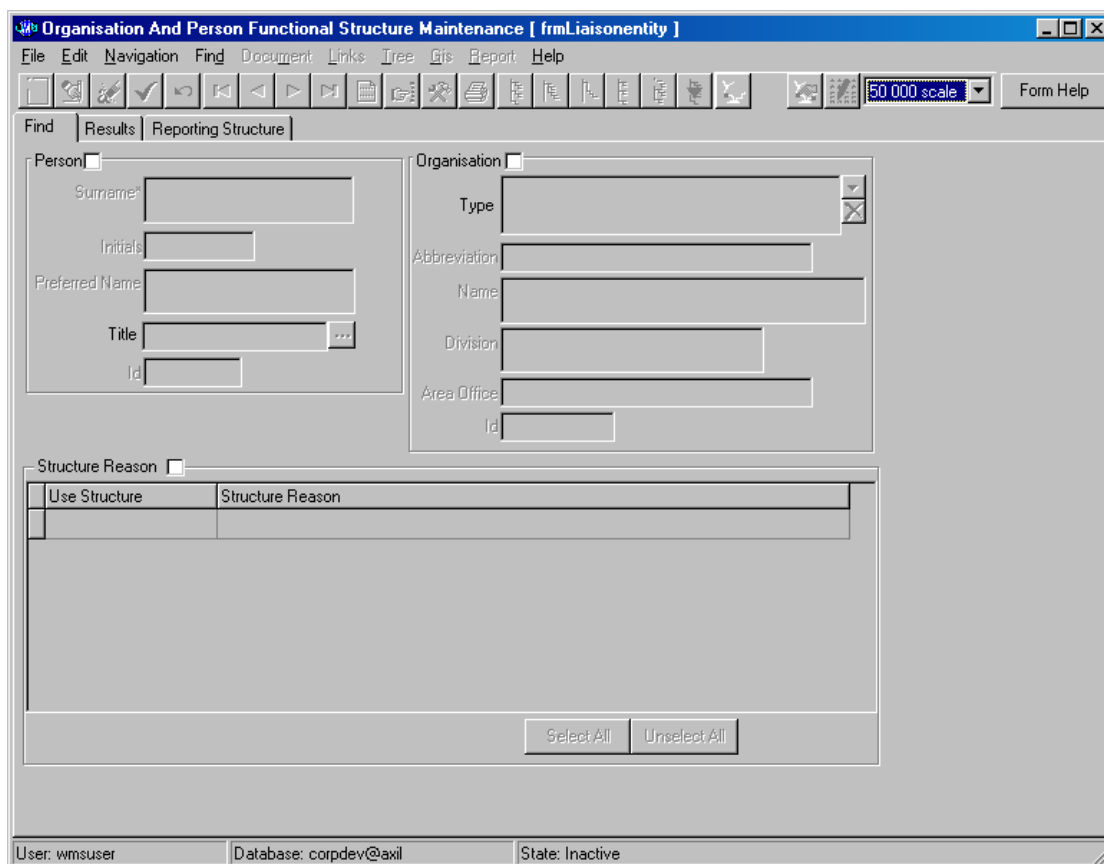
Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Functional Structures** from the sub menu.

1.3   This will open the **Organisation and Person Functional Structure** form on the Find tab. *The checkboxes to activate either Person or Organisation, and the fields in Search for LE's in the following structures are active. The menu items Close, Range and Help, and the "Range" button are active. The tabs Results and Reporting Structure cannot be selected.*

What does this mean?

You can range (find or search) on either Persons or Organisations with or without filters (filters is additional information that is entered to narrow down the search) in the Search for LE's in the following structures fields.

You can also range on only Search for LE's in the following structures with or without filters. In the latter case a list of ALL liaison entities, persons and organisations is returned on the Results tab.

After the range was done the Find tab is active (to review your search criteria) and the Reporting Structure tab is active for Liaison Entities with a "Relation Structure Reason" in the "The current Liaison Entity exists in the following relation structure" grid. You can switch from one tab to another.

How to add an Organisation to a Laboratory Analysis Structure (Managing Level):

2.1 On the **Find** tab click on the Organisation ☑ **checkbox**.

2.2 Perform a range with the following search criteria, abbreviation DWAF (no wild keys (*):
(See How to Search for an organisation by using the Functional Structures)

2.3 On the Results tab only one Liaison Entity will be displayed, DWAF 10055.

2.4 Select the **Relation Structure Reason**, which is Laboratory Analysis.
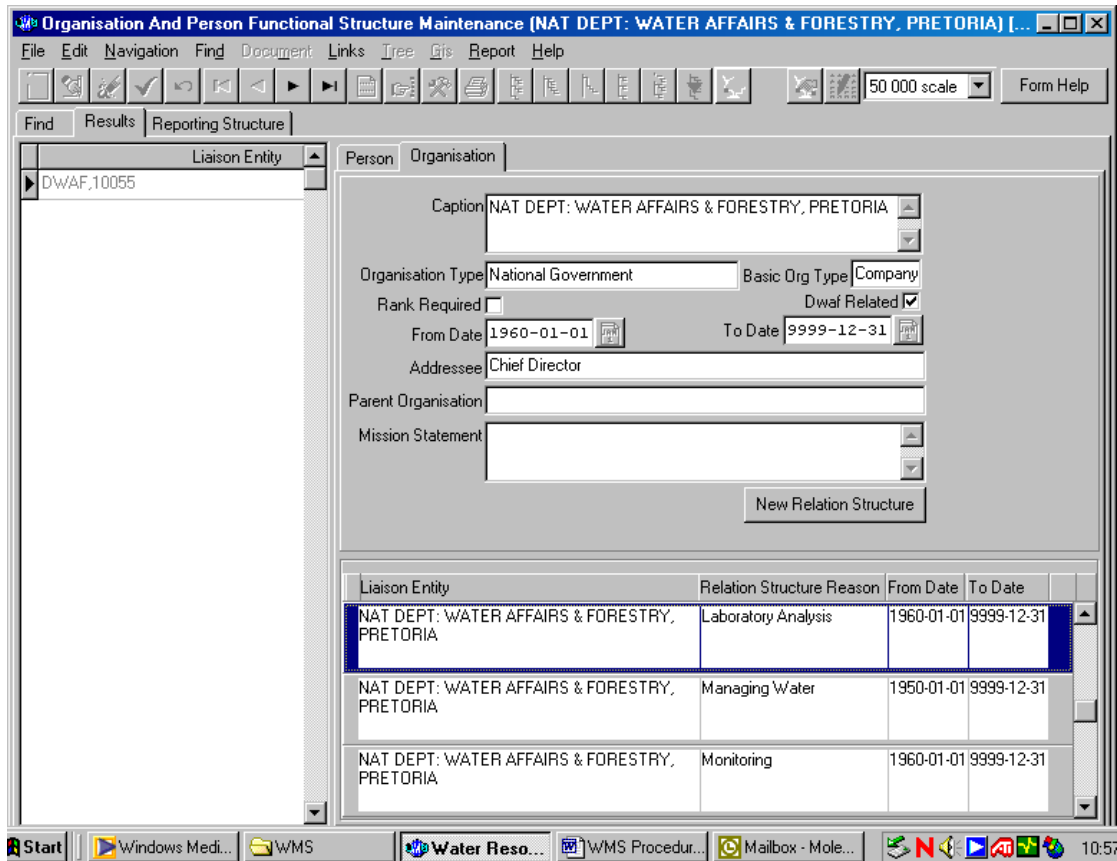
2.5   Click on the **Reporting Structure** tab. A list of DWAF Laboratory Analysis structure
records will be displayed.
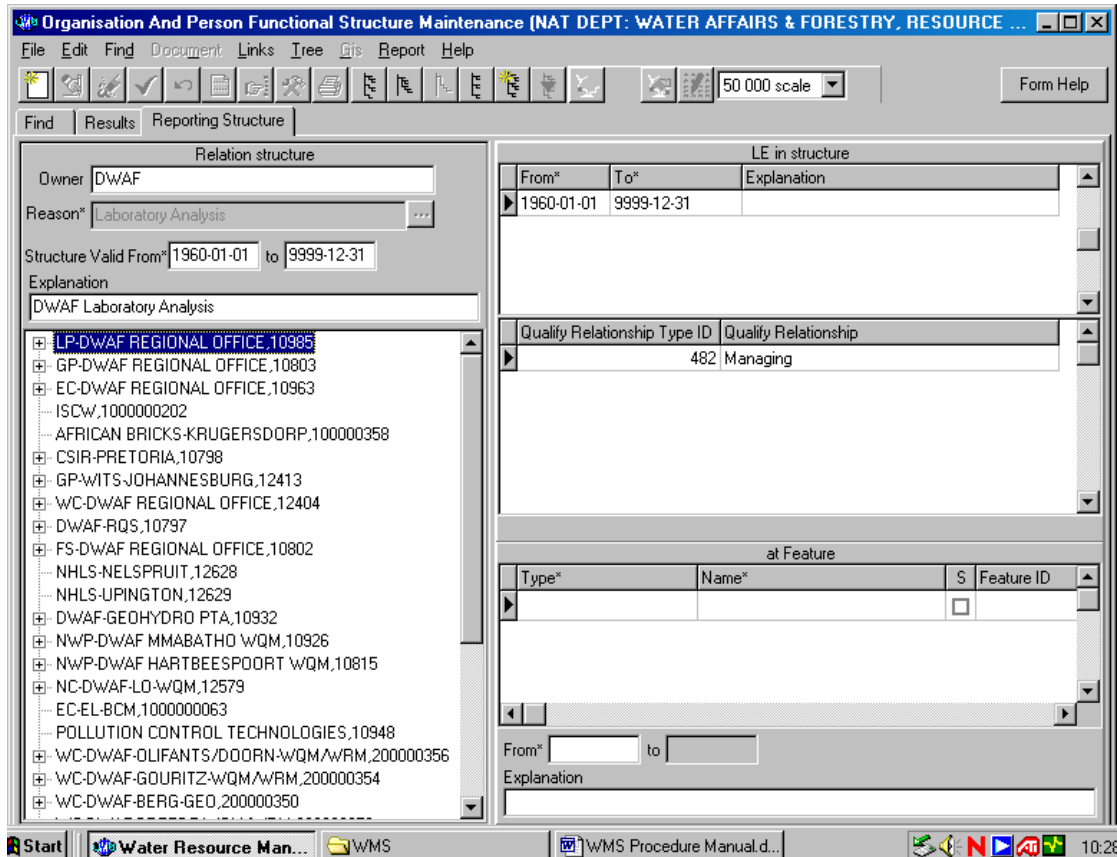
2.6   Search for your subsection of your Regional Office on the Managing Level, e.g. LP-

DWAF-RO, if your subsection of your Regional Office is not there, click on the ![icon]
Add Root button to open the **Organisation Selection** form.

2.7   Select the applicable Organisation and click on the ![Select] **Select** button to return
the selection.

2.8   An Organisation and **Person Functional Structure Maintenance** form displays with
the newly created **Structure Level**.
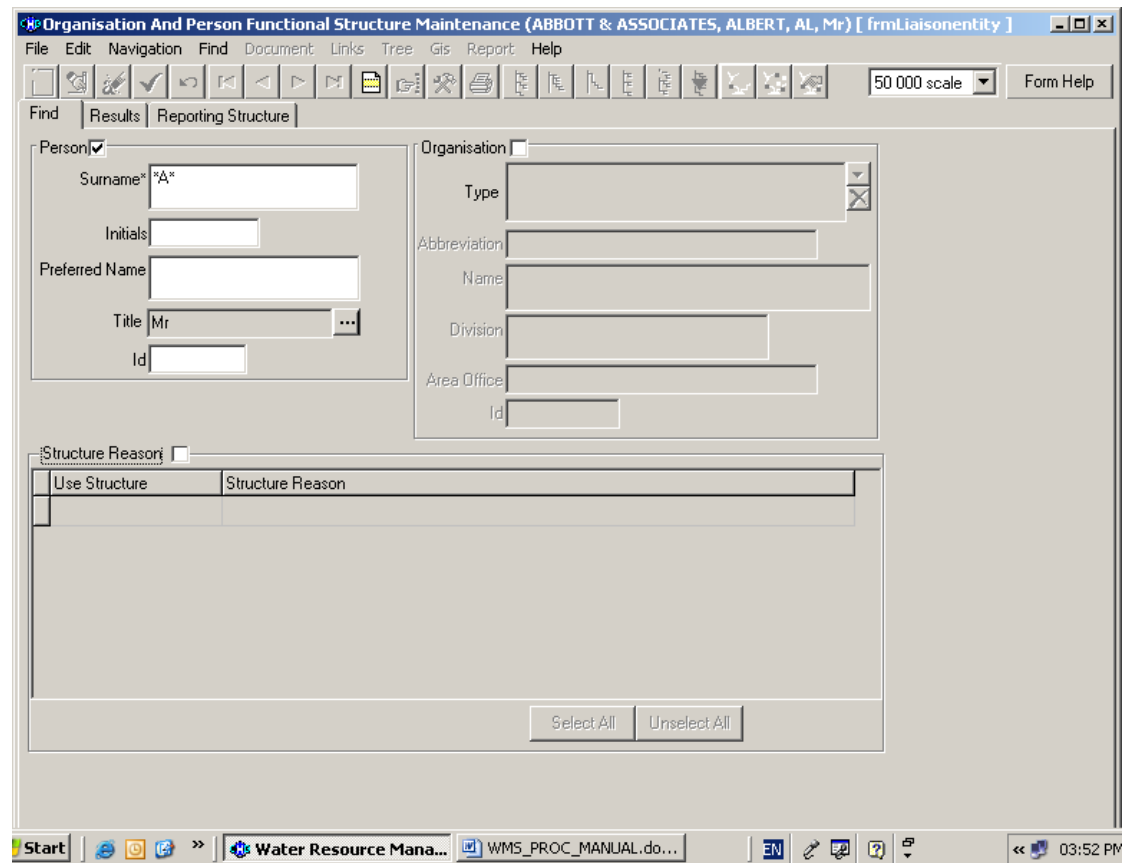
2.9   Enter the **From** and **To** dates on the LE in structure area. *(If the dates are unknown, use the default From date as 1960-01-01 and the default To date as 9999-12-31).*

2.10   Click on the ✔ **Accept** button.

2.11   Click on the **Qualify Relationship Type ID** or **Qualify Relationship** fields and click on the 🗔 **Add** button.

2.12   The **Qualify Relationship Type ID** and **Qualify Relationship** information will be automatically populated by the system as Managing.
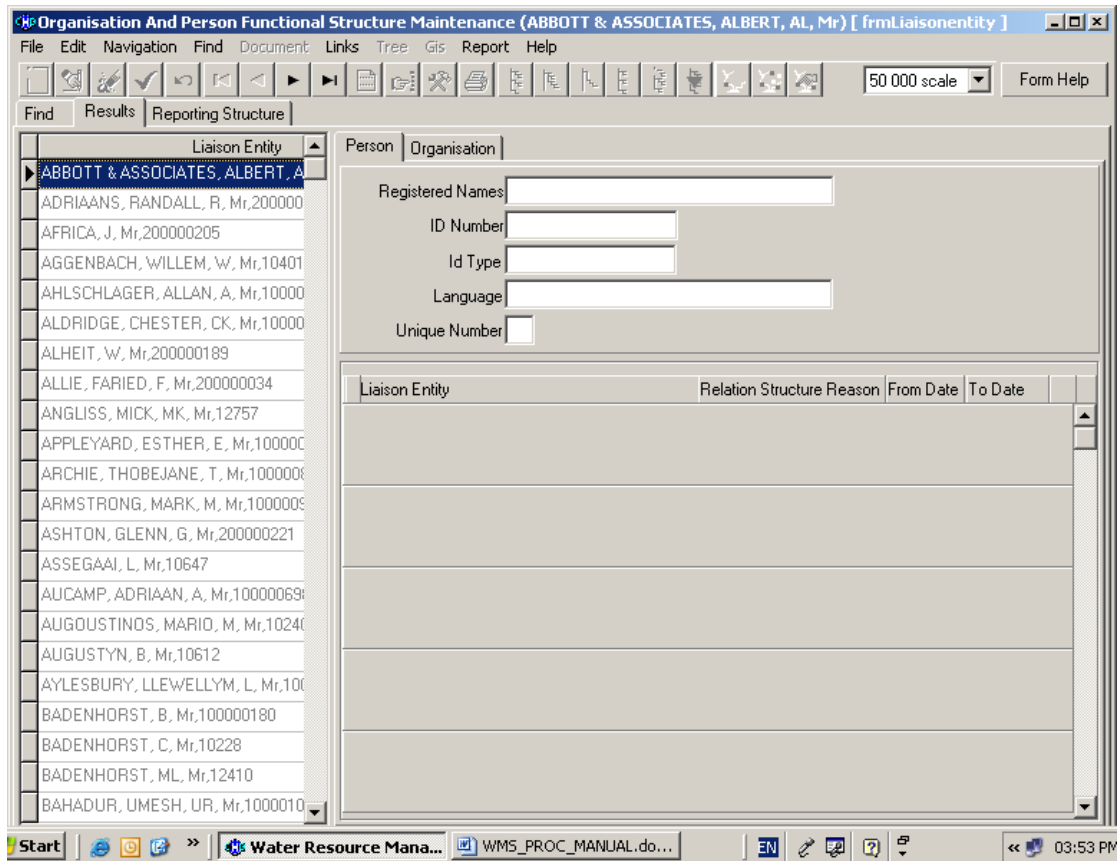
3.   To add an organisation on Responsible level:

3.1   Move the cursor to the required Managing organisation and click on it to highlight it.

3.2   Click on the + to open the structure to the lowest level in order to search for the applicable organisation.

3.3   If the record does not exist, click on the [icon] **Add** button to add a new record.
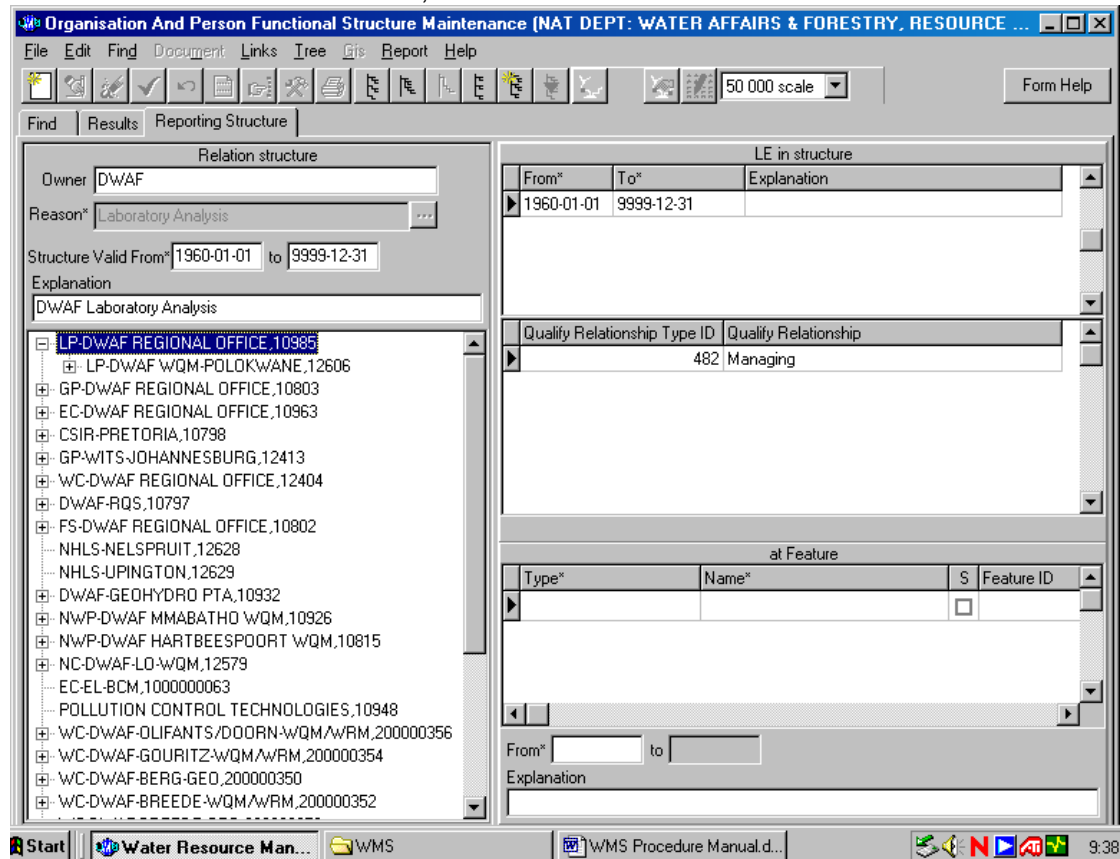
3.4   The **Organisation Selection** form will open. This form is in browse/query mode.
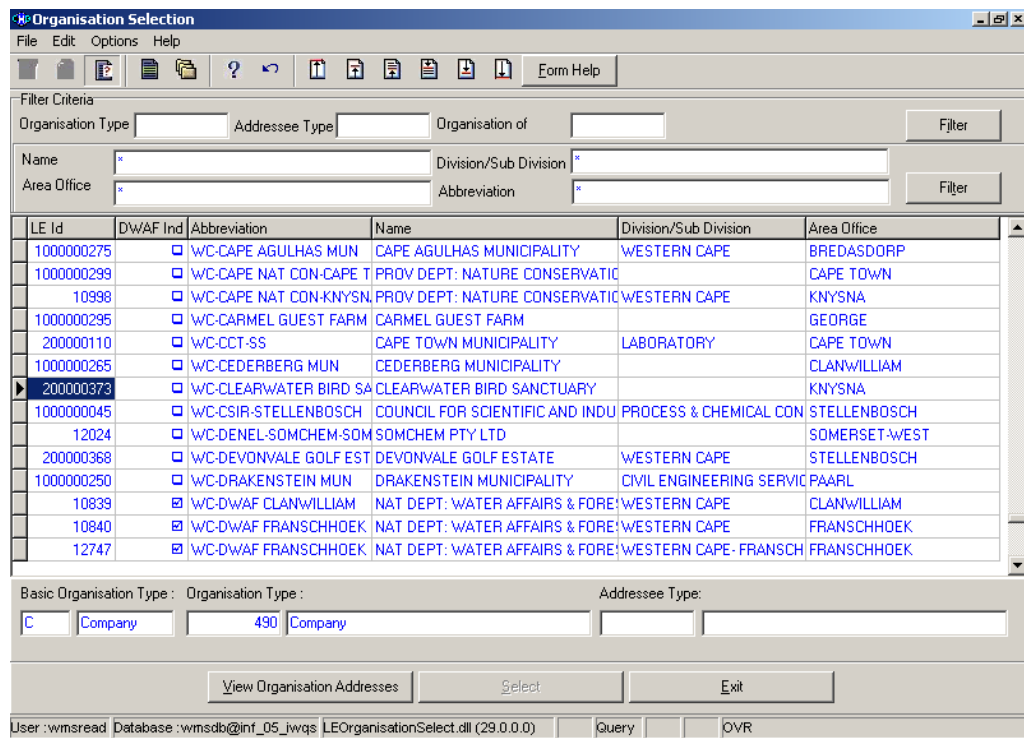
3.5   When the correct Organisation is found, click on the [Select] **Select** button. This will return the name to populate the form.

3.6 An Organisation and **Person Functional Structure Maintenance** form displays with the newly created **Structure Level**.

3.7 Fill in the **From** and **To** dates on the LE in structure area. *(If the dates are unknown, use the default From date as 1960-01-01 and the default To date as 9999-12-31).*

3.8 Click on the ✔️ **Accept** button.

3.9 Click on the **Qualify Relationship Type ID** and **Qualify Relationship** fields and click on the 🔲**Add** button.

3.10 *The Qualify Relationship Type ID and Qualify Relationship information will be automatically populated by the system as Responsible.*

4. How to Add an Organisation on Executive Level:

4.1 Move the cursor to the required organisation on Responsible level and click on it to highlight it.

4.2 Click on the + to open the structure to the lowest level in order to search for the applicable organisation.
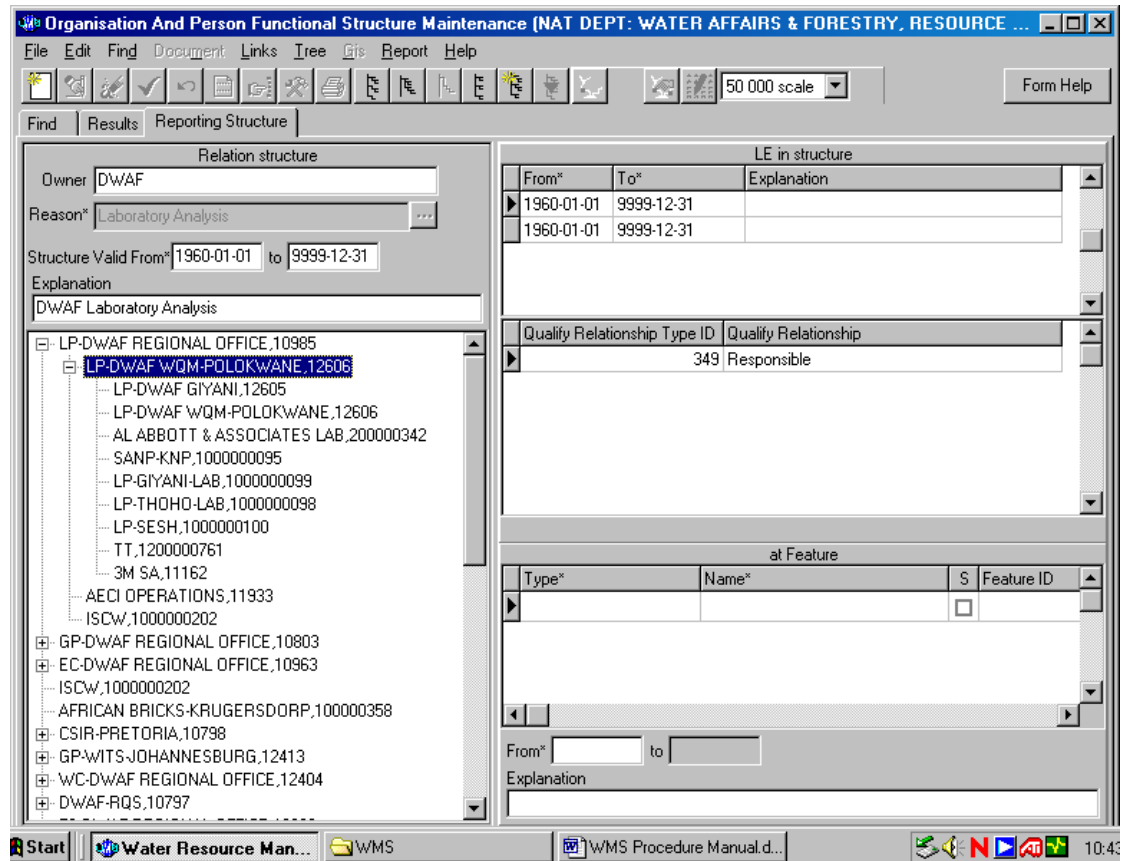
4.3   If the record does not exist, click on the **Add** button to open the **Organisation Selection** form.
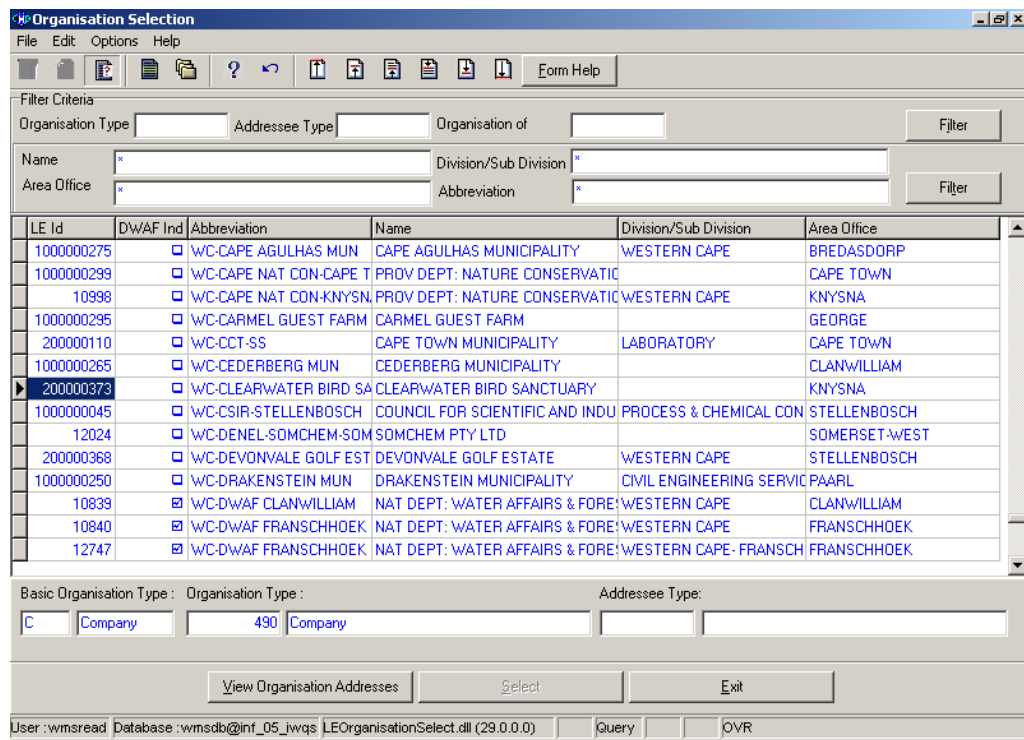
4.4   Click on the applicable organisation and click on the [Select] **Select** button to return the selection.

4.5   An **Organisation and Person Functional Maintenance** form displays with the newly
         created Structure Level.

4.6   Enter the **From** and **To** dates on the LE structure area. *(If the dates are unknown,
         use the default From date as 1960-01-01 and the default To date as 9999-12-31).*

4.7   Click in the **Qualify Relationship Type ID** and **Qualify Relationship** fields and click

         on the [ ]**Add** button.

4.8   The **Qualify Relationship Type ID** and **Qualify Relationship** information will be
         automatically populated by the system as Executive.
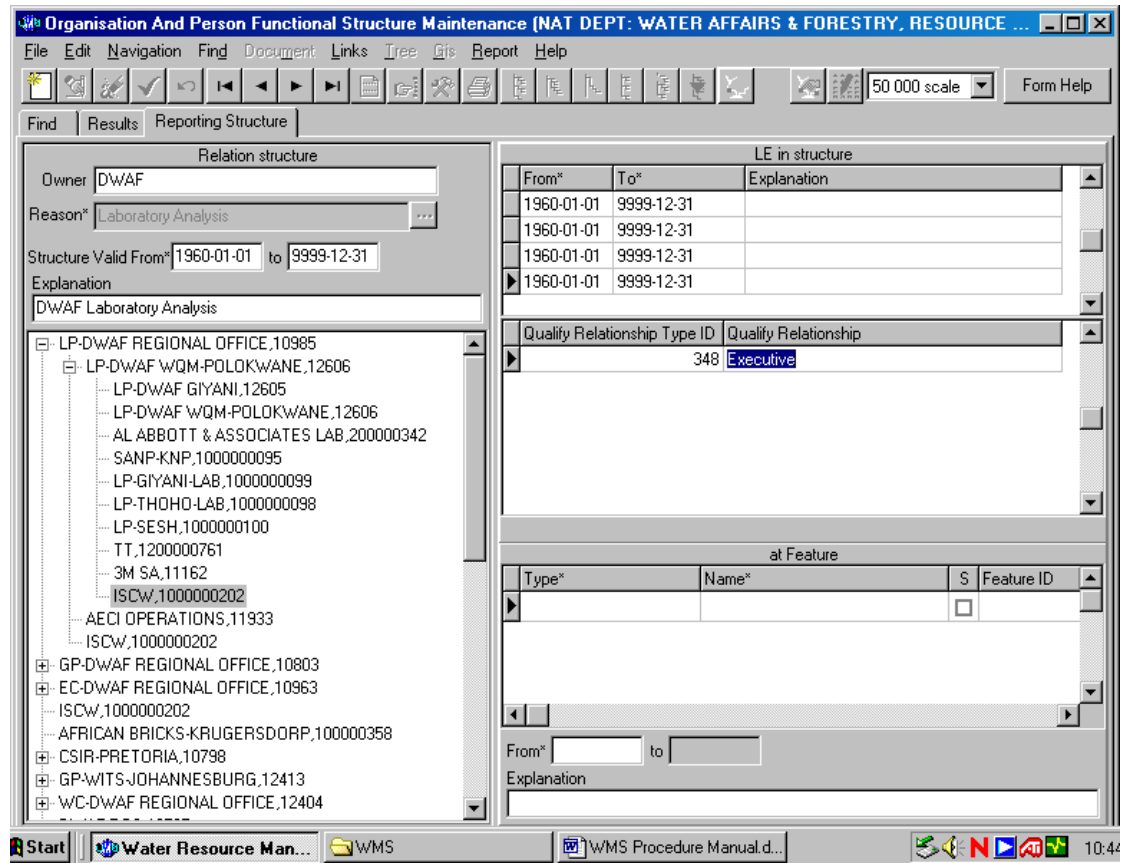
Water Features - Transfer Feature

Introduction:

The objective of the Transfer Features module is to be able to query, add and maintain information pertaining to water transfer features such as pipelines, canals, storm water canals, pump stations and tunnels. The capturing of transfer features is important in that not all "water use sites" are located next to or on the resource, which is being utilised.

This module is directly related to Source and Destination Feature modules, as well as flow associations.

Business Rules:

i.   The system is set up so that only capital (upper case) letters may be used in this module. The reason for this is that the system searches are case sensitive.

ii.   Always perform a search for the feature you are interested in before you add a new entity – this is to reduce /avoid duplication.

iii.   Ensure that the detail added to the system is correct and comprehensive.

iv.   Follow the "General Business Rules for WMS" for the use of hyphenation, spaces, abbreviations etc.

v.   Data Owners for the different Transfer Feature will be implemented to prevent non Data Owners from updating or deleting other Organisations' Transfer Feature information.

vi.   When Login Organisation id is not the same as the Data Owner Organisation of the focused record, the Modify mode (no maintenance allowed) will be disabled.

vii.   You will be able to maintain the selected record on Transfer Feature Maintenance form, or be able to create a new record and delete unused records.

1   Path:

1.1   Select **Water Network Management** from the Water Resource Management menu bar.

1.2   Select **Transfer Feature** from the **Water Network** sub menu.

How to Search for a Transfer Feature record using the Transfer Feature Decision Criteria:

Note: When no filter criteria or many criteria are specified on the Transfer Feature Filter Criteria form, all Transfer Features for the selected criteria will be available for maintenance on the Transfer Feature Maintenance form.
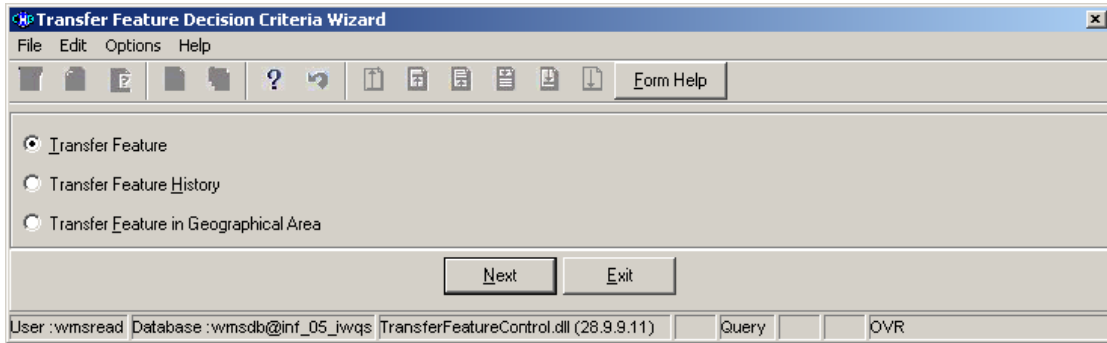
2.1   Open the Transfer Feature Decision Criteria form.

Select the Transfer Feature option to open the Transfer Feature Filter Criteria form.

2.2.1   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Transfer Feature Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.2.2 The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

2.2.3 Enter the **Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.2.4   The **Feature Type Name** will be automatically displayed as it is linked to the Feature Type ID.

2.2.5   Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

2.2.6   The **Data Owner Organisation Abbreviation** and the **Data Owner Organisation Name** fields will be automatically populated as they are linked to the Data Owner Organisation ID.

2.2.7   Enter the **Multimedia Map ID** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection. **Note: This is for Future Implementation.**

(The Screen Print for the Multimedia Selection form will be available in future releases)

2.2.8   The **Multimedia Map Description** will be automatically displayed as it is linked to the Multimedia Map ID.

2.2.9   Enter the **Multimedia Photo ID** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection. **Note: This is for Future Implementation.**

(The Screen Print for the Multimedia Selection form will be available in future releases)

2.2.10   The **Multimedia Photo Description** will be automatically displayed as it is linked to the Multimedia Photo ID.

2.2.11 Click on the **Next** button to open the **Transfer Feature Maintenance** form.

2.2.12 Click on the **Back** button to go to the Decision Criteria form.

2.2.13 Click on the **Exit** button to go to the main menu.

Select the Transfer Feature History option to open the Transfer Feature History Filter Criteria form.

2.3.1 Select the applicable **Feature Type** from a list of given options on the drop-down list.

2.3.2 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Transfer Feature Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.3.3   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

2.3.4   Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

Note: Only Data Owners of Transfer Feature historical records will be selectable.

2.3.5 The **Data Owner Organisation Abbreviation** and the **Data Owner Organisation Name** fields will be automatically populated as they are linked to the Data Owner Organisation ID.

2.3.6 Enter the **Change User Login** or click on the ZOOM **Zoom** button to open the **User Selection** form, select the applicable record and click on the **Select** button to return your selection.

Note: Only Users who created Transfer Feature history records will be selectable.

2.3.7 The **Change User Name** field will be automatically populated as it is linked to the Change User Login.

2.3.8 Enter the **Change User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** button to return your selection.
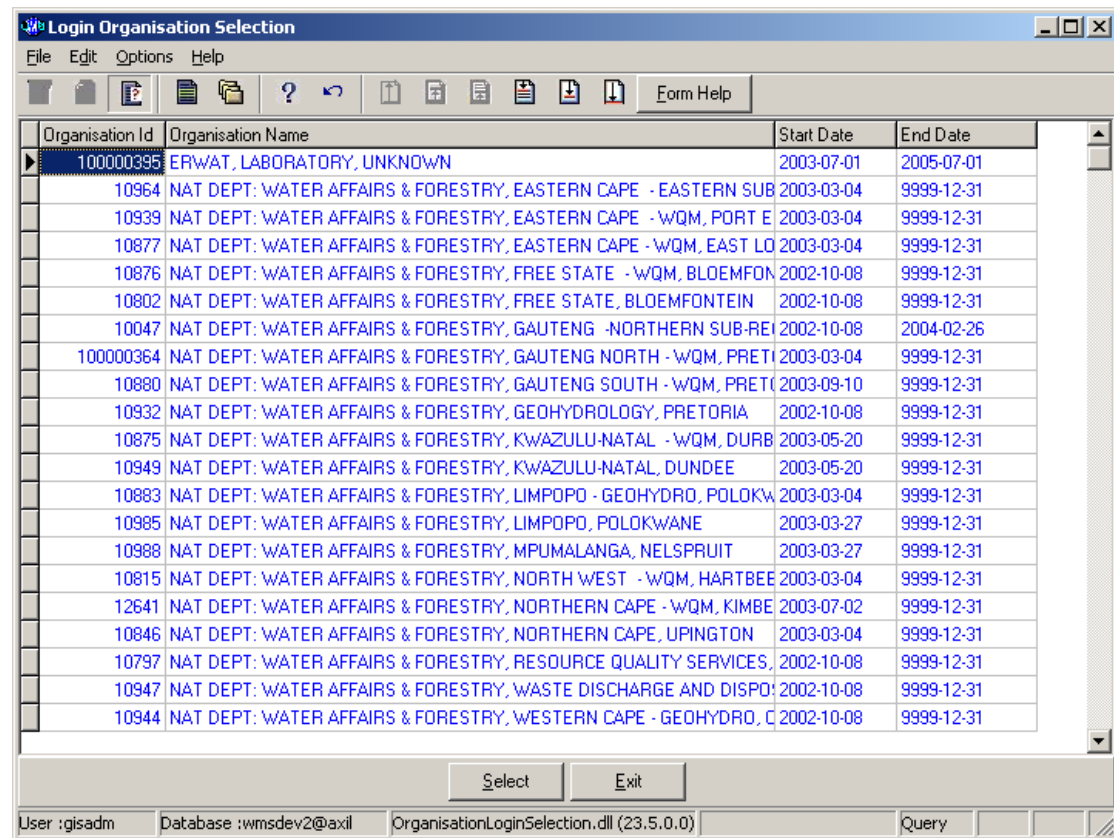
2.3.9 The **Change User Organisation Abbreviation** and the **Change User Name** fields will be automatically populated as they are linked to the Change User Organisation ID.

2.3.10 Click on the **Next** button to open the **Transfer Feature History Selection** form with the specified Filter criteria.

2.3.11 Click on the **Back** button to return to the Decision Criteria form.

2.3.12 Click on the **Exi**t button to go to the main menu.

2.3.13   Click on the **Next** button to open the **Transfer Feature Maintenance** form for the focused or with no record.

Select the Transfer Feature in Geographical Area option to open the Transfer Feature in Geographical Area Filter Criteria form.

Note: *You will be able to specify the Filter Criteria of a Geographical Area and/or Transfer Feature.*

2.3.14 On the **Geographical Feature Types** radio group, the **Transfer Feature** option will be selected. **Note:** *You will not be able to change it.*

2.3.15 Enter the **Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes - Type Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
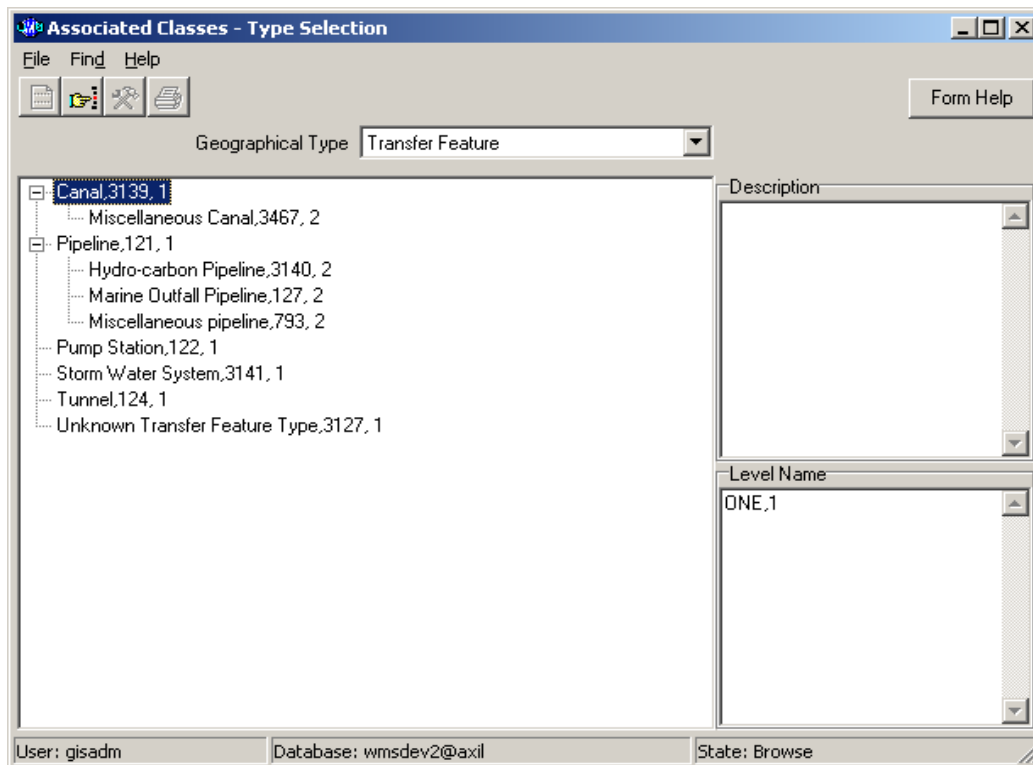
2.3.16 The **Feature Type Name** will be automatically displayed as it is linked to the Feature Type ID.

2.3.17 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Transfer Feature Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.3.18 The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

2.3.19 On the **High Level Geographical Area Types**, select the **WMA, Sub Catchment, Drainage Region**, **DWAF Water Resources Officer**, **Other Geographical Types** or the **None** option from a list of given options.

2.3.20 Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
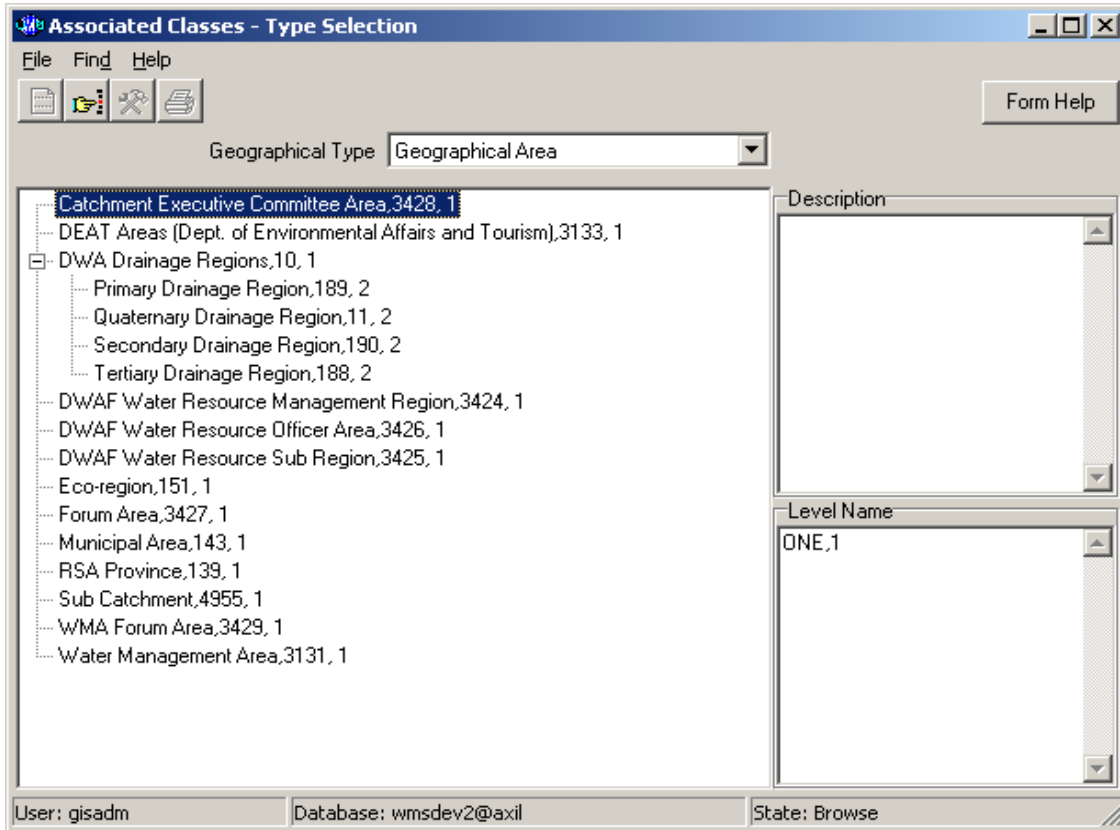
2.3.21 The **Geographical Area Type Name** will be automatically displayed as it linked to the Geographical Area Type ID.

2.3.22 Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
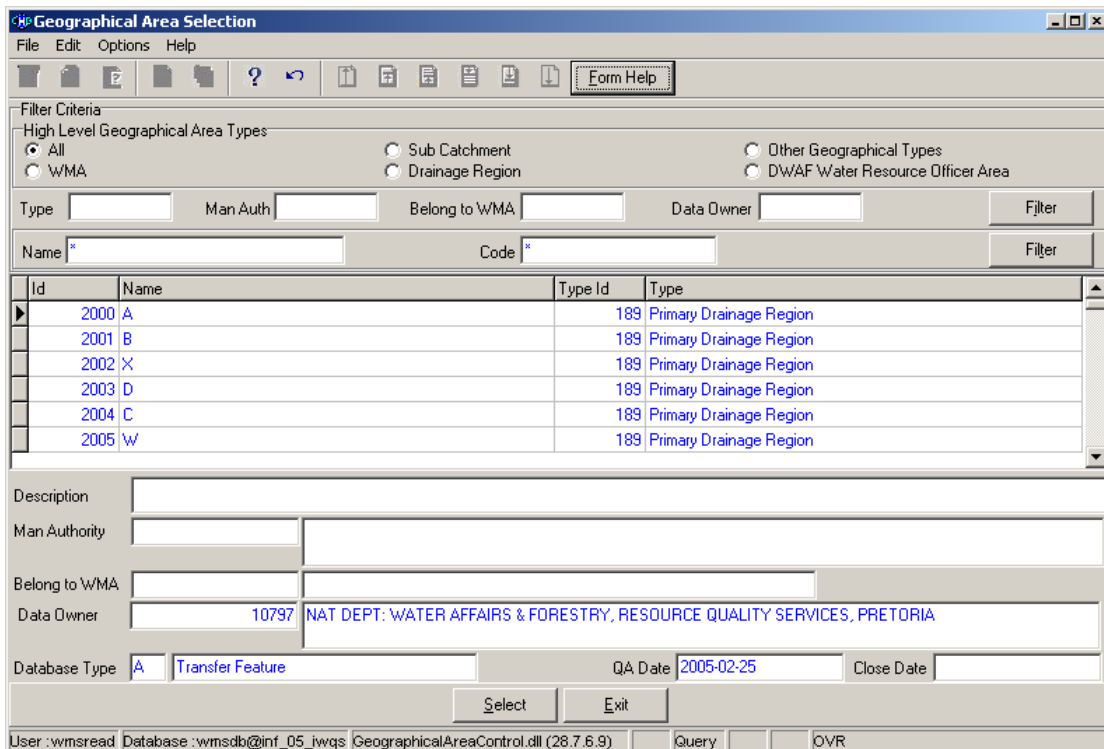
2.3.23   The **Geographical Area Name** field will be automatically displayed as it is linked to the Geographical Area ID.

2.3.24   Click on the **Back** button to go to the Decision Criteria form.

2.3.25   Click on the **Exit** button to close the form.

2.3.26   Click on the **Next** button to open the **Geographical Feature in Geographical Area Selection** form with the records for the specified Filter criteria.
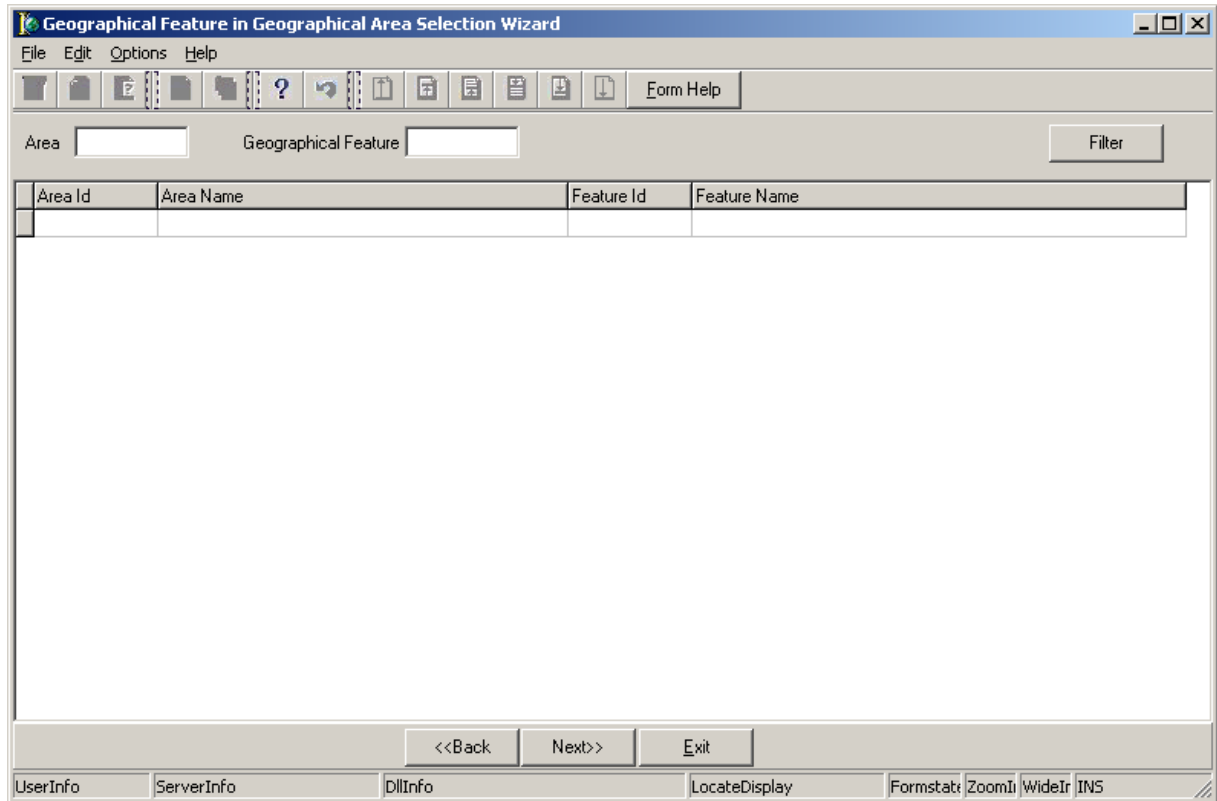
2.3.27   Click on the **Next** button to open the **Transfer Feature Maintenance** form for the focused or with no records.

3   How to Add a Transfer Feature:
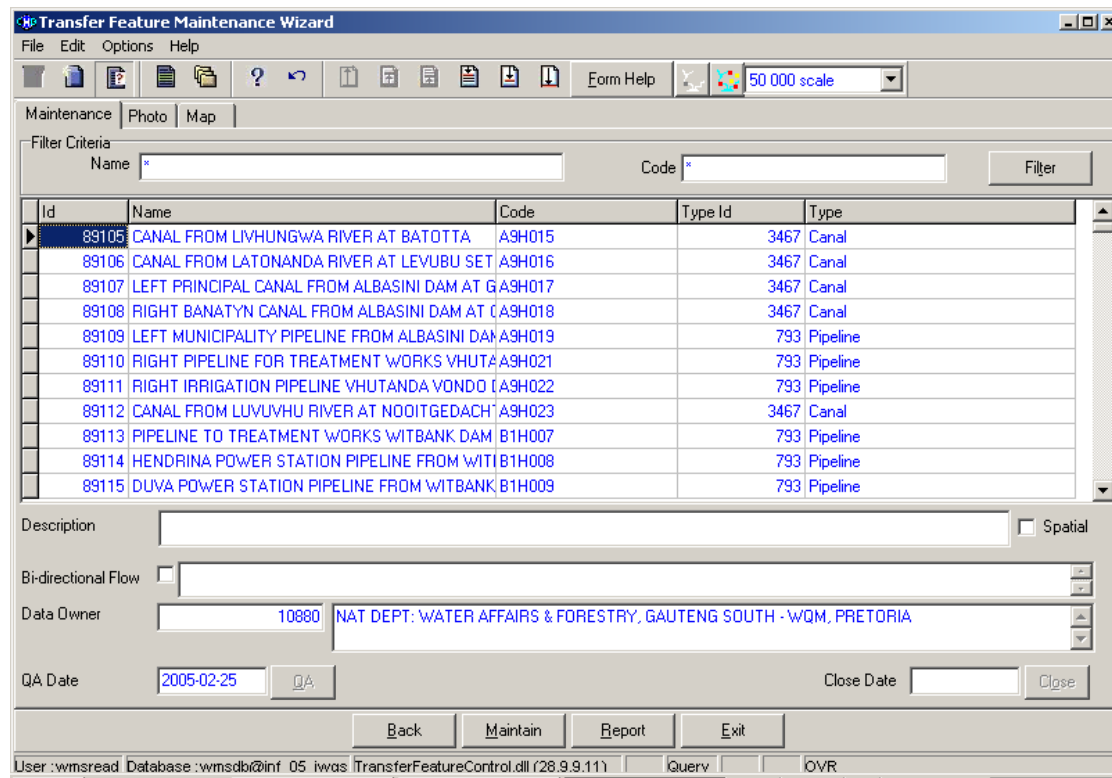
If the Transfer Feature you are looking for does not exist:

3.1 Click on the 📄**Create** button to add a new record.

3.2 A new line displays to allow the addition of a new record.

3.3 The **Transfer Feature ID** will be automatically generated by the system.

3.4 Enter the **Transfer Feature Name**. 💬*Note: The Transfer Feature Name must be unique.*

3.5 Enter the **Transfer Feature Code**.

3.6 Enter the **Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Class – Type Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

3.7 The **Transfer Feature Type** will be automatically displayed as it is linked to the Transfer Feature Type ID.

3.8 Enter the **Description** for the Transfer Feature.

3.9 Click on the **Bi-Directional Flow** checkbox to indicate whether the Transfer Feature is bi-directional or not.

3.10 Enter the **Bi-Directional Flow Reason** to indicate why a transfer feature is bi-directional. *Note: By default the **Data Owner Organisation** is the same as the **Login Organisation ID**. When you insert a new record, the Data Owner for the Transfer Feature will automatically be created with the Login Organisation ID, but you may change it.*

3.11 Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open a **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
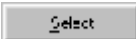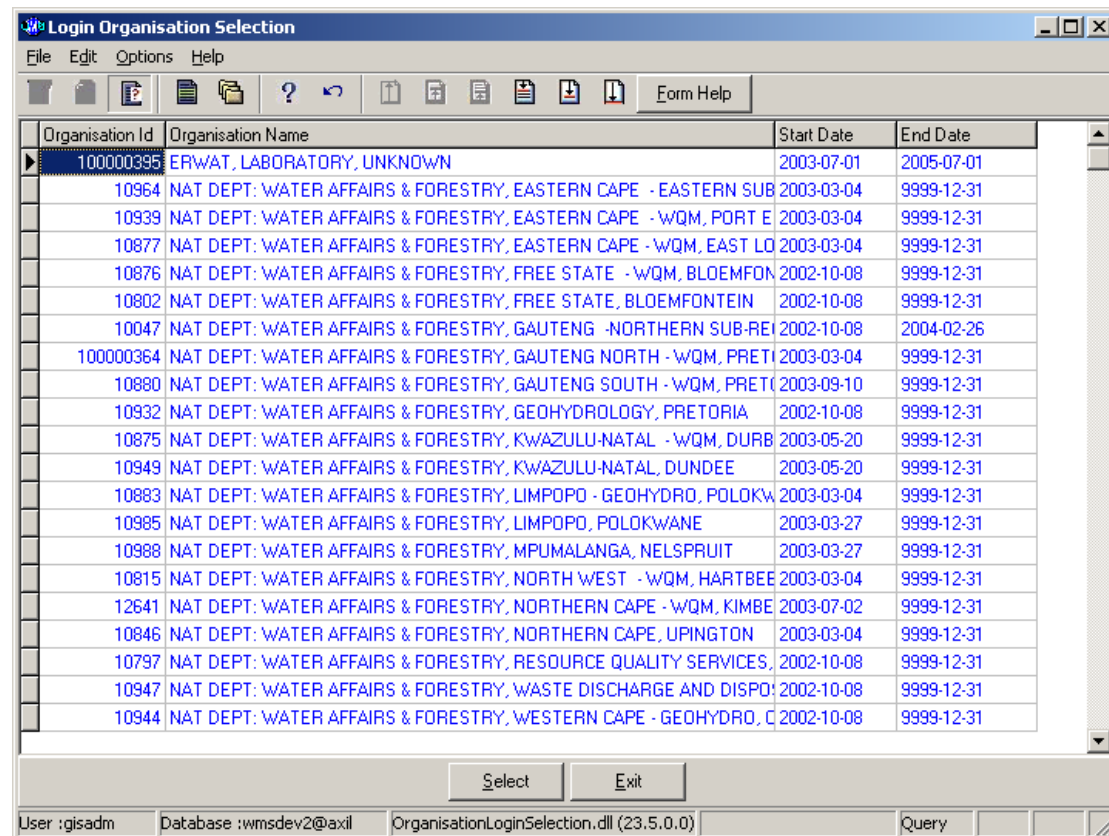
3.12 The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

*3.13 The **QA Date** field will by default be empty when creating a record.*

3.14 Click on the **QA** button to indicate that the Transfer Feature's information is Quality Assured on WMS. And populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

3.15 *The **Close Date** field will by default be empty when creating a record.*

3.16 Click on the **Close** button to indicate that the Transfer Feature is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator*

3.17 Click on the **Back** button to return to the previous form.

3.18 Click on the **Repor**t button to generate a .csv file with all the information of the records retrieved according to the parameters received as input to this form.

3.19 Click on the **Exit** button to go to the main menu.

4 How to Edit a Transfer Feature:

[?] *Note: Data Owners for the different Transfer Features will be implemented to prevent non Data Owners from editing other Organisations' Transfer Feature information. Only the Data Owner may edit its Transfer Feature record.*

4.1 On the Maintenance Tab click on the record to be edited to highlight it, and click on the [icon] **Modify Records** button.

[?] *Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the* ZOOM *Zoom button to open the **Login Organisation Selection** form, make your selection and click on the* Select *Select button to return your selection.*

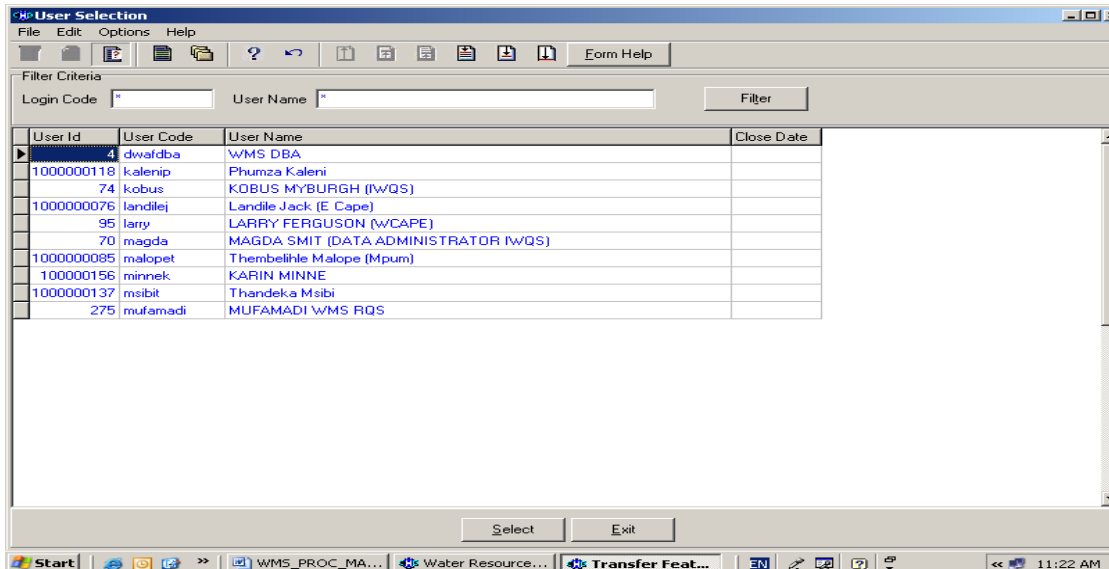| Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE(	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET(	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET(	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO!	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

4.2 Edit the record as required.

4.3 Click on another record to accept the newly modified record.

[?] *Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab*

4.1 Click on the applicable Photo or Map Tab to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.2   Click on the Accept button to accept the changes

Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.

5   How to Delete a Transfer Feature:

Note: Data Owners for the different Transfer Features will be implemented to prevent non Data Owners from deleting other Organisations' Transfer Feature information. Only the Data Owner may delete its Transfer Feature record. A record can only be deleted if it is not being linked or used elsewhere.

5.1   Click on the record to be deleted, to highlight it.

5.2   Click on the **Delete** button. *Note: When records are referenced elsewhere on the system, the Delete option will be disable.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the **OK** option to confirm the deletion.

Usage/Impact/Flow Association

Introduction:

The Flow Association module is used to query, add and maintain information pertaining to the water use of a site. This identifies the source of the water (e.g. river or in the case of a discharge the site itself); the destination (E.g. the site which abstracted the water or the river to which the water was discharged), the means (transfer feature) e.g. the pipe or canal and the water use itself e.g. discharge abstract or even seepage. This means that you must have already registered the source and destination features, as well as the transfer feature.

This module is therefore directly related to the Source and Destination Feature modules, as well as transfer features.

Business Rules:

i.   The system is set up so that only capital (upper case) letters may be used in this module. The reason for this is that the system searches are case sensitive.

ii.   Always perform a search for the feature you are interested in before you add a new entity – this is to reduce /avoid duplication.

iii.   Ensure that the detail added to the system is correct and comprehensive.

iv.   Follow the "General Business Rules for WMS" for the use of hyphenation, spaces, abbreviations etc.

1   Path:

1.1   Open the **Water Network Management** from the Water Resource Management (Delphi Front-End) menu bar.

1.2   Select **Usage/Impact/Flow Association Maintenance** from the **Water Network Management** sub menu.

1.3   This will open the **Usage/Impact/Flow Association Maintenance** form.
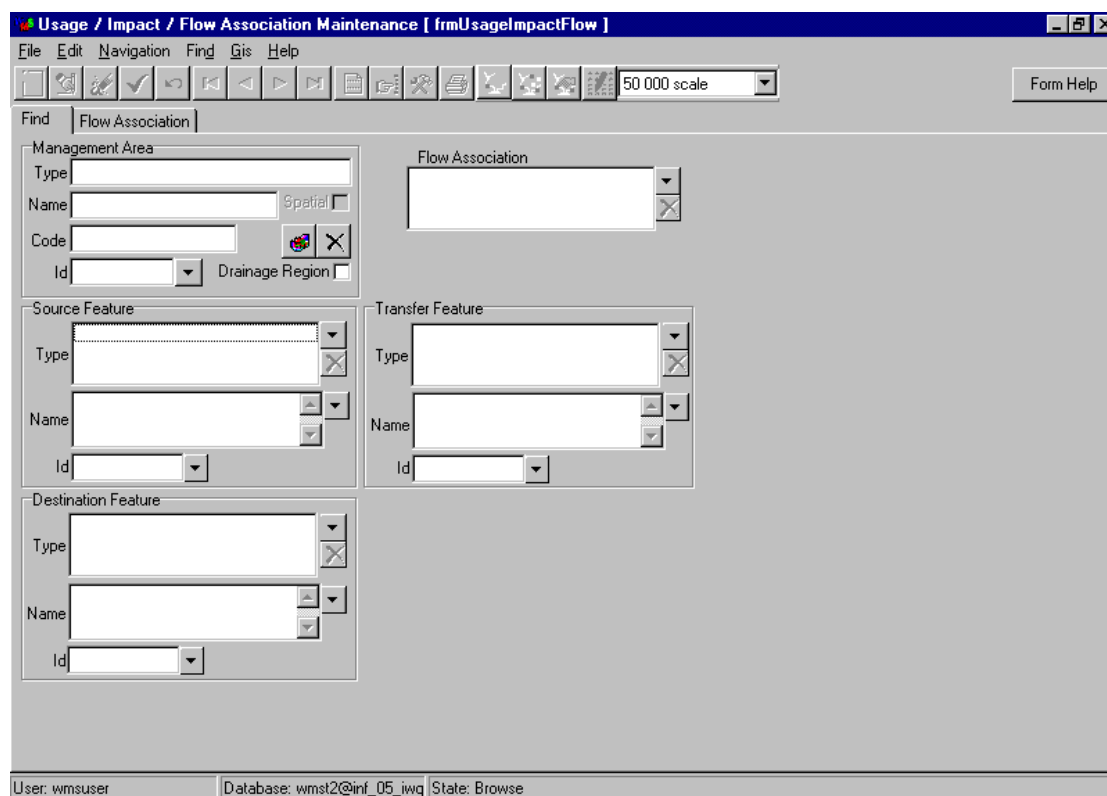
2   How to Search for a Flow Association:

2.1   Click on the **Type** field in the Source Feature Group box.

2.2   This will open the **Class Types** form. Select the relevant record e.g. Water Quality Sites, by clicking on the 🖙 **Select** button The system will return to the Flow Association form and the range button will now be enabled.

2.3   You may range at this stage, but this search should be narrowed down by entering the name of the Water Quality Site, using an asterisk e.g. Sasol*. You also have the option to use the zoom button next to this name field, and select the relevant entry, but note that the system will then search for ALL Water Quality Sites.

2.4   If you Range at this stage in the Flow Association form, the system will search for all Source Features as specified above, and should any transfer features and flow associations already be registered, the relevant records will be displayed. Similarly, you may search using the Destination Features or Transfer Features by using the Name and Type fields. There is also an option to search for Flow Associations within a Management Area. Click on the Type zoom button in the Management Area group box, and this will open the Management Area form.

2.5   Click on **Type**, and select the relevant entry in the tree, by clicking the 🖙 **Select** button.

2.6   The system will return to the Management Area form, with the type data inputted. You may Range at this stage, or enter the name or feature ID in the relevant fields.

2.7   Select the relevant entry in the grid by clicking on the 🖙 **Select** button. The system will return to the Flow Association form with the Management Area data inputted. You may range at this stage.

2.8   Another method of querying a flow association is to click on the Type **:::** **Zoom** button
        in the Flow Association group box. This will open the Flow Association class types.
        Select the relevant record in the tree by Clicking on the **Select** button.

2.9   This will return you to the Flow Association form. However, either the Source,
        Destination or Transfer Feature fields must be populated before the Range button will
        become enabled.
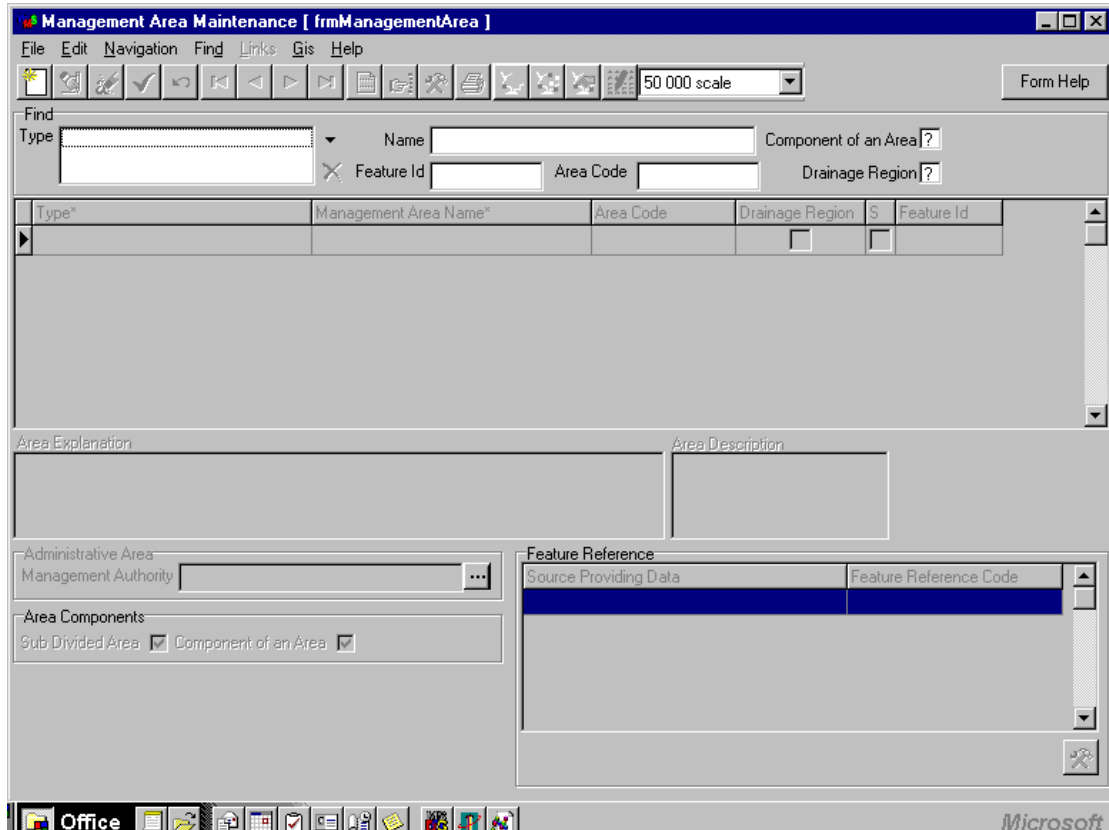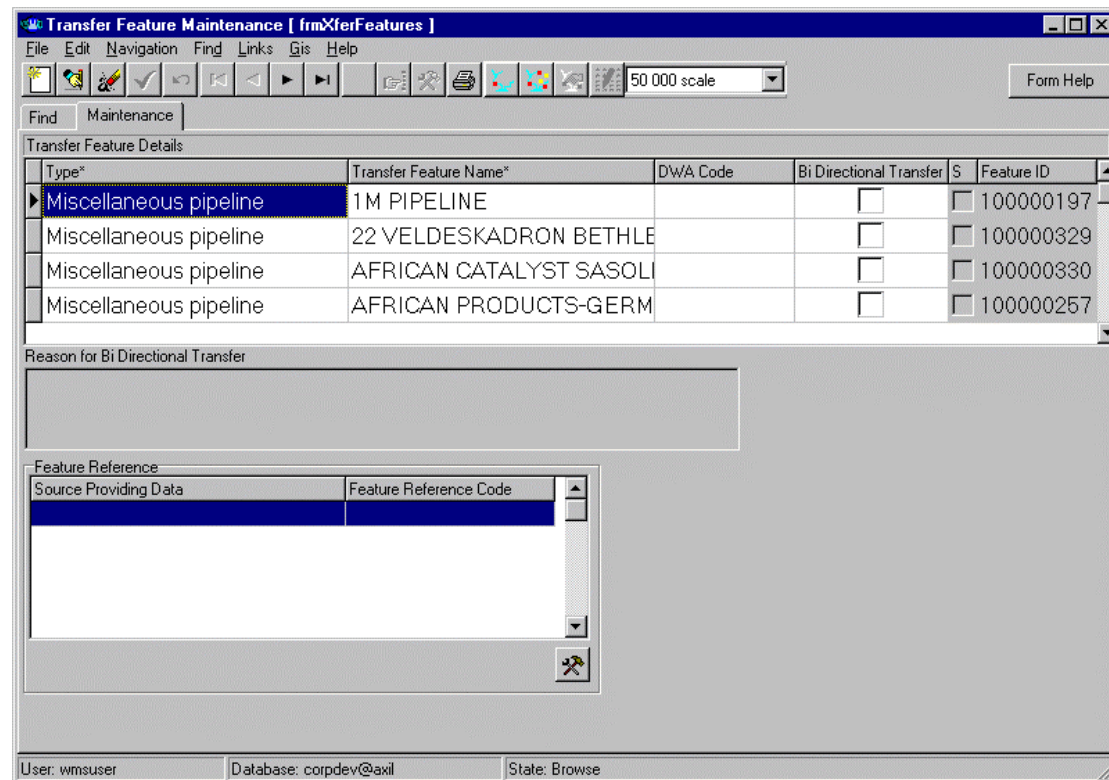
3 How to Add a Feature:

3.1 Click the **Add** button, or click on F4.

3.2 Click on the **Source Type** field in the right corner, a button will appear. Click on this button.

3.3 This will open the "Class Types" tree. Select the relevant entry by clicking on the **Select** button e.g. Water Quality Sites.

3.4 Click on the **Source Name** field in the right corner, a button will appear. Click on this button.

3.5 This will open the **Water Features** form. You may Range, or refine your search by entering a name, and then Ranging. Select the relevant entry from the grid by clicking on the **Select** button e.g. Sasol.

3.6 Click on the Destination Type field in the right corner, a button will appear. Click on this button.

3.7 This will open the "Class Types" tree. Select the relevant entry by clicking on the **Select** button e.g. Rivers

3.8 Click on the "Destination Name" field in the right corner, a button will appear. Click on this button.

3.9 This will open the "Water Features" form. You may Range, or refine your search by entering a name, and then Ranging. Select the relevant entry from the grid by clicking on the **Select** button e.g. Vaal River

3.10 Click in the right corner of Flow Associations. This will open the "Class Types" tree.

3.11 Select the relevant entry by clicking the [icon] **Select** button.

3.12   If a Transfer Feature has been registered for this Flow Association, check the box for: A transfer feature is involved" at the bottom left hand side of the form.

3.13   Click on the Type **Zoom** button in the Transfer Feature group box, and select the relevant entry.

3.14   You may search using the Name or part of the name with *, or the Transfer Feature ID code.

3.15   If all the information you have captured is correct, click on the **Accept** button, or click on F9.

3.16   It is useful to enter a Flow Association Description in the relevant field. This should be as descriptive as possible, and should include the names of the source, destination and transfer features if possible.

3.17   The record will be accepted and assigned a Feature ID number.

4   How to Edit a Feature:

If you need to change or update a record:

4.1   Click on the relevant record and field you wish to maintain.

4.2   Click on the **Edit** button.

4.3   Update the information as required – refer to above.

4.4   If all the information you have captured is correct, click on the **Accept** button, or click on F9.The record will be updated.

Water Network Management: Feature Reference

Introduction:

The Feature Reference module enables the user to maintain Feature Reference information associated with a WMS Geographical Feature. Reference codes provide a link between WMS features ID's and numbering conventions used by External System Datasources. Geographical Feature References are recorded to provide access to data that is either imported to WMS, or can be obtained from the External System Datasources.

The Feature Reference module also enables the user to extract Geographical Feature Information associated with a specific System Datasource, Numbering Convention and the Geographical Feature's Code as it was created on the external system. A Feature, System Datasource, Numbering Convention combination may have more than one Feature Reference Code, but only one Features Reference Code may be current by checking the Current Indicator checkbox.

Business Rules:

i.   Data Owners for the different Feature References will be implemented to prevent non Data Owners from Updating or Deleting other Organisations' Feature Reference information.

ii.   The Data Owner Organisation is the same as the Login Organisation.

Path:

1.1.   Select **Water Network Management** from the Water Resource Management menu bar.

1.2.   Select **Feature Reference** from the Water Network sub-menu.

1.3.   This will open the **Feature Reference Filter Criteria** Form.

How to Search for Feature Reference:

2.1.   Open the **Feature Reference Filter Criteria** Form. Note: Any combination or no filter criteria may be specified.

2.2.   On the **High Level Geographical Feature Type** radio group, select the Geographical Area, Water Quality Feature, Transfer Feature, Reach Zoning Purpose, Monitoring Feature or All option in order to filter out records associated with a specific High Level Geographical Feature Type.

2.3.   Enter the **Feature ID** or click on the **ZOOM** Zoom button to open the **Geographical Feature Selection** form to select a specific **Geographical Feature ID** according to the selected High Level Geographical Feature Type, select a Feature to be used as a filter and click on the **Select** **Select** button to return the selection.

2.4.   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

2.5.   Enter the **System Datasource ID** or click on the **ZOOM** Zoom button to open the **System Datasource Selection** form, select a **System Datasource** to be used as a filter and click on the Select **Select** button to return the selection.
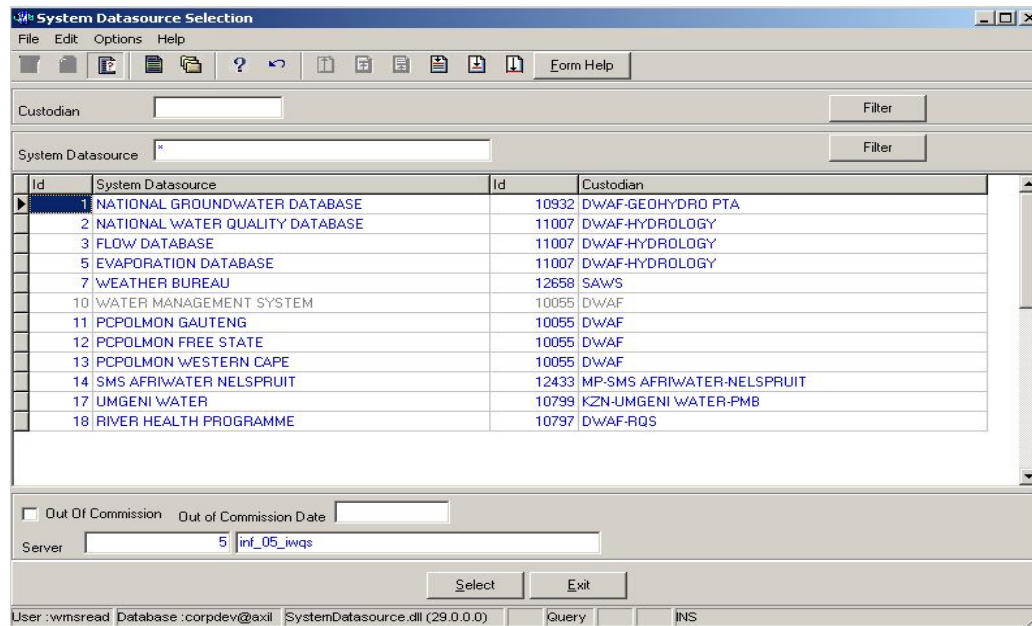
2.6.   The **System Datasource Name** will be automatically displayed as it is linked to the System Datasource ID.

2.7.   Enter the **Numbering Convention Type ID** or click on the **ZOOM** Zoom button to open the **Associated Classes – Type Selection** form, select the Numbering Convention to be used as a filter and click on the **Select** button to return the selection.
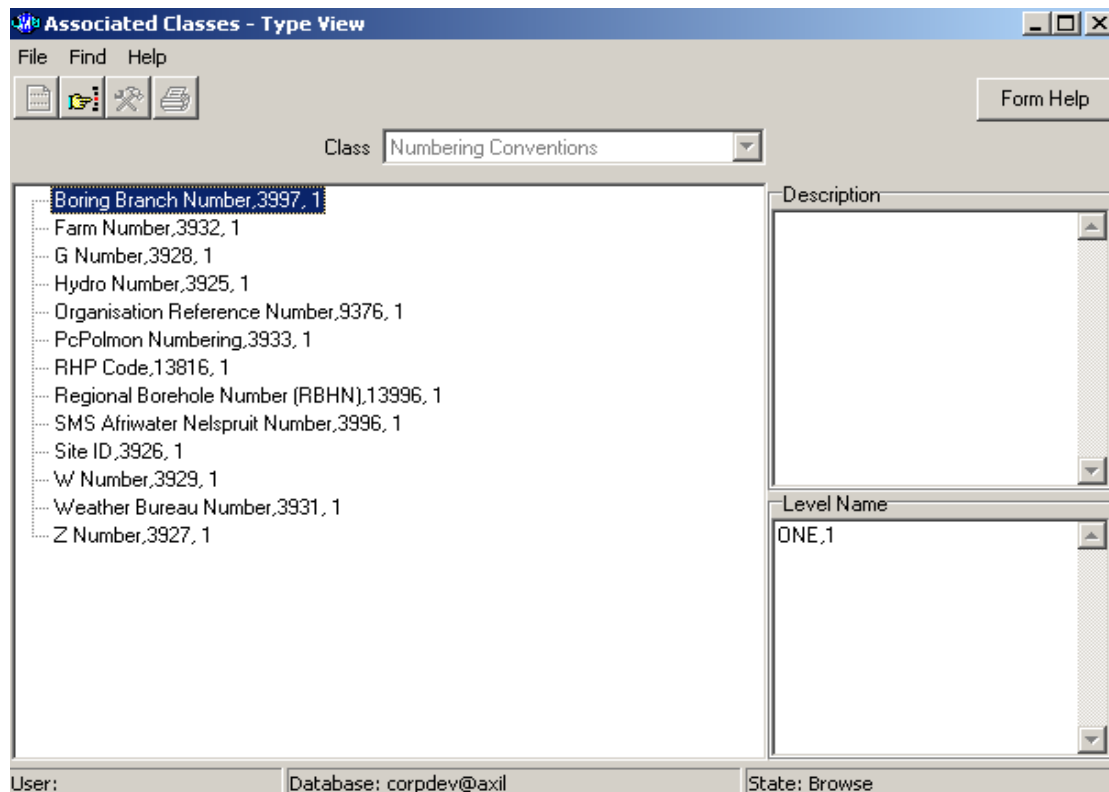
2.8. The **Numbering Convention Type Name** will be automatically displayed as it is linked to the Numbering Convention Type ID.

2.9. Enter the **Data Owner Organisation ID** or click on the **ZOOM** Zoom button to open the **Login Organisation Selection** form, select the **Data Owner** to be used as a filter and click on the [Select] **Select** button to return the selection.

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

2.10. The **Data Owner Caption** and the **Data Owner Orgaisation Abbreviation** will be automatically displayed as they are linked to the **Data Owner Organisation ID**.

2.11. Enter the **Change User Organisation ID** or click on the **ZOOM** Zoom button to open the Login **Organisation Selection** form, select the **Change User Organisation** to be used as a filter and click on the [Select] **Select** button to return the selection.

2.12.   The **Change User Organisation Abbreviation** will be automatically displayed as it is linked to the Create User Organisation ID.

2.13.   The ⬚Exit⬚ **Exit** button will close the Feature Reference Filter Criteria form and return to the main menu
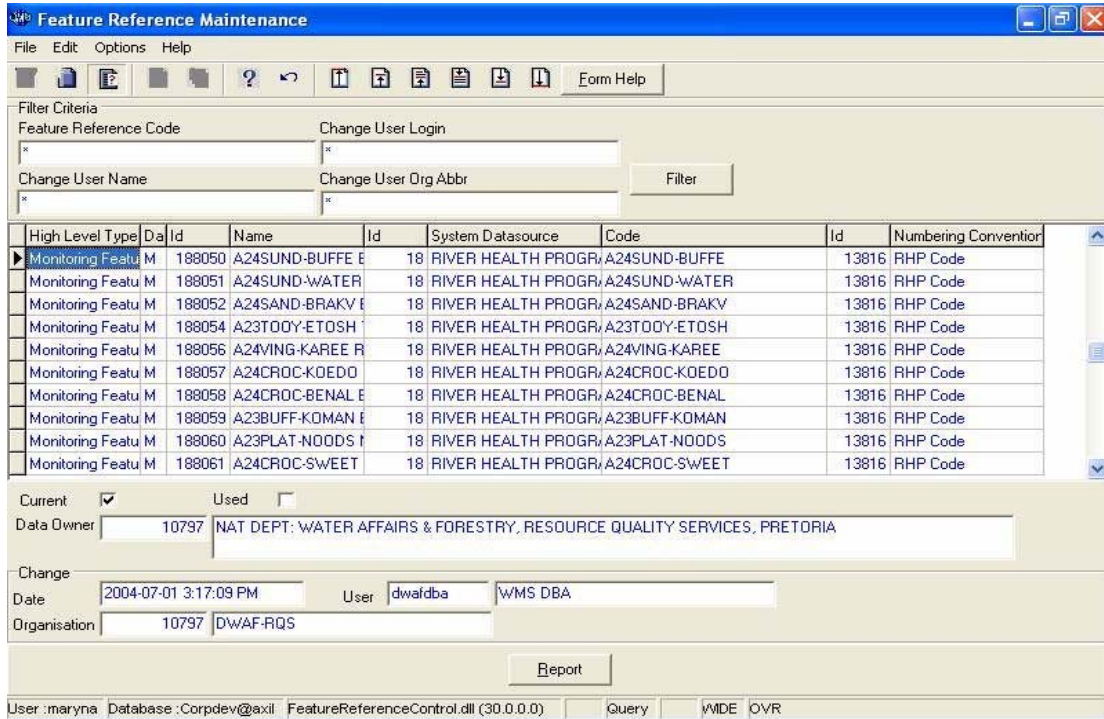
2.14.   Click on the ⬚Ok⬚ **Ok** button to open the **Feature Reference Maintenance Wizard** with the records for the specified filter criteria.
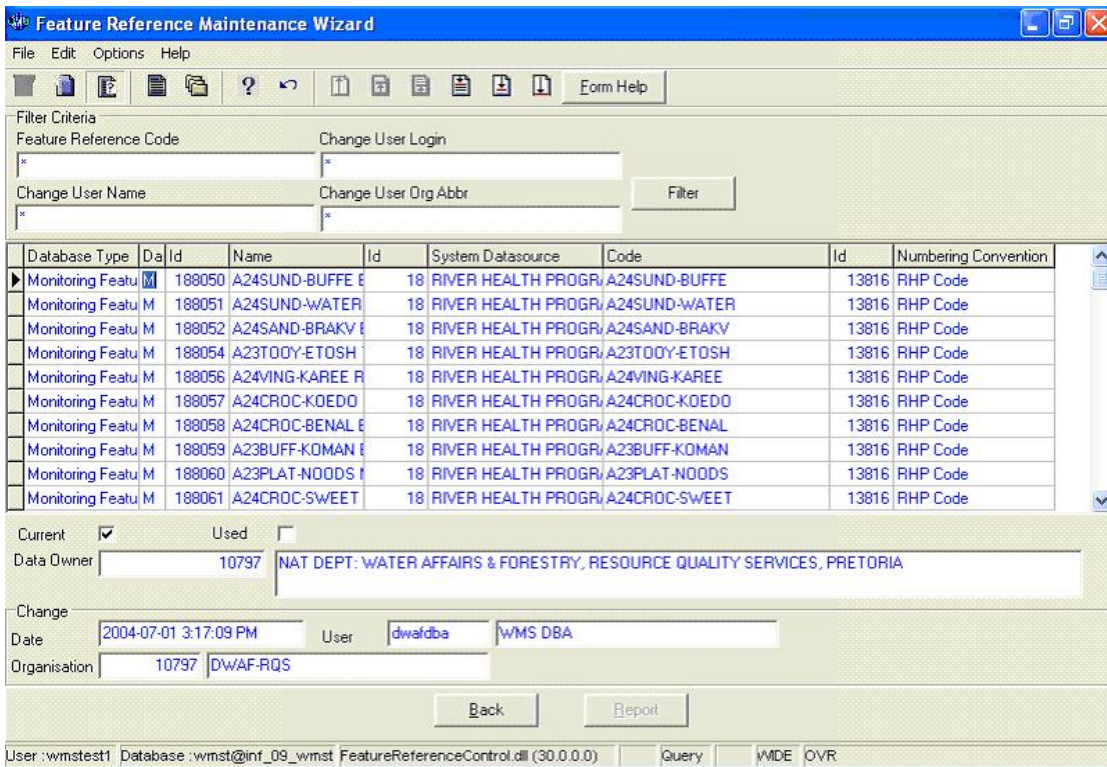
2.15.   Click the ⊠ Close button to close the Feature Reference Maintenance Wizard and return to the main menu

160
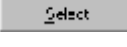
How to Add a Feature Reference:

3.1. Open the **Feature Reference Maintenance** form. *Note: A combination of the System Datasource Id, Feature ID, Numbering Convention Type ID and the Feature Reference Code defines a record uniquely. When the form is activated from another form while focused on a feature, then the Database Type, Feature ID and Name are populated with the focused feature's data and the User cannot change it*

3.2. To Search for records, enter the **Change User Login**, **Change User Name**, **Change User Organisation Abbreviation** or the **Feature Reference Code** and click on the

    [Filter] **Filter** button to filter records according to the specified criteria.

3.3. To add a new record click on the **Create Records** button

3.4. Select **the High Level Type** from the drop down list. The values are Monitoring Feature, Water Quality Feature, Transfer Feature, Reach Zoning Purpose and Geographical Area

3.5. The **Database Type** will be automatically displayed according to the selected High Level Type value.

3.6. Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Feature Selection** form according to the specified Database Type, select the Geographical Feature and click on the [Select] **Select** button to return the selection.
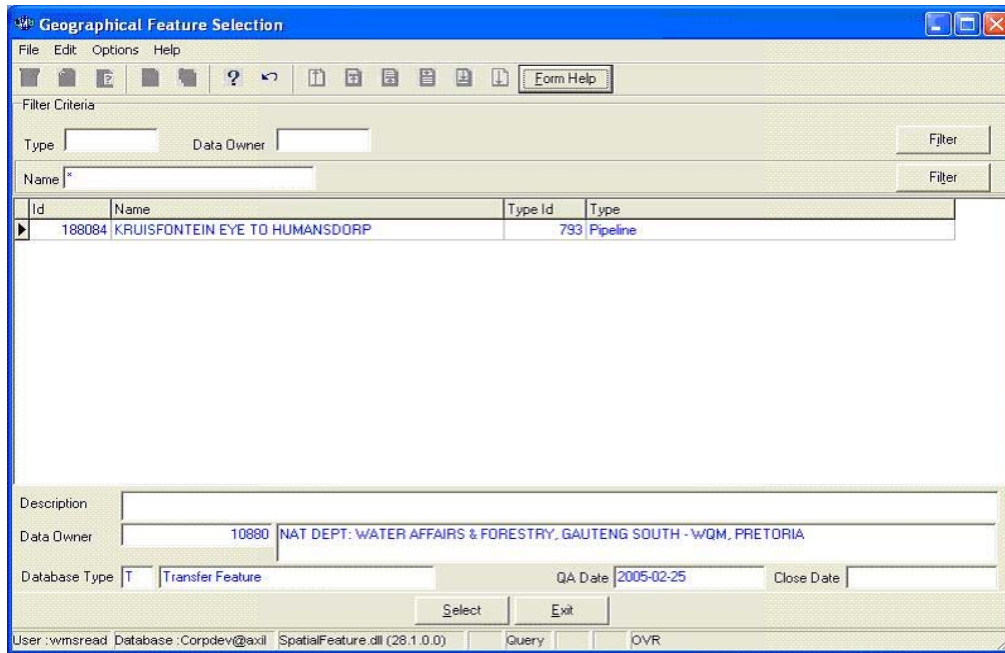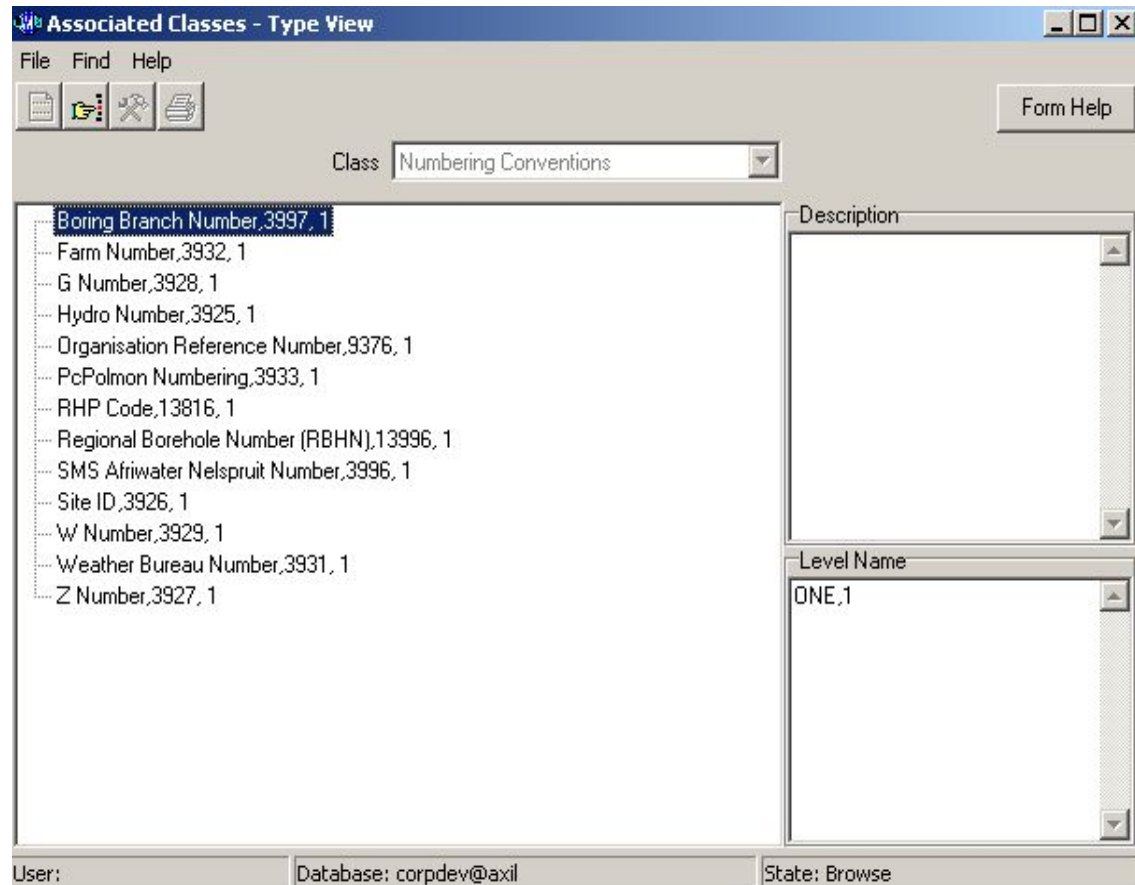
3.7.   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

3.8.   Enter the **System Datasource ID** or click on the **ZOOM** **Zoom** button to open the **System Datasource Selection** form, select the System Datasource and click on the [Select] **Select** button to return the selection.
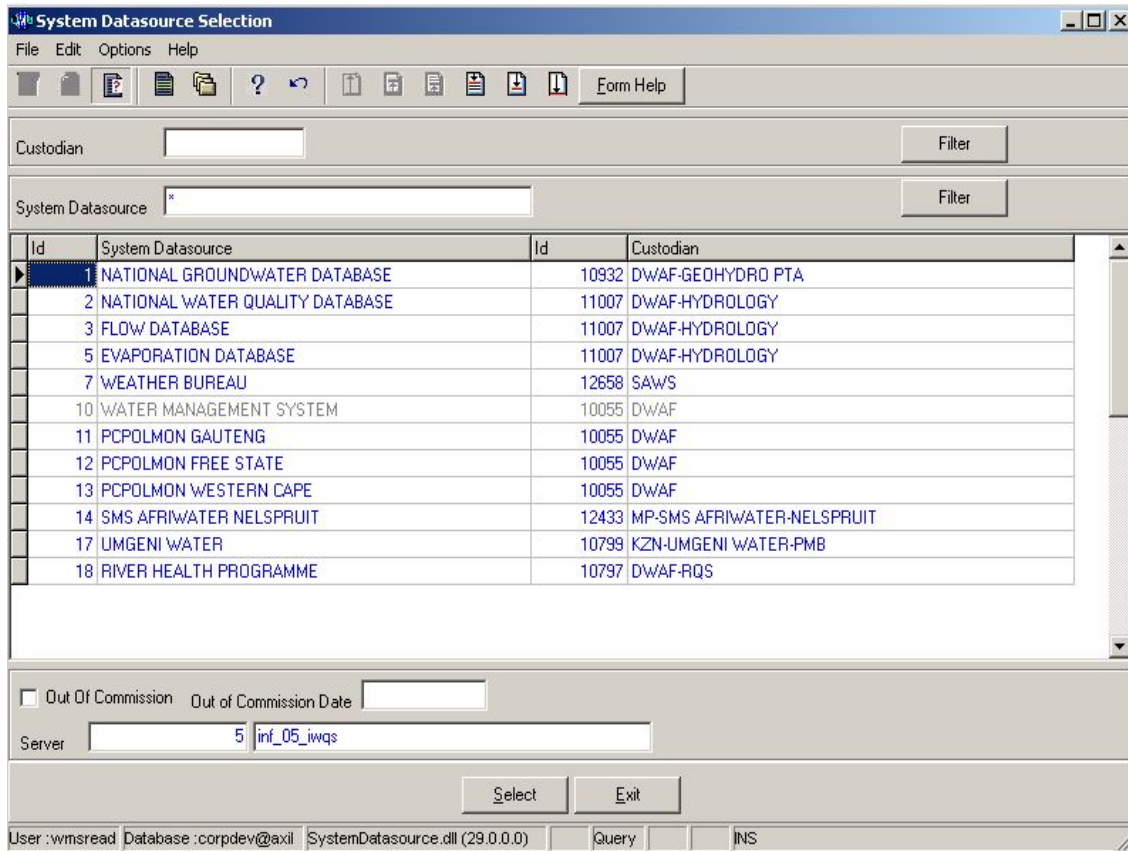
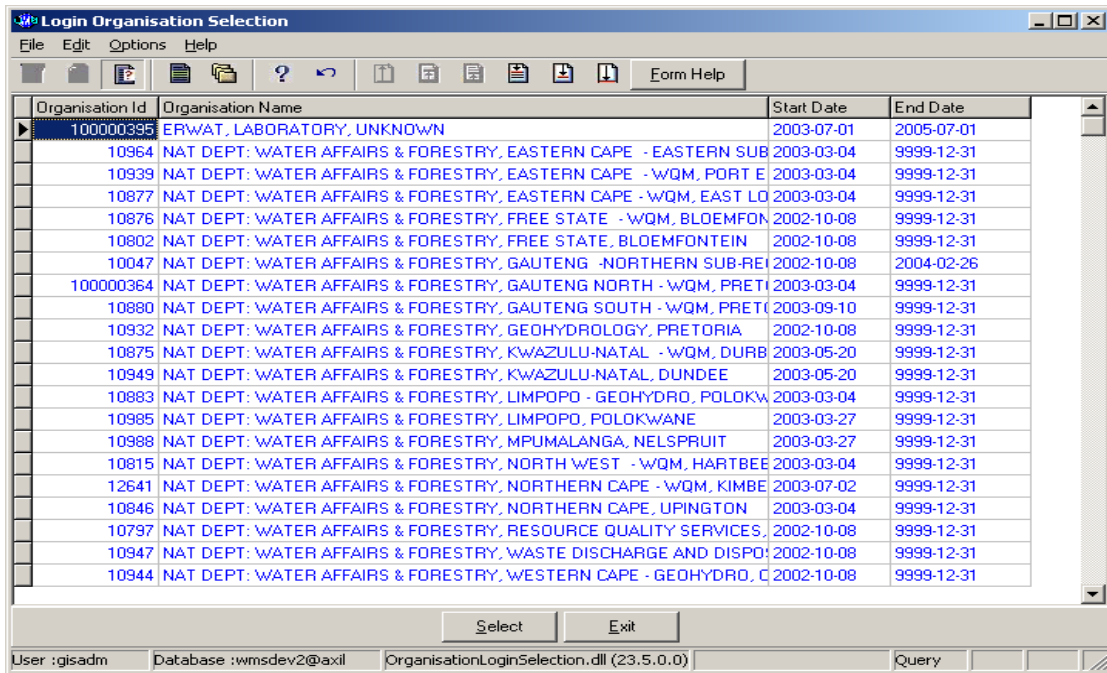3.9.   The **Datasource Name** will be automatically displayed as it is linked to the System Datasource Id.

3.10.   On the **Feature Reference Code** field, enter the Reference/Number/Name. [?] *Note: This Reference uniquely identifies this feature in another system for a specific Numbering Convention and a specific System Datasource. An error message will be displayed if a record of the same Feature Type is already linked to the entered Feature Reference Code.*

3.11.   Enter the **Numbering Convention Type ID** or click on the `ZOOM` **Zoom** button to open the **Associated Classes Type Selection** form, select the Numbering Convention then click on the [icon] **Select** button to return the selection.
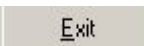

3.12.   The **Numbering Convention Type Name** will be automatically displayed as it is linked to the Numbering Convention Type ID.

3.13.   Check the **Current Indicator** checkbox to indicate that the Reference Code is the current code for the System Datasource, Numbering Convention and the Feature ID combination. [?] *Note: The current Indicator may only be updated by the Data Owner. For the first record, the Current Indicator must be checked. The user may not uncheck the Current Indicator; the user may only check the current indicator of a record and the other record that is checked will be unchecked automatically. Only one record's current Indicator may be checked for a specific System Datasource Id, Numbering Convention Type ID and the Feature ID combination at a given point in time.*

3.14.   The **Used Indicator** checkbox will by default be unchecked. [?] **Note:** The user cannot update the record as a batch program will update it during the electronic data import.

163

3.15. Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the Data Owner Organisation then click on the [Select] **Select** button to return the selection.

3.16. The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

3.17. The **Change Date** field will be automatically updated with the date and time when the record was created.

3.18. The **Change User Login** field will be automatically updated with the logged in User's login code who created the record.

3.19. The **Change User Name** will be automatically displayed as it is linked to the Change User Login.

3.20. The **Change User Organisation ID** field will be automatically updated with the ID of the User Organisation who created the record.

3.21. The **Change User Organisation Abbreviation** will be automatically displayed as it is linked to the Change User Organisation ID.

Note: The user will not be able to change the values of the Change Date, Change User Login, Change User Name, Change User Organisation ID and the Change User Organisation Abbreviation

How to Edit a Feature Reference:

Note: Data Owners will be implemented to prevent non Data Owners from updating other Organisation's Feature Reference information.

4.1.   Click on the record to be edited to highlight it, and click on the [icon] Modify Records button.

[icon] **Note:** *If user wants to assign the new Data Owner to the record, enter the Data Owner Organisation ID, or click on the* ZOOM *Zoom button to open the Login Organisation Selection form, select a nominated Data Owner and click on the* Select *Select button to return the selection. A User may only change his/her own Organisation records. However, the Central Administrator may change any Record.*

4.2.   Edit the record as required.

4.3.   Click on another record to accept the newly modified record.

[icon] *Note: When the Data Owner has changed, then only the newly assigned Data Owner or The Central Administrator may edit the modified Feature Reference record.*

How to Delete a Feature Reference:

[icon] *Note: Data Owners for the different Features References will be implemented to prevent non Data Owners from deleting other Organisations' Feature References information. The Central Administrator may delete any record, but the Data Owner may only delete its records. A record can only be deleted if the Used Indicator is checked.*

5.1.   Click on the record to be deleted, to highlight it

5.2.   Click on the [icon] Delete button. [icon] *Note: When the Used Indicator is checked, the Delete option will be disabled.*

5.3.   A confirmation message will be displayed asking if you would like to delete the record.

5.4.   Click on the OK button option to confirm the deletion.

Water Network Management: River

Introduction:

The River module enables the user to maintain Water Quality Feature - River information

Business Rules:

i   Ensure that the details added to the system are correct and comprehensive.

ii   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

iii   Data Owners for different Rivers will be implemented to prevent non Data Owners from updating or deleting other Organisations' River information.

iv   The Central Administrator may insert, update or delete any type of a Geographical Feature, else the Data Owner may DELETE or UPDATE its Geographical Area record.

v   Only the Central Administrator may change the Quality Assurance date and the Close Date to be set to the system date.

vi   Quality Assurance Date of a group of records may be set by the Database Administrator on request from the Central Administrator.

vii   A Geographical Area record is uniquely identified by its name.

Path:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **River** from the sub menu.
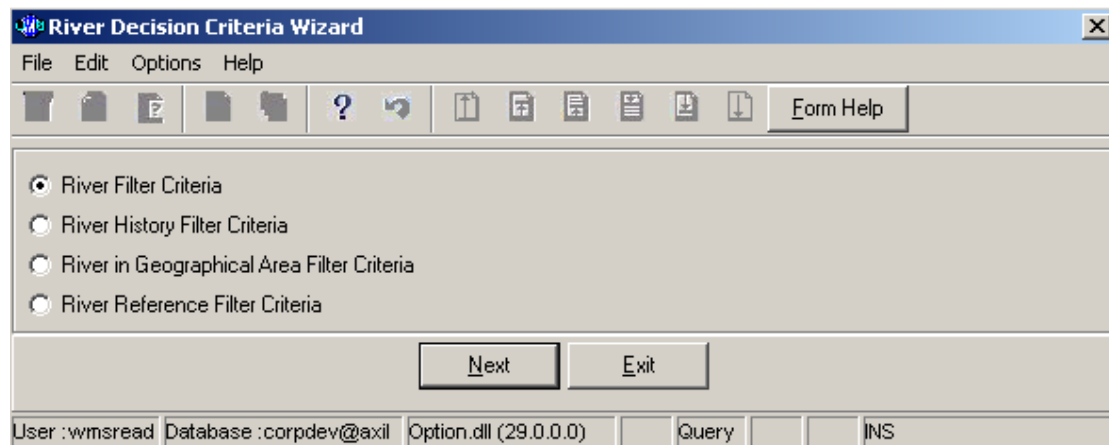
1.3   This will open the **River Decision Criteria Wizard**

How to Search for a River:

Note: *All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for River.*

2.1   Open the **River Decision Criteria Wizard**.

2.2   Choose any of the relevant options to search for a **River** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

How to Search for a River using River Filter Criteria.

2.3   Click on the **River Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **River Filter Criteria Wizard**

2.5   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

167

2.6   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7   Enter the **Geographical Feature ID** or click on the `ZOOM` **Zoom** button to open the **River Selection** form, select a **Feature** to be used as a filter and click on the `Select` **Select** button to return the selection

2.8   The **Feature Name** field will be automatically populated as it is linked to the Feature
       ID

2.9   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login
       Organisation** form, select a **Data Owner LE** to be used as a filter and click on the
       [Select] **Select** button to return the selection.

2.10   The **Data Owner Organisation Abbreviation and Name** field will be automatically
       populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.11   Click on the **Next** button to open the **River Maintenance Wizard** form with records
       for the specified Filter criteria.

2.12   Select the **Exit** button to close the form and return to the main menu

How to Search for a River using River History Filter Criteria.

2.3   Click on the **River History Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **River History Filter Criteria Wizard**

2.5   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a Feature Type to be

        used as a filter and click on the Select button to return the selection.

170

2.6   The **Feature Type** field will be automatically populated as it is linked to the
       Geographical Feature Type ID

2.7   Enter the **Feature ID** or click on the `ZOOM` **Zoom** button to open the **River History
       Selection** form, select a Feature to be used as a filter and click on the **Select** button
       to return the selection

2.8   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.9   Enter the **Data Owner LE ID** or click on the ZOOM **Zoom** button to open the **Login Organisation** form, select a Data Owner LE to be used as a filter and click on the Select **Select** button to return the selection.

2.10   The **Data Owner Organisation Abbreviation** fields will be automatically populated as it is linked to the **Data Owner LE ID**

2.11   Enter the **Change User Login** or click on the **ZOOM** **Zoom** button to open the **User Selection** form, select a **User** to be used as a filter and click on the **Select** button to return the selection.

2.12   The **Change User Name** field will be automatically populated as it is linked to the Change User ID

2.13   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection.

2.14 The **Change User Organisation Abbreviation** fields will be automatically populated as it is linked to the Change User Organisation ID.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.15 Click on the **Next** button to open the **River History View Wizard** form with records for the specified Filter criteria.

2.16   Select the **Exit** button to close the form and return to the main menu

How to Search for a River using River Feature in Geographical Area.

2.3   Click on the **River in Geographical Area Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **River Feature in Geographical Area Filter Criteria Wizard**

2.5   On the **High Level Geographic Feature Types**, will be automatically selected.

2.6   Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Feature Selection** form to select a specific **Geographical Feature ID,** select a **Feature** to be used as a filter and click on the Select **Select** button to return the selection.

176

2.7 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.8 Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

2.9 The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID

[?] *Note: The **Back** button will close the form and return to the Decision Criteria form.*

[?] *Note: The **Exi**t button will close the form and return to the main menu*.

2.10   Click the **Next** button to open the **Geographical Feature in Geographical Area Select Wizard** with the records for the specified Filter criteria.

2.11   Select the **Exit** button to close the form and return to the main menu

How to Add a new River record:

3.1   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **River** from the sub menu, this will open the **River Decision Criteria Wizard**, Click on **River Filter Criteria** radio button, and click on the **Next** button form the **Decision Criteria**, This will open the **River Filter Criteria Wizard**, then click the **Next** button to open the **River Maintenance Wizard**

3.2 Click on the **Create** button to add a new record.

3.3 An empty line displays to allow the addition of a new record.

*Note: The **Geographical Area ID** will be automatically generated by the system when the record is successfully created*

3.4 Enter the **Start Reach Code**

3.5 Enter the **End Reach Code**

3.6 Enter the **River Name**.

3.7 The **Feature Name** will be automatically displayed

3.8 Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.
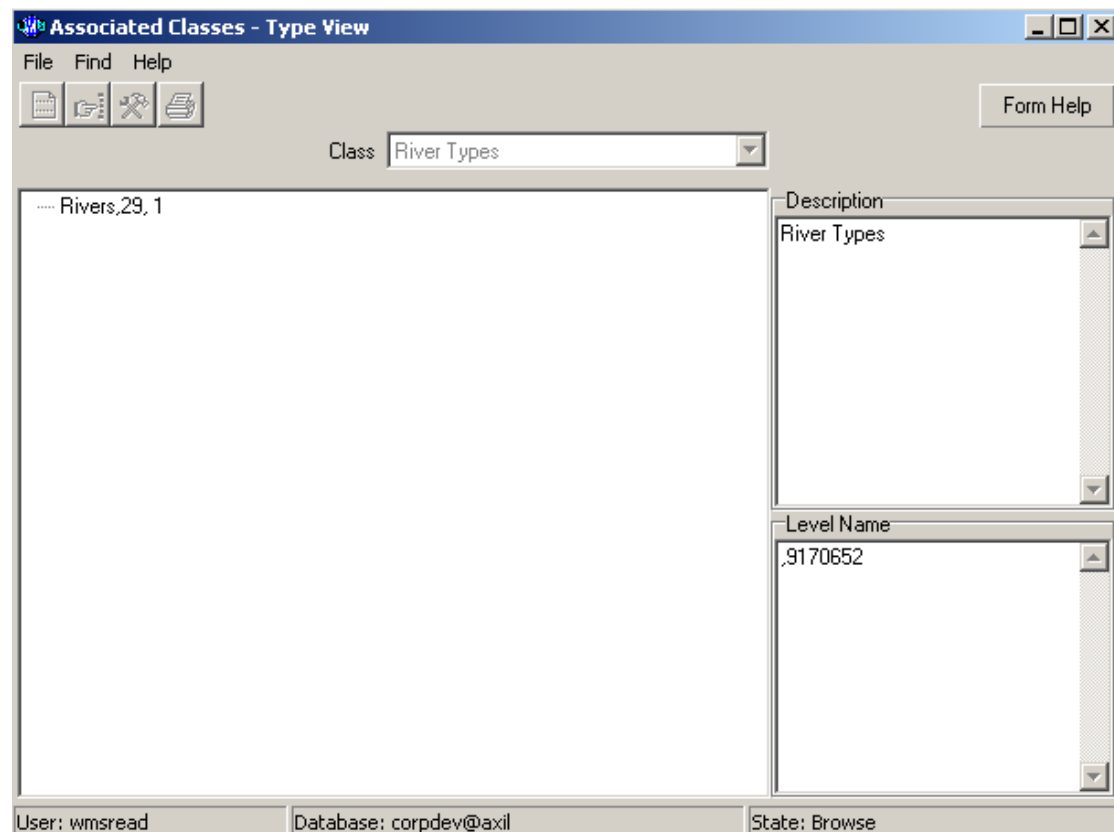
3.9   The **Geographical Area Type** will be automatically displayed as it is linked to the Geographical Area Type ID.
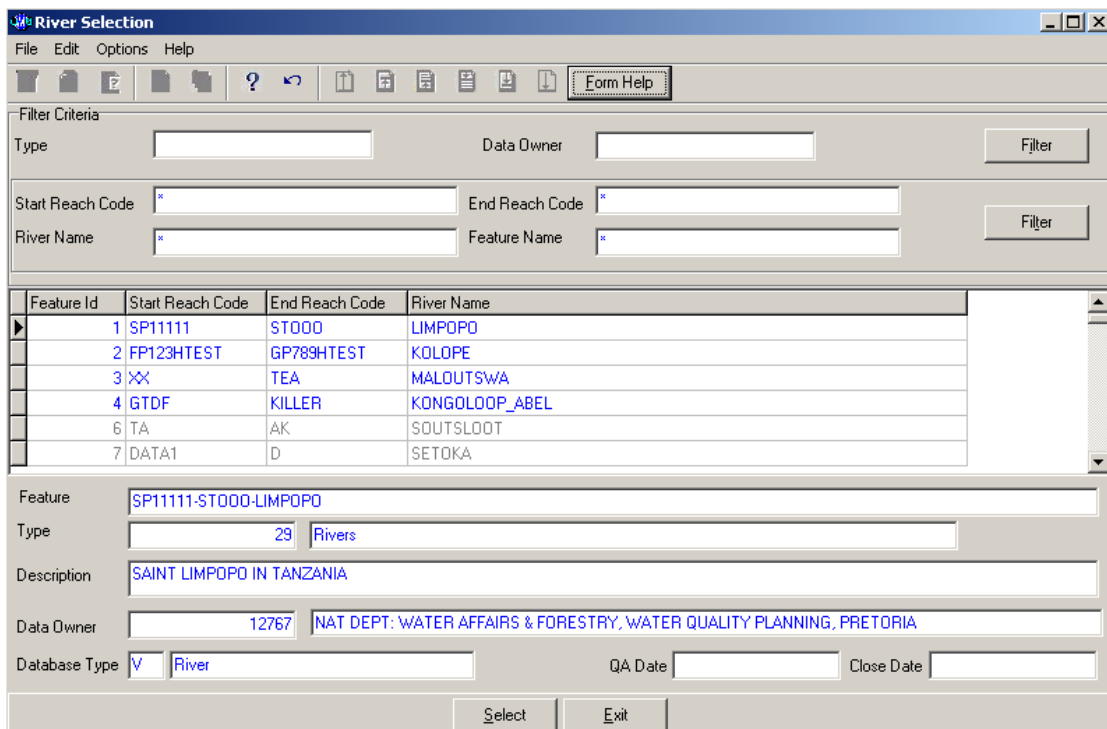
3.10   Enter the **Feature Description**

3.11   Click on the **Spatial** checkbox to indicate that the feature is currently presented on a shapefile. If the user has the correct shape file on his PC, the feature can be viewed in ArcView if spatially represented

3.12   The Date Owner Id will be automatically displayed. To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the [Select] **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.13   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

3.14   The **QA Date** will be automatically displayed.

3.15   Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

*Note: The **Close Date** will by default be empty when creating the record.*

3.16   Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

*Note: the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature*

*Note: the **Back** button will return to the previous Filter Criteria or Selection form.*

3.17   Tab to accept the newly created record.

3.18   Click on the **Exit** button to go to the main menu.

How to Edit a River:

⚠ *Note: Data Owners for the different River will be implemented to prevent non Data Owners from editing other Organisations' River information. Only the Data Owner may edit its River record.*

4.1 On the Maintenance Tab click on the record to be edited to highlight it, and click on the 🖊 **Modify Records** button.

⚠ *Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the* ZOOM *Zoom button to open the **Login Organisation Selection** form, make your selection and click on the* Select *Select button to return your selection.*

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

4.2 Edit the record as required.

4.3 Click on another record to accept the newly modified record.

⚠ *Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab*

4.1 Click on the applicable Photo or Map Tab to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.2 Click on the Accept button to accept the changes

182

Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.

How to Delete a River:

Note: Only the Data Owner may delete it's River record and the Central Administrator may edit any record.

5.1   Click on the record to be deleted, to highlight it.

5.2   Click F3 or Select Delete for the Edit main menu. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the OK option to confirm the deletion.

Water Network Management: Water Body

Introduction:

The Water Body module enables the user to maintain Water Quality Feature - Water Body information

Business Rules:

i   Ensure that the details added to the system are correct and comprehensive.

ii   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

iii   Data Owners for the different Water Bodies will be implemented to prevent non Data Owners from updating or deleting other Organisations' Water Body information.

iv   The Central Administrator may Insert, Update or Delete any type of a Geographical Feature else the Data Owner may DELETE or UPDATE it's Geographical Area record.

v   Only the Central Administrator may change the Quality Assurance date and the Close Date to be set to the system date.

vi   The Database Administrator on request may set quality Assurance Date of a group of records from the Central Administrator.

Path:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Water Body** from the sub menu.

1.3   This will open the **Water Body Decision Criteria Wizard**

How to Search for a Water Body:

Note: *All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for Water Body.*

2.1.   Open the **Water Body Decision Criteria Wizard**.

2.2.   Choose any of the relevant options to search for a **Water Body** and click on the **Next** button to open a specific filter criteria wizard.

Note: *If you select Waters Body Filter Criteria then Waters Body Filter Criteria Wizard will be opened.*

How to Search for a Water Body using Water Body Filter Criteria.

2.3.   Click on the **Water Body Filter Criteria** radio button, then click the **Next** button

2.4.   This will open the **Water Body Filter Criteria Wizard**

2.5.   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the Select button to return the selection.

2.6.   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7.   Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Body Selection** form, select a **Feature** to be used as a filter and click on the **Select** button to return the selection

2.8.   The **Feature Name** field will be automatically populated as it is linked to the Feature
        ID

2.9.   Enter the **Component of Feature Id** or click on the **ZOOM** **Zoom** button to open the
        Water Body Hierarchy Selection form, select a **Water Body** to be used as a filter

        and click on the [Select] **Select** button to return the selection. *Note: To select
        a Component of Feature Id it is compulsory to enter the Geographical Type ID first*

2.10.   The **Component of Feature Name** field will be automatically populated as they are
        linked to the **Component of Feature Id**

2.11.   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login
        Organisation Selection** form, select a **Data Owner LE** to be used as a filter and
        click on the [Select] **Select** button to return the selection.

2.12.   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.13.   Click on the **Next** button to open the **Water Body Maintenance** form with records for the specified Filter criteria.

2.14.   Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Body using Water Body History Filter Criteria.

2.3.   Click on the **Water Body Filter Criteria** radio button, then click the **Next** button

2.4.   This will open the **Water Body History Filter Criteria Wizard**

2.5.   Enter the **Geographical Feature Type ID** or click on the **Zoom** button to
open the **Associated Classes – Type Selection** form, select a Feature Type to be
used as a filter and click on the **Select** button to return the selection.

2.6.　The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7.　Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **Water Body History Selection** form, select a Feature to be used as a filter and click on the Select **Select** button to return the selection

2.8.   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.9.   Enter the **Component of Feature Id** or click on the `ZOOM` **Zoom** button to open the **Water Body History Selection** form, select a Component to be used as a filter and click on the `Select` **Select** button to return the selection. *Note: To select a Component of Feature Id it is compulsory to enter the Geographical Type ID first*

2.10.   The **Component of Feature Name** field will be automatically populated as they are linked to the **Component of Feature Id**

2.11.   Enter the **Data Owner LE ID** or click on the `ZOOM` **Zoom** button to open the **Login Organisation** form, select a Data Owner LE to be used as a filter and click on the `Select` **Select** button to return the selection.

2.12.   The **Data Owner Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the **Data Owner LE ID**

2.13.   Enter the **Change User ID** or click on the **ZOOM** **Zoom** button to open the **User Selection** form, select a **Change User** to be used as a filter and click on the **Select** button to return the selection.

2.14. The **Change User Name** field will be automatically populated as it is linked to the Change User ID

2.15. Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection.

2.16.   The **Change User Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the Change User Organisation ID.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu*.

2.17.   Click on the **Next** button to open the **Water Body History Selection** form with records for the specified Filter criteria.

2.18.   Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Body using Water Body in Geographical Area.

2.3.   Click on the **Water Body in Geographical Area** radio button, then click the **Next** button

2.4.   This will open the **Water Body in Geographical Area Filter Criteria Wizard**

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2.5.   The **High Level Geographic Feature Types**, will be automatically selected

2.6.   Enter the **Feature ID** or click on the ᴢᴼᴼᴹ **Zoom** button to open the **Water Body Selection** form, select a Feature to be used as a filter and click on the ⬚ Select ⬚ **Select** button to return the selection.

2.7. The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.8. On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared.

2.9. Enter the **Geographical Area ID** or click on the **ZOOM Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

2.10. The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area Type ID

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

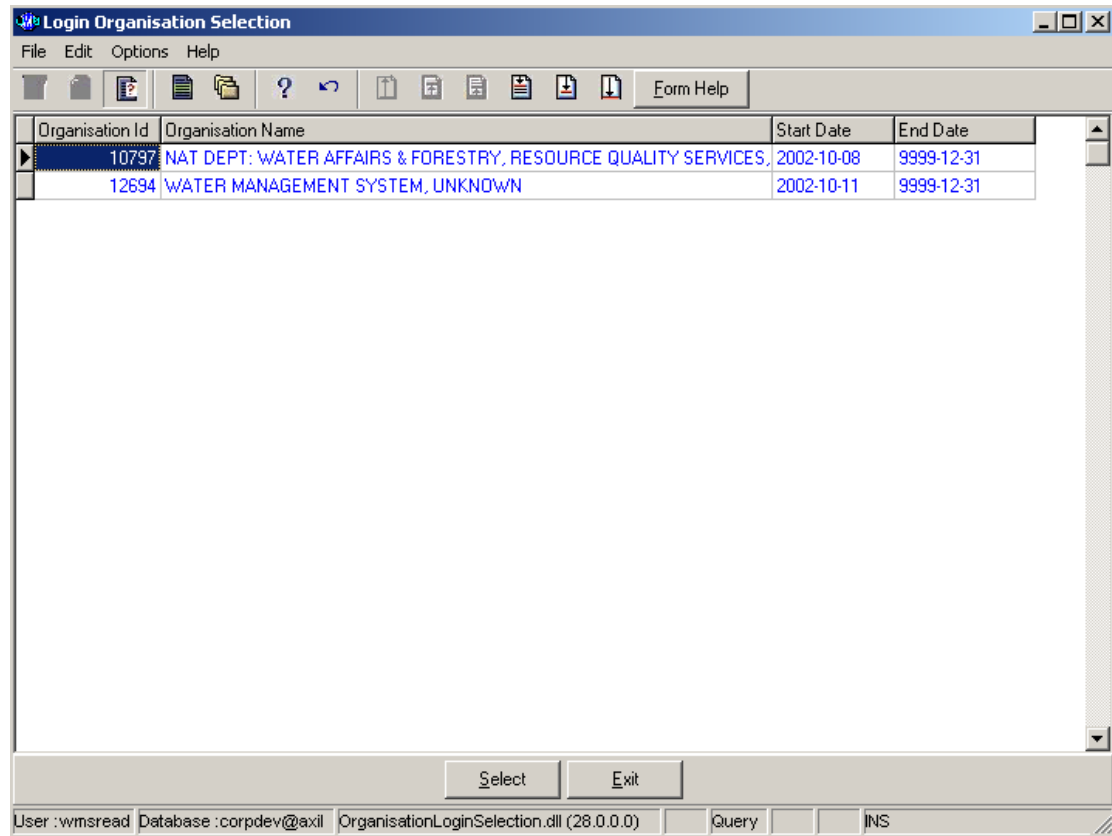2.11. Click on the **Next** button to open the **Water Body in Geographical Area Selection Wizard** with records for the specified Filter criteria.

2.12. Select the **Exit** button to close the form and return to the main menu

How to Add a new Water Body record:

3.1. Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Water Body** from the sub menu, This will open the **Water Body Decision Criteria Wizard**, Click on the **Water Body Filter Criteria** radio button, then click the **Next** button, This will open the **Water Body Filter Criteria Wizard**,

3.2. Click the **Next** button to open the **Water Body Maintenance Wizard**

3.3.   Click on the **Create** button to add a new record.

3.4.   An empty line displays to allow the addition of a new record.

*Note: The **Geographical Area ID** will be automatically generated by the system when the record is successfully created*

3.5.   Enter the **Geographical Feature Name**. *Note: The Geographical Area Name shall be unique for all the Geographical Area records.*

3.6.   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.
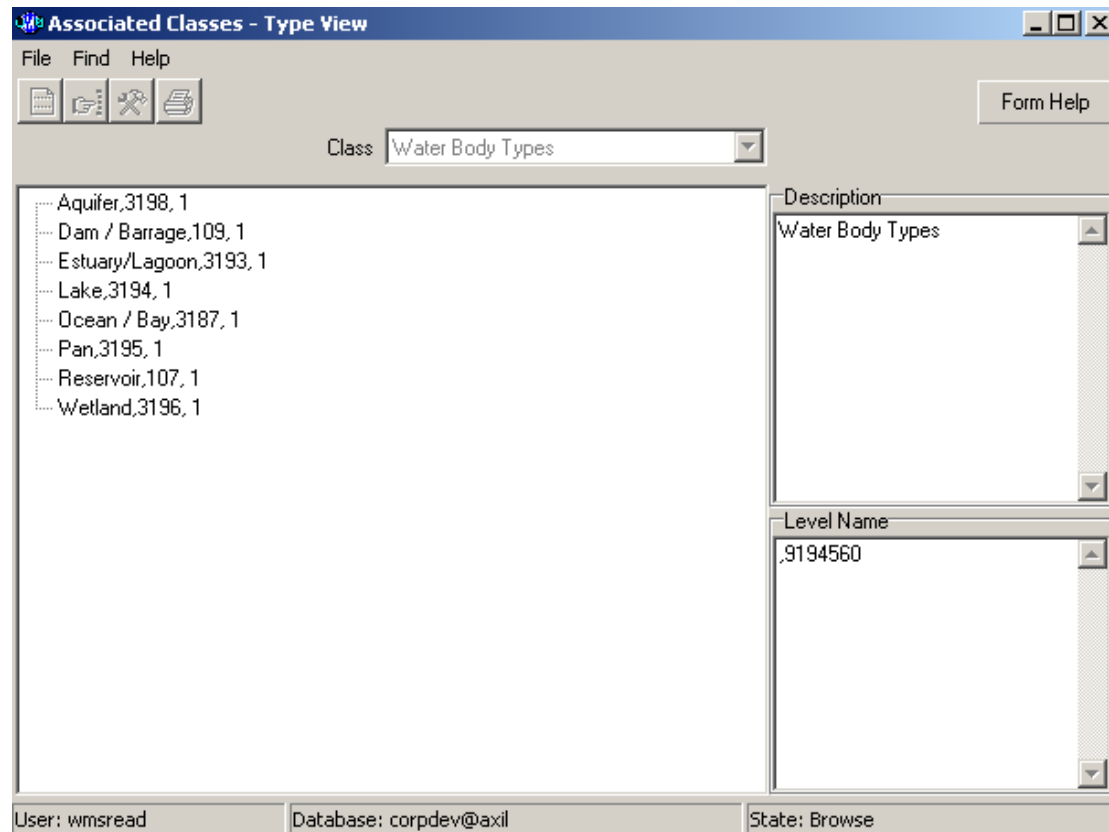
3.7.   The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.8.   Enter the **Geographical Area Description**.

3.9.   Click on the **Spatial** checkbox to indicate that the feature is currently presented on a shapefile. If the user has the correct shape file on his PC, the feature can be viewed in ArcView if spatially represented.

3.10.   The **Component of Feature Id** will automatically display the Id of the Water Body this Water Body is a Component of.

3.11.   The **Component of Feature Name** will automatically display the Name of the Water Body this Water Body is a Component of.

3.12.   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the ZOOM **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the ⌊ Select ⌋ **Select** button to return the selection. 🔲 *Note: Only active organisations with passwords are available for selection.*
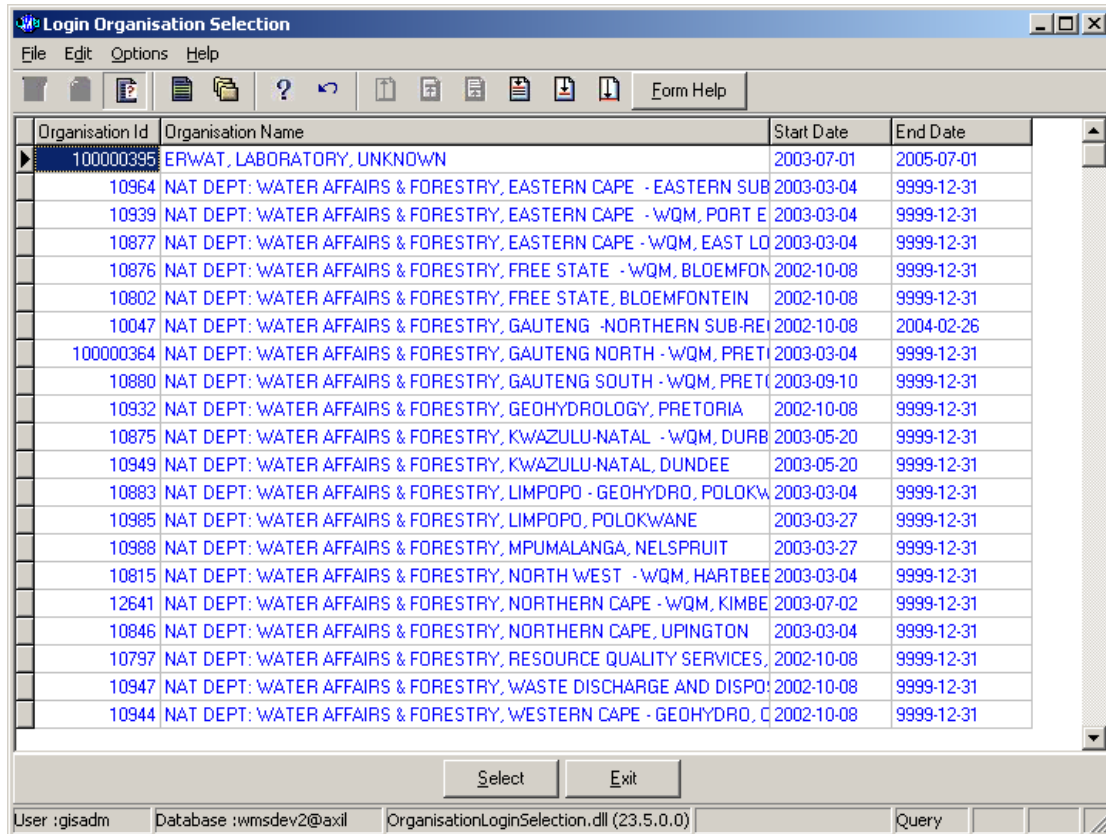
3.13.   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

3.14.   *The **QA Date** field will by default be empty when creating the record.*

3.15.   Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

*Note: The **Close Date** will by default be empty when creating the record.*

3.16.   Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

3.17.   Tab to accept the newly created record.

***Note**: the **Back** button will return to the previous Filter Criteria or Selection form.*

3.18.   Click on the **Exit** button to go to the main menu.

How to Edit a Water Body record:

***Note:** Data Owners for the different Water Body will be implemented to prevent non Data Owners from editing other Organisations' Water Body information. Only the Data Owner may edit its Water Body record.*

4.1   On the Maintenance Tab click on the record to be edited to highlight it, and click on the 📝 **Modify Records** button.

❓*Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the `ZOOM` **Zoom** button to open the **Login Organisation Selection** form,* make your selection and click on the `Select` **Select** button to return your selection.

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE(	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET(	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET(	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO!	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

4.4   Edit the record as required.

4.5   Click on another record to accept the newly modified record.

❓*Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab*

4.3   Click on the applicable Photo or Map Tab to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.4   Click on the Accept button to accept the changes

❓*Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.*

How to Delete a Water Body record:

Note: Only the Data Owner may delete it's Water Body record.

5.1.   Click on the record to be deleted, to highlight it.

5.2.   Click F3 or Select Delete for the Edit main menu. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3.   A confirmation message will be displayed asking if you would like to delete the record.

5.4.   Click on the OK option to confirm the deletion

Water Network Management: Water Use Site

Introduction:

The Water Use Site module enables the user to maintain Water Quality Feature - Water Use Site information

Business Rules:

i   Ensure that the details added to the system are correct and comprehensive.

ii   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

iii   Data Owners for the different Water Use Sites will be implemented to prevent non Data Owners from updating or deleting other Organisations' Water Use Site information.

iv   The Central Administrator may insert, edit or delete any type of a Geographical Feature, else the Data Owner may DELETE or UPDATE its Geographical Area record.

v   Only the Central Administrator may change the Quality Assurance date and the Close Date to be set to the system date.

vi   Quality Assurance Date of a group of records may be set by the Database Administrator on request from the Central Administrator.

vii   A Geographical Area record is uniquely identified by its name.

Path:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Water Use Site** from the sub menu.

1.3   This will open the **Water Use Site Decision Criteria Wizard**

How to Search for a Water Use Site:

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for Water Use Site.

2.1   Open the **Water Use Site Decision Criteria Wizard**.

2.2   Choose any of the relevant options to search for a **Water Use Site** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

How to Search for a Water Use Site using Water Use Site Filter Criteria.

2.3   Click on the **Water Use Site Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **Water Use Site Filter Criteria Wizard**

2.5   On the **High Level Water Use Site Types**, click on the **Agricultural, industrial, Mine, Solid Waste, Urban or Water care Works** or the **All** option to filter out records associated with a selected type of **Water Use Site Types**

2.6   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

2.7 The **Feature Type** field will be automatically populated as it is linked to the **Geographical Feature Type ID**

2.8 Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select a **Feature** to be used as a filter and click on the **Select** button to return the selection

2.9 The **Feature Name** field will be automatically populated as it is linked to the **Geographical Feature ID**

2.10 Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the [Select] **Select** button to return the selection

2.11 The **Legal Responsible Organisation Abbreviation & Name** field will be automatically populated as they are linked to the **Legal Responsible Organisation ID**

2.12 Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the [Select] **Select** button to return the selection

2.13 The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

2.14 Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** **Select** button to return the selection

2.15 The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

2.16 Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

2.17 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

2.18 Enter the **Site Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the ☐ Select **Select** button to return the selection

2.19 The **Site Owner Abbreviation & Name** field will be automatically populated as they are linked to the **Site Owner Organisation ID**

2.20 Enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the ☐ Select **Select** button to return the selection

2.21 The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

2.22 Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

2.23 The **Main Site Name** field will be automatically populated as it is linked to the **Main Site Feature ID**

2.24   Enter the **Sub Site Feature ID** or click on the `ZOOM` **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the `Select` **Select** button to return the selection

2.25   The **Sub Site Name** field will be automatically populated as it is linked to the **Sub Site Feature ID**

2.26   Enter the **Data Owner LE ID** or click on the `ZOOM` **Zoom** button to open the **Login Organisation** form, select a **Data Owner LE** to be used as a filter and click on the `Select` **Select** button to return the selection.

2.27   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exit** button will close the form and return to the main menu.*

2.28   Click on the **Next** button to open the **Water Use Site View Wizard** with records for the specified Filter Criteria.

2.29   Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Use Site using Water Use Site History Filter Criteria.

2.3   Click on the **Water Use Site Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **Water Use Site History Filter Criteria Wizard**

2.5   On the **High Level Water Use Site Types**, click on the **Agricultural, industrial,
        Mine, Solid Waste, Urban or Water care Works** or the **All** option to filter out records
        associated with a selected type of **Water Use Site Types**

2.6   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to
        open the **Associated Classes – Type Selection** form, select a Feature Type to be

        used as a filter and click on the 📇 **Select** button to return the selection.

2.7   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.8   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site History Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection

2.9   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.10   Enter the **Legal Responsible Organisation ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the `Select` **Select** button to return the selection

2.11   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

2.12   Enter the **Regional Office Authority ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the `Select` **Select** button to return the selection

2.13   The **Regional Office Authority Abbreviation** field will be automatically populated as it is linked to the **Regional Office Authority ID**

2.14   Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the [**Select**] **Select** button to return the selection

2.15   The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

2.16   Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the [**Select**] **Select** button to return the selection

2.17 The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

2.18 Enter the **Site Owner Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

2.19 The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

2.20 Enter the **Management Authority Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

2.21 'The **Management Authority Abbreviation** field will be automatically populated as it is linked to the **Management Authority Organisation ID**

2.22 Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

2.23   The **Main Site Name** field will be automatically populated as it is linked to the **Main Site Feature ID**

2.24   Enter the **Sub Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

2.25   The **Sub Site Name** field will be automatically populated as it is linked to the **Sub Site Feature ID**

2.26   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation** form, select a Data Owner LE to be used as a filter and click on the **Select** **Select** button to return the selection.

2.27   The **Data Owner Organisation Abbreviation and Name** fields will be automatically
        populated as they are linked to the **Data Owner LE ID**

2.28   Enter the **Change User Login** or click on the ⌊ZOOM⌋ **Zoom** button to open the **User
        Selection** form, select a **Change User** to be used as a filter and click on the **Select**
        button to return the selection.

2.29   The **Change User Name** field will be automatically populated as it is linked to the **Change User Login**

2.30   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the [Select] **Select** button to return the selection.

WMS Procedural Manual

2.31 The **Change User Organisation Abbreviation** fields will be automatically populated as it is linked to the **Change User Organisation ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exit** button will close the form and return to the main menu.*

2.32 Click on the **Next** button to open the **Water Use Site History View Wizard** with records for the specified Filter criteria.

2.33	Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Use Site using Water Use Site in Geographical Area.

2.1	Click on the **Water Use Site in Geographical Area Filter Criteria** radio button, then click the **Next** button

2.2	This will open the **Geographical Feature in Geographical Area Filter Criteria** form

2.3	On the **High Level Geographic Feature Types**, the **Water Use Site Point** will be checked and the user cannot change it. It gives the option to filter out records associated with Water Use Site.

2.4   Enter the **Feature ID** or click on the `ZOOM` **Zoom** button to open the **Geographical Feature Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection.

2.5   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.6   On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared

2.7   Enter the **Geographical Area ID** or click on the `ZOOM` **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

226

2.8   The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.9   Click on the **Next** button to open the **Water Use Site in Geographical Area View Wizard** with records for the specified Filter criteria.
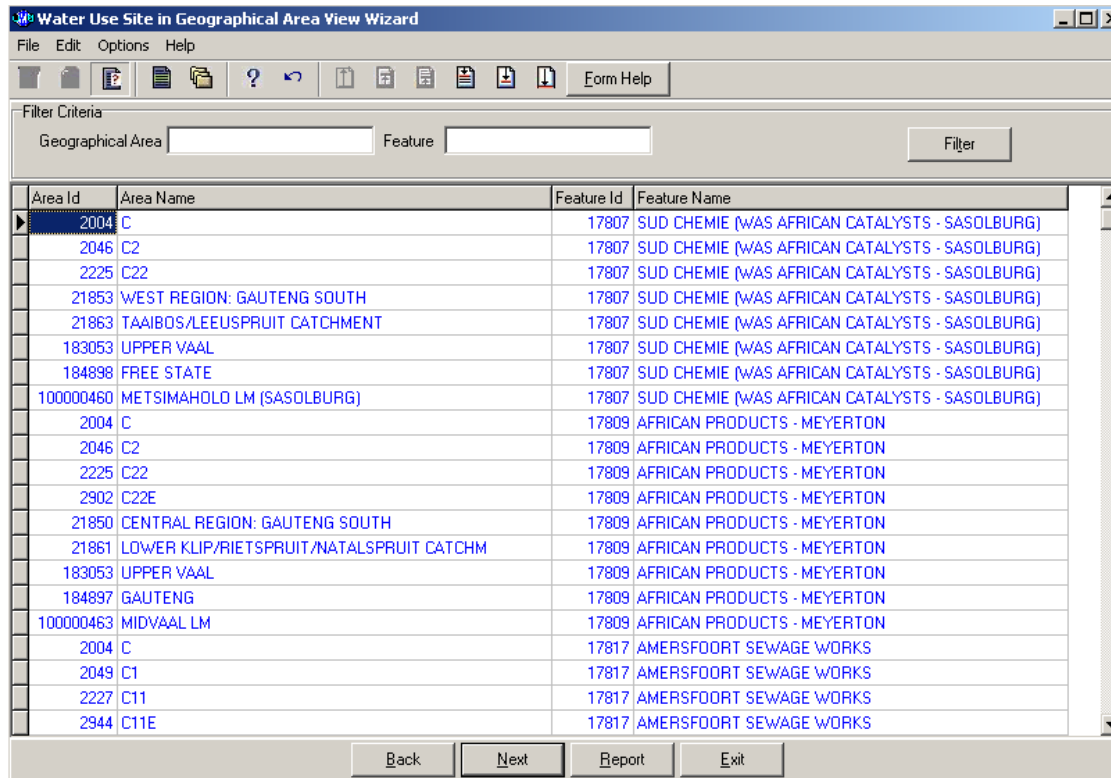
2.10   Select the **Exit** button to close the form and return to the main menu

How to Add a new Water Use Site:

*Note: Water Use Site can be added using three different forms. The **Water Use Main Site**, **Water Use Sub Site** or the **Water Use Site Component** Maintenance depending on the Site Type*

3.1   Select **Water Network Management** from the **Water** *Note:* **Resource Management** menu bar, Select **Water Use Site** from the sub menu, this will open the **Water Use Site Decision Criteria Wizard**, Select **Water Use Site Filter Criteria** radio button, and click on the **Next** button form the **Decision Criteria**; this will open the **Water Use Site Filter Criteria Wizard**, and then click the **Next** button to open the **Water Use Site View Wizard** then click the **Create** button to open the Maintain Decision Criteria

How to Add a new Water Use Main Site record

3.2   Click on the **Water Use Main Site Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

3.3   This will open the **Water Use Main Site Maintenance**

3.4   Select a **High Level Type** of the Water Use Site from the drop down list

3.5   **High Level Code ID** will be automatically displayed. **Note:** *This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works*

3.6   Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. **Note:** *if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.*

3.7   **Site Type ID** and **Site Type Name** will be automatically displayed

3.8   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.

3.9　The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.10　Enter the **Geographical Feature Name**. *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.11　Enter the **Geographical Feature Description**.

3.12　The **Site Full Name** will be automatically displays

3.13　Enter the **File Number**

3.14　Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.15   The **Legal Responsible Organisation Abbreviation** field will be automatically
        populated as it is linked to the **Legal Responsible Organisation ID**

3.16   Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to
        open the **Employee Selection** form, select an **Person** to be used as a filter and click
        on the **Select** **Select** button to return the selection

3.17   The **Regional Officer Name** field will be automatically populated as it is linked to the
        Regional Officer Employee ID

3.18   Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open
        the **Organisation Selection** form, select an **Regional Office** to be used as a filter
        and click on the **Select** **Select** button to return the selection

3.19   The **Regional Office Authority Abbreviation & Name** field will be automatically
         populated as they are linked to the **Regional Office Authority ID**

3.20   Enter the **Contact Person ID** or click on the **ZOOM Zoom** button to open the
         Employee Selection form, select an **Person** to be used as a filter and click on the
         Select Select button to return the selection

3.21   The **Legal Contact Person Name** field will be automatically populated as it is linked
         to the **Contact Person ID**

3.22   Enter the **Site Owner Organisation ID** or click on the **ZOOM Zoom** button to open
         the **Organisation Selection** form, select an **Organisation** to be used as a filter and
         click on the **Select Select** button to return the selection

232

3.23 The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.24 Enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.25 The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.26 To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the ZOOM **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the ⎡ Select ⎤ **Select** button to return the selection. 🔖 *Note: Only active organisations with passwords are available for selection.*

3.27 The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

🔖 *Note: The **QA Date** field will by default be empty when creating the record.* Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. 🔖 *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

🔖 *Note: The **Close Date** will by default be empty when creating the record*. Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage.
🔖 *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

🔖 *Note: the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature. (this is for future development)*

3.28 Click the **Accept** button to accept the newly created record.

How to Add a new Water Use Sub Site record

3.2   Click on the **Water Use Sub Site Maintenance** radio button and click the OK button
       from the **Maintain Decision Criteria**

3.3   This will open the **Water Use Sub Site Maintenance**

3.4   Select a **High Level Type** of the Water Use Site from the drop down list

3.5   **High Level Code ID** will be automatically displayed. *Note: This field will be
       populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or
       Water Care Works*

3.6   Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently

       presented on a shape file. *Note: if the user has the correct shape file on PC, the
       feature can be viewed in ArcView if spatially represented.*

3.7   **Site Type ID** and **Site Type Name** will be automatically displayed

3.8   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to
       open the **Associated Classes – Type Selection** form, select the applicable record

       and click on the Select button to return the selection.

3.9 The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.10 Enter the **Main Site Feature ID** or click on the ZOOM **Zoom** button to open the **Water Use Site Selection** form, select the applicable record and click on the Select **Select** button to return the selection.

3.11 The **Main Site Feature Name** will be automatically displayed as it is linked to the **Main Site Feature ID**.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.12 Enter the **Geographical Feature Name**. *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.13 Enter the **Geographical Feature Description**.

3.14 The **Site Full Name** will be automatically displays

3.15 Enter the **File Number**

3.16 Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.17 The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.18 Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.19 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.20 Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** **Select** button to return the selection

3.21 The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

3.22 Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.23   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.24   Enter the **Site Owner Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the ⟨Select⟩ **Select** button to return the selection

3.25   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.26   Enter the **Management Authority Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the ⟨Select⟩ **Select** button to return the selection

3.27 The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.28 To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the ⬚ Select **Select** button to return the selection. ⬚ *Note: Only active organisations with passwords are available for selection.*

3.29   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

Note: *The **QA Date** field will by default be empty when creating the record.* Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value.

Note: *This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

Note: *The **Close Date** will by default be empty when creating the record*. Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage.

Note: *This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

Note: *the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature (this is for future development)*

3.30   Click the **Accept** button to accept the newly created record

How to Add a new Water Use Site Component record

3.2   Click on the **Water Use Site Component Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

3.3   This will open the **Water Use Site Component Maintenance**

3.4 Select a **High Level Type** of the Water Use Site from the drop down list

3.5 **High Level Code ID** will be automatically displayed. *Note: This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works*

3.6 Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. *Note: if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.*

3.7 **Site Type ID** and **Site Type Name** will be automatically displayed

3.8 Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.

3.9   The **Geographical Feature Type** will be automatically displayed as it is linked to the
        Geographical Area Type ID.

3.10   Enter the **Main Site Feature ID** or click on the [ZOOM] **Zoom** button to open the
        Water Use Site Selection form, select the applicable record and click on the
        [Select] Select button to return the selection.

3.11   The **Main Site Feature Name** will be automatically displayed as it is linked to the **Main Site Feature ID**.

3.12   Enter the **Sub Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select the applicable record and click on the

Select Select button to return the selection.

Note: *The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.13   Enter the **Geographical Feature Name**. *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.14   Enter the **Geographical Feature Description**.

3.15   The **Site Full Name** will be automatically displays

3.16   Enter the **File Number**

3.17   Enter the **Legal Responsible Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

LE Id	DWAF Ind	Abbreviation	Name	Division/Sub Division	Area Office
1000000247	☐	WC-AECI-SOMERSET WEST	AECI-SOMERSET WEST		SOMERSET-WEST
100000620	☐	GP-AFCHEM CLAY CHEMICA	AFCHEM CLAY CHEMICALS		UNKNOWN
11023	☐	AFRI PROD-MEYERTON	AFRICAN PRODUCTS		MEYERTON
100000285	☐	AFROSEARCH	AFROSEARCH		UNKNOWN
100000631	☐	GP-ACSA	AIRPORTS COMPANY SOUTH AFRICA		UNKNOWN
200000342	☐	WC-AL ABBOTT & ASSOCIA	AL ABBOTT & ASSOCIATES PTY LTD-	PROCESS & CHEMICAL CON	WOODSTOCK
11791	☐	ALBERTINIA MUN	ALBERTINIA MUNICIPALITY		ALBERTINIA
10847	☐	NC-ALEX BAY MONITOR	ALEXANDER BAY MONITOR		ALEXANDER BAY
1000000029	☐	ALEXKOR	ALEXKOR LIMITED		UNKNOWN
100000671	☐	GP-ANGLO OLIFANTS	ALPHA PTY LTD	OLIFANTSFONTEIN OPERAT	UNKNOWN
200000085	☐	ALPHA CEMENT SALDANHA	ALPHA PTY LTD	SALDANHA CEMENT PROJE	SALDANHA
100000732	☐	ALPHA WEST RAND OPERA	ALPHA PTY LTD	WEST RAND OPERATIONS	UNKNOWN
100000693	☐	ALPHA STONE & READY MI	ALPHA STONE & READY MIX	HEAD OFFICE	UNKNOWN
1000000072	☐	EC-STUT-AMAHL	AMAHLATHI MUNICIPALITY		UNKNOWN

Basic Organisation Type : C Company
Organisation Type : 490 Company
Addressee Type:

View Organisation Addresses   Select   Exit

3.18   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.19   Enter the **Regional Officer Employee ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the Select **Select** button to return the selection

3.20   The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.21   Enter the **Regional Office Authority ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the [Select] **Select** button to return the selection

3.22   The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

3.23   Enter the **Contact Person ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the [Select] **Select** button to return the selection

3.24 The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.25 Enter the **Site Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.26 The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.27 Enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.28 The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.29 To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the **Select** **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.30   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

*Note: The **QA Date** field will by default be empty when creating the record. Click on the* **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

*Note: The **Close Date** will by default be empty when creating the record. Click on the* **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*
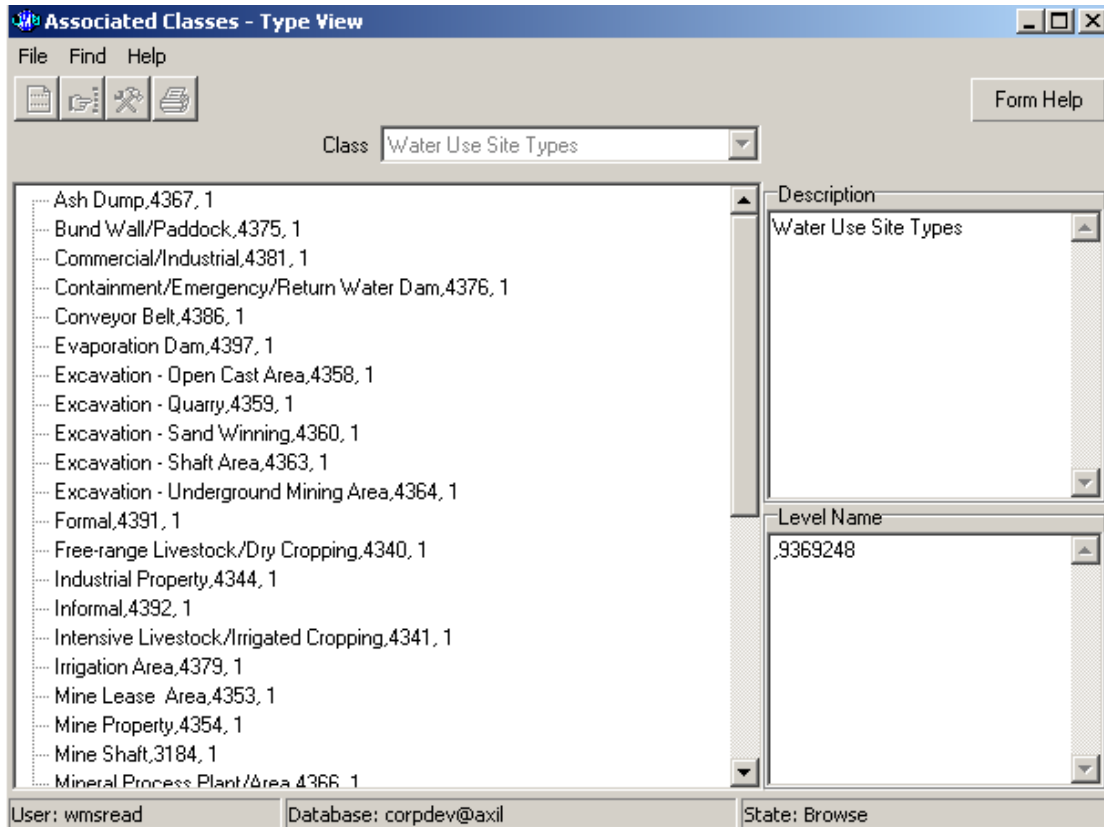
*Note: the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature (this is for future development)*

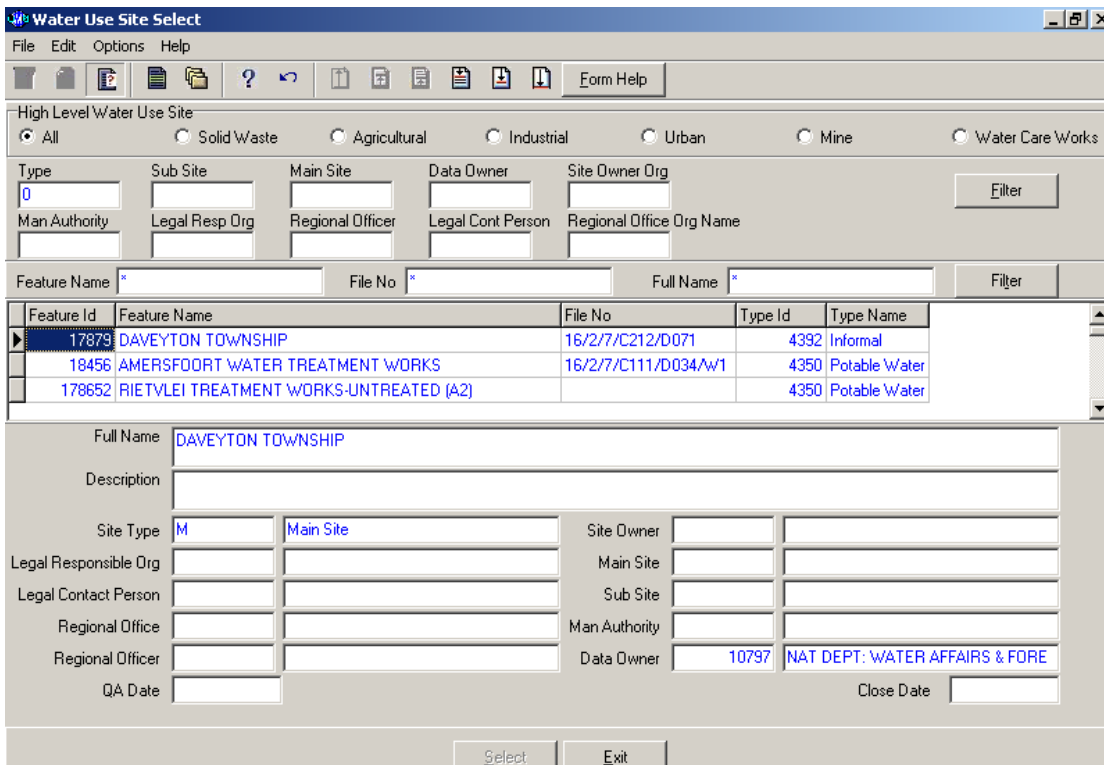3.31   Click the **Accept** button to accept the newly created record

How to Edit a Water Use Site:

Note: Only the Data Owner may edit it's Water Use Site record and the Central Administrator may edit any record.

4.1   Click on the record to be edited to highlight it, and click on the Modify Records button.

Note: If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.

4.2   Edit the record as required.

4.3   Click on another record to accept the newly modified record.

How to Delete a Water Use Site:

Note: Only the Data Owner may delete it's Water Use Site record and the Central Administrator may edit any record.

5.1   Click on the record to be deleted, to highlight it.

5.2   Click F3 or Select Delete for the Edit main menu. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the OK option to confirm the deletion

Water Network Management: Groundwater

Introduction:

The Groundwater Feature module enables the user to maintain Water Quality Feature - Groundwater Feature information

Business Rules:

i   Ensure that the details added to the system are correct and comprehensive.

ii   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

iii   Data Owners for the different Groundwater Features will be implemented to prevent non Data Owners from updating or deleting other Organisations' Groundwater Feature information.

iv   The Central Administrator may insert, update or delete any type of a Geographical Feature, else the Data Owner may DELETE or UPDATE its Geographical Area record.

v   Only the Central Administrator may change the Quality Assurance date and the Close Date to be set to the system date.

vi   Quality Assurance Date of a group of records may be set by the Database Administrator on request from the Central Administrator.

vii   A Geographical Area record is uniquely identified by its name.

Path:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Groundwater Feature** from the sub menu.

1.3   This will open the **Groundwater Feature Decision Criteria Wizard**
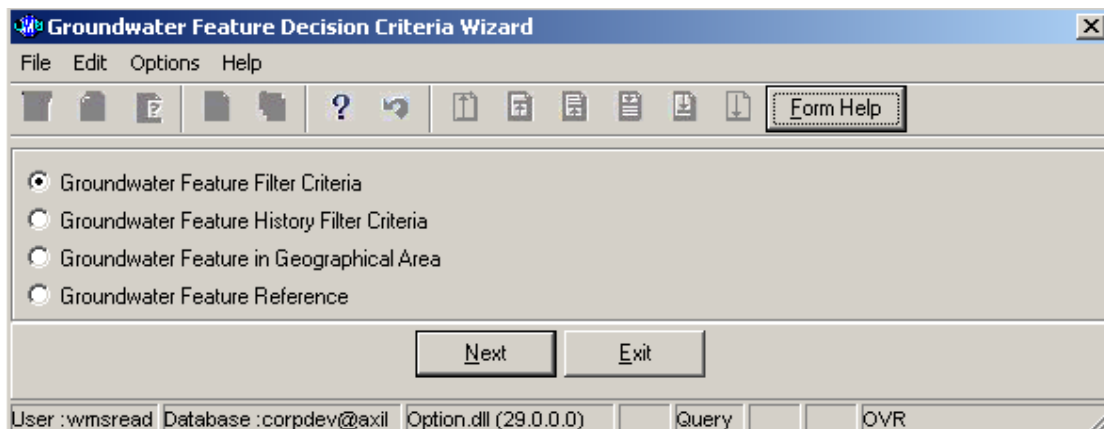
How to Search for a Groundwater Feature:

Note: *All the Filter Criteria forms will be opened from the Groundwater Feature Decision Criteria Wizard form, and they are also used for searching for Groundwater Feature.*

2.1　　Open the **Groundwater Feature Decision Criteria Wizard**.

2.2　　Choose any of the relevant options to search for a **Groundwater Feature** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

How to Search for a Groundwater using Groundwater Feature Filter Criteria.

2.3　　Click on the **Groundwater Feature Filter Criteria** radio button, then click the **Next** button

2.4　　This will open the **Groundwater Feature Filter Criteria Wizard**

2.5　　Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

252

2.6   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7   Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Groundwater Selection** form, select a **Feature** to be used as a filter and click on the **Select** button to return the selection

2.8   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.9   Enter the **Data Owner ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select a **Data Owner LE** to be used as a filter and click on the Select **Select** button to return the selection.

2.10   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Groundwater Feature Decision Criteria Wizard form.*

*Note: The **Exi**t button will close the form and return to the main menu*.

2.11   Click on the **Next** button to open the **Groundwater Feature Maintenance Wizard** form with records for the specified Filter criteria.

2.12   Select the **Exit** button to close the form and return to the main menu

How to Search for a Groundwater using Groundwater Feature History Filter Criteria.

2.3   Click on the **Groundwater Feature History Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **Groundwater Feature History Filter Criteria Wizard**

2.5   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a Feature Type to be used as a filter and click on the **Select** button to return the selection.

2.6   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Groundwater Feature History Selection Wizard** form, select a Feature to be used as a filter and click on the **Select** button to return the selection

2.8   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.9   Enter the **Data Owner ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select a Data Owner LE to be used as a filter and click on the   Select   **Select** button to return the selection.

2.10   The **Data Owner Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the **Data Owner LE ID**

2.11   Enter the **Change User ID** or click on the ZOOM **Zoom** button to open the **User Selection** form, select a **Change User** to be used as a filter and click on the **Select** button to return the selection.

2.12   The **Change User Name** field will be automatically populated as it is linked to the Change User ID

2.13   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection.

2.14   The **Change User Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the Change User Organisation ID.

Note: *The **Back** button will close the form and return to the Groundwater Feature Decision Criteria Wizard form.*

Note: *The **Exit** button will close the form and return to the main menu.*

2.15   Click on the **Next** button to open the **Groundwater History View Wizard** form with records for the specified Filter criteria.

2.16   Select the **Exit** button to close the form and return to the main menu

How to Search for a Groundwater using Groundwater Feature in Geographical Area Filter Criteria.

2.3   Click on the **Groundwater Feature in Geographical Area Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **Groundwater Feature in Geographical Area Filter Criteria Wizard**

2.5   The **High Level Geographic Feature Types**, will be automatically selected

2.6   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Feature Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection.

2.7 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.8 On the **High Level Geographical Area Types**, click on the **WMA**, **Sub catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

Note: The Selection of WMA, Sub catchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Sub catchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared.

2.9 Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

2.10 The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID

Note: *The* **Back** *button will close the form and return to the Groundwater Feature Decision Criteria Wizard form.*

Note: *The* **Exi***t button will close the form and return to the main menu.*

2.11 Click on the **Next** button to open the **Groundwater Feature in Geographical Area View Wizard** form with records for the specified Filter criteria.

2.12   Select the **Exit** button to close the form and return to the main menu

How to Add a new Groundwater Feature:

3.1   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Groundwater** from the sub menu, this will open the **Groundwater Feature Decision Criteria Wizard**, Select one of the options form **Groundwater Feature Decision Criteria Wizard** to be able to open maintenance form. Click on the **Groundwater Feature Filter Criteria** radio button, and click on the **Next** button. This will open the **Groundwater Feature Filter Criteria Wizard**, then click the **Next** button to open the **Groundwater Feature Maintenance Wizard**

3.2   Click on the [icon]**Create** button to add a new record.

3.3   An empty line displays to allow the addition of a new record.

[icon]*Note: The **Geographical Area ID** will be automatically generated by the system when the record is successfully created*

3.4   Enter the **Geographical Area Name**. [icon]*Note: The Geographical Area Name shall be unique for all the Geographical Area records.*

3.5   Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the [icon]Select button to return the selection.

3.6   The **Geographical Area Type Name** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.7   Enter the **Geographical Area Description**.

3.8   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the ZOOM **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the ⟨Select⟩ **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.9   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

[?] *Note: The **QA Date** field will by default be empty when creating the record.*

3.10   Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. [?] *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State*

[?] *Note: The **Close Date** will by default be empty when creating the record.*

3.11   Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. [?] *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

3.12   Enter **Point Latitude, Point Longitude,**

3.13   Enter the **Altitude** for the Point Related Feature

3.14   Select a **Latitude Longitude Capture Method** form the **drop down** menu

3.15   The **Latitude Longitude Capture Method Code** will be automatically displayed

3.16   Select a **Altitude Capture Method** form the **drop down** menu

3.17   The **Altitude Capture Method Code** will be automatically displayed

3.18   Select a **Projection Type** form the **drop down** menu

3.19   The **Projection Type Code** will be automatically displayed

3.20   Tab to accept the newly created record.

*Note: the **Back** button will return to the previous Filter Criteria or Selection form.*

3.21   Click on the **Exit** button to go to the main menu.

How to Edit a Groundwater Feature:

Note: Data Owners for the different Groundwater Feature will be implemented to prevent non Data Owners from editing other Organisations' Groundwater Feature information. Only the Data Owner may edit its Groundwater Feature record.

4.1   On the Maintenance Tab click on the record to be edited to highlight it, and click on the **Modify Records** button.

*Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the* ZOOM *Zoom button to open the **Login Organisation Selection** form, make your selection and click on the* Select *Select button to return your selection.*

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

4.6   Edit the record as required.

4.7   Click on another record to accept the newly modified record.

Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab

4.5   Click on the applicable Photo or Map Tab to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.6   Click on the Accept button to accept the changes

4.1   *Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.*

How to Delete a Groundwater Feature:

Note: Only the Data Owner may delete it's Groundwater Feature record and the Central Administrator may edit any record.

5.1   Click on the record to be deleted, to highlight it.

5.2   Click F3 or Select Delete for the Edit main menu. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the OK option to confirm the deletion

Water Use Site Water Use

Introduction:

The objective of the WMS – Water Use Site Water User module is to establish a live connection between the two systems (WMS AND WARMS) in form of views to reflect the relevant information regarding water users and the different water use activities that is registered on WARMS.

The WMS – Water Use Site Water User module enables the users to confirm that the information as supplied by water users on WARMS is what is 'actual' and measured on WMS.

It also enables the user to link the Warms information in WMS on a maintenance form, whereby WMS will be able to call a function to associate a water-use site with the water user and one or more water use activity

Business Rules:

viii Ensure that the details added to the system are correct and comprehensive.

ix Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

x Data Owners for the different Water Use Site Water User will be implemented to prevent non Data Owners from updating or deleting other Organisations' Water Use Site Water Use information.

xi The Central Administrator may insert, edit or delete any type of a Water Use Site Water Use, else the Data Owner may DELETE or UPDATE its Water Use Site Water Use record.

xii Only the Central Administrator may cause the Quality Assurance date and the Close Date to be set to the system date.

xiii The Database Administrator on request may set quality Assurance Date of a group of records from the Central Administrator.

Path:

1.1   Select **Water Network Management** from the **WMS - Water Resource Management** menu bar.

1.2   Select **Water Use Site Water User** from the sub menu.

1.3   This will open the **Water Use Site Water Use Decision Criteria Wizard**
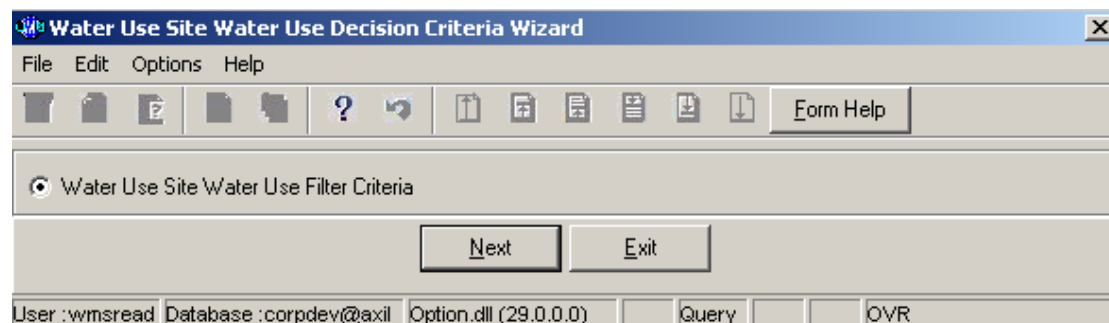
2   How to Search for a Water Use Site Water Use Water use:

Note: *All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for Water Use Site Water Use Water use.*

2.1   Open the **Water Use Site Water Use Decision Criteria Wizard**.
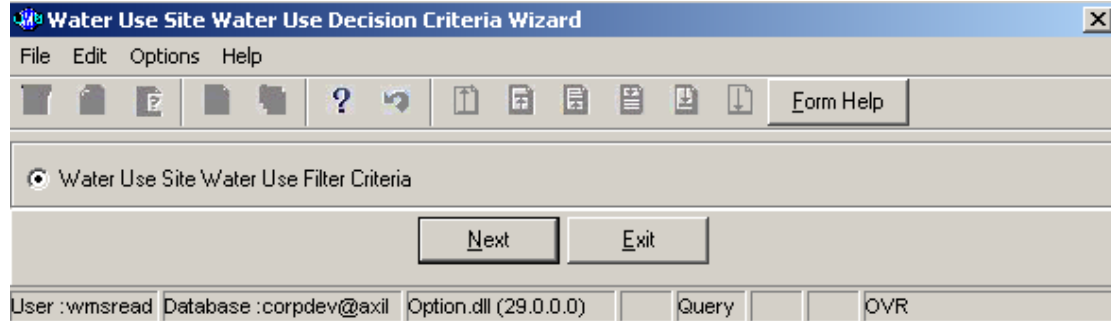
2.2   Click on the **Water Use Site Water Use Filter Criteria** radio button click on the **Next** button to open the **Water Use Site Water Use Filter Criteria Wizard**.

How to Search for a Water Use Site Water Use using Water Use Site Water Use Filter Criteria.

2.3   Click on the **Water Use Site Water Use Filter Criteria** radio button, the click the **Next** button

2.4   This will open the **Water Use Site Water Use Filter Criteria Wizard**

2.5   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select a **WMS Water Use Site** to be used as filter and click on the **Select** button to return the selection.

2.3 The **Site Hierarchy Name** field will be automatically populated as it is linked to the **Feature ID**

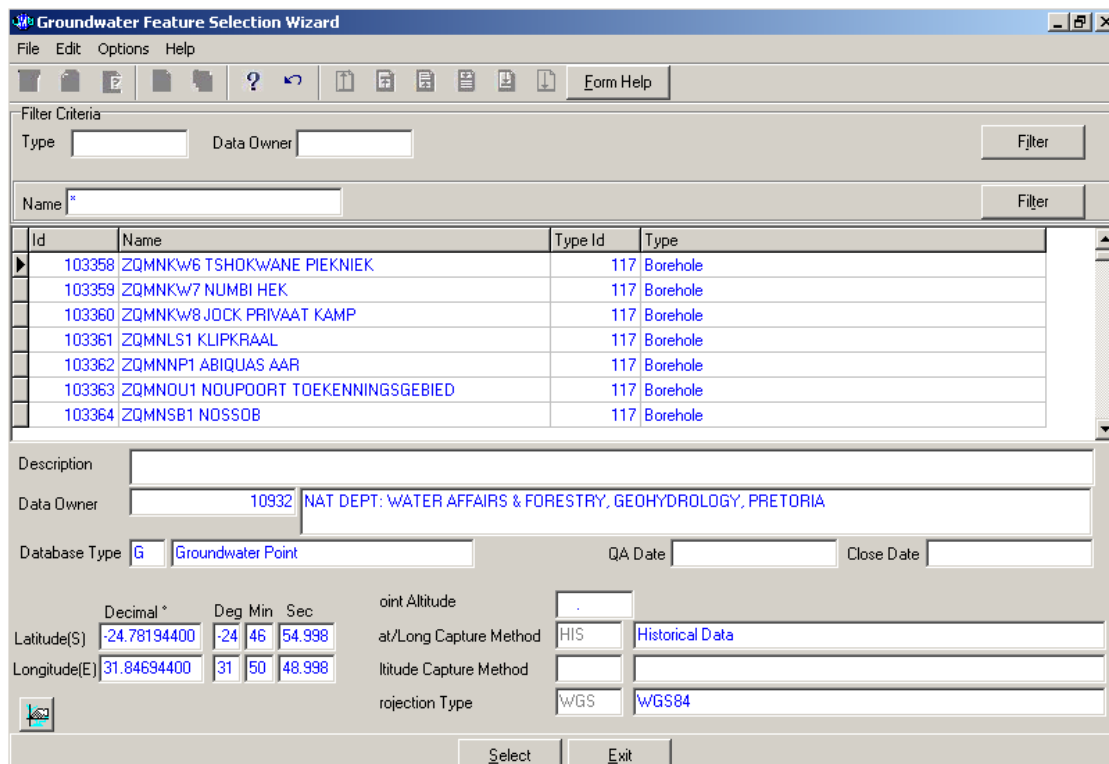2.4 Enter the **Register Number** or click on the **ZOOM** **Zoom** button to open the **Water User Filter Criteria Wizard** to filter, and click Next button to **WARMS Water Use Site Selection** form, select a **Register number** and **Form number** to be used as a filter and click on the **Select** **Select** button to return the selection

2.5   The **Water Use Description** field will be automatically populated as it is linked to the
        Register number and **Form number**

[?] *Note: The **Back** button will close the form and return to the Decision Criteria form.*

[?] *Note: The **Exit** button will close the form and return to the main menu*.

2.6   Click on the **Next** button to open the **Water Use Site Water Use Maintenance
        Wizard** with records for the specified Filter Criteria.

2.7   Select the **Exit** button to close the form and return to the main menu

3   How to Add a new Water Use Site Water Use:

[?] *Note: Only the Central Administrator or Data Owner may delete it's Water Use Site add a
Water Use Site Water Use.*

3.1   Select **Water Network Management** from the **WMS - Water Resource Management**
        menu bar, Select **Water Use Site Water User** from the sub menu, this will open the
        Water Use Site Water Use Decision Criteria Wizard, click on the **Next** button form
        the **Decision Criteria** to open the **Water Use Site Water Use Filter Criteria Wizard**,
        and then click the **Next** button to open the **Water Use Site Water Use Maintenance
        Wizard**

3.2   Click the [icon] **Create** button

3.3   An empty row will be opened at the bottom left side of the maintenance from

3.4   Enter the **Geographical Feature ID** or click on the [ZOOM] **Zoom** button to open the
        Water Use Site Selection form, select a **WMS Water Use Site** to be used as filter
        and click on the [Select] **Select** button to return the selection

272

3.5 Enter the **Register Number** or click on the ZOOM **Zoom** button to open the **Water User Filter Criteria Wizard** to filter, and click Next button to **WARMS Water Use Site Selection** form, select a **Register number** and **Form number** to be used as a filter and click on the Select button to return the selection

3.6 Tab to accept the newly created record

[?] **Note:** The **Back** button will close the form and return to the Filter Criteria form.

*Note: The **Maintenance** button will close the form and open the Option Decision Criteria where the user can select to maintain or view the parent or children records for the record that is selected*

3.7   The **Exi**t button will close the form and return to the main menu

4   How to Edit a Water Use Site Water Use:

Note: Only the Data Owner may edit it's Water Use Site Water Use record and the Central Administrator may edit any record.

4.1   Click on the record to be edited to highlight it, and click on the Modify Records button.

4.2   Edit the record as required.

4.3   Click on another record to accept the newly modified record.

5   How to Delete a Water Use Site Water Use:

Note: Only the Data Owner may delete it's Water Use Site Water Use record and the Central Administrator may edit any record.

5.1   Click on the record to be deleted, to highlight it.

5.2   Click on the **Edit menu** and select **Delete Line** option or press **F3** on the keyboard.*Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the **OK** option to confirm the deletion.

Water Use View

Introduction:

The objective of the Water Use View module is to allow the user to view Water Use records

Business Rules:

i.   Ensure that the details added to the system are correct and comprehensive.

ii.   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

iii.   The Central Administrator may insert or delete any type of a Water Use Site Water Use, else the Data Owner may DELETE or INSERT its Water Use Site Water Use record.

Path:

1.4   Select **Water Network Management** from the **WMS - Water Resource Management** menu bar.

1.5   Select **Water Use View** from the sub menu.

1.6   This will open the **Water Use Decision Criteria Wizard**
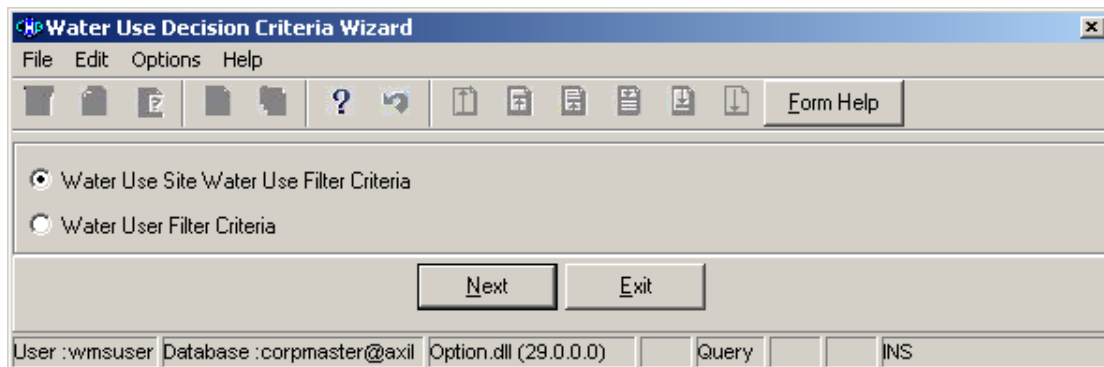
3   How to View the Water Use records

3.1   Open the **Water Use Decision Criteria Wizard**
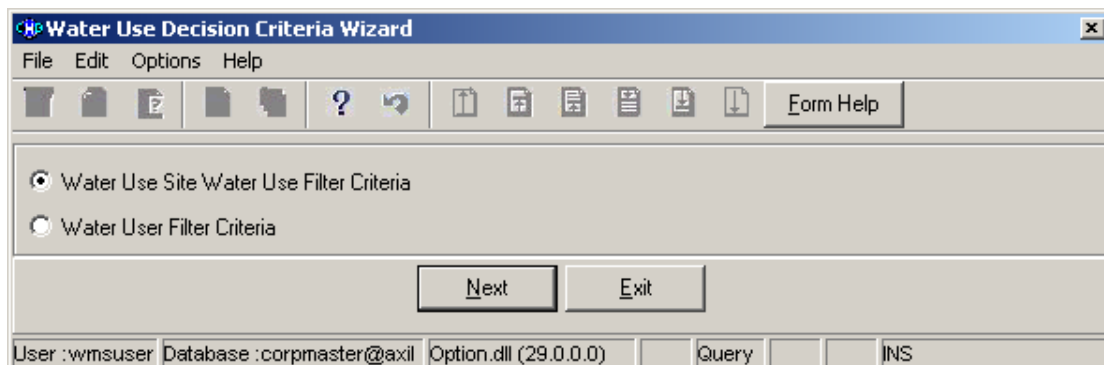
3.1 Click on the **Water User Filter Criteria** radio button click on the **Next** button to open the **Water User Filter Criteria**

3.2 Select **Region, WMA or CMA** field then click **Next** button to open the **Water Use View Wizard**.

3.3 The **Water Use View Wizard** will be opened displaying the Water Use records

3.4 Click the **Exit** button to exit the form and return to the main menu

Note: The Report button will close the form and open a Report Option Decision Form for the user to display a list of applicable reports that can be run for the Geographical Feature to make a selection from

Note: The GIS browse button enables the user to view a group of spatial records on a Map

Note: The **GIS View/Maintain** button enables the user to view a spatial record or maintain a non-record on a map.

Note: The **Back** button will close the form and return to the Water Use Decision Criteria Wizard form

How to View for a Water Use records using the Water Use Site Water Use filter Criteria Wizard:

2.1 Click on the **Water Use Site Water Use Filter Criteria** radio button, then click the **Next** button.

2.2 This will open the **Water Use Site Water Use Filter Criteria Wizard** form.

2.3 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select a **WMS Water Use Site** to be used as filter and click on the **Select** **Select** button to return the selection.

2.4   The **Site Full Name** field will be automatically populated as it is linked to the **Feature ID**.

2.5   Enter the **Register Number** or click on the **ZOOM** **Zoom** button to open the **Water User Filter Criteria Wizard** to filter, and click Next button to **WARMS Water Use Site Selection** form, select a **Register number** and **Form number** to be used as a filter and click on the ⬚ Select ⬚ **Select** button to return the selection
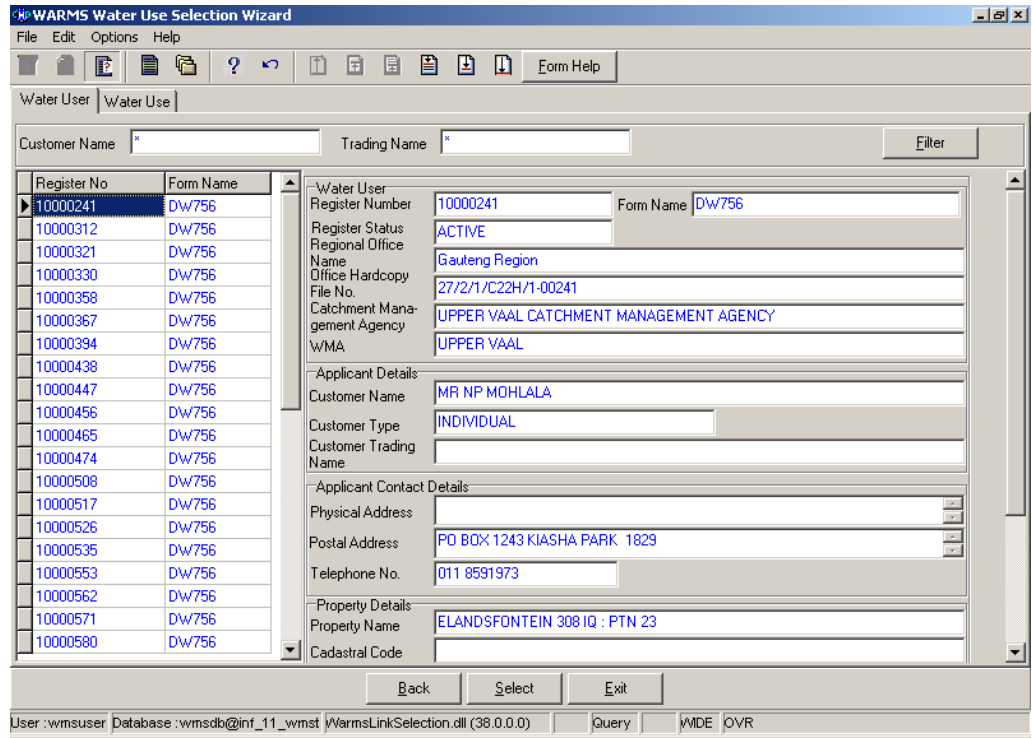
2.6   The **Water Use Description** field and the Form Number will be automatically populated as they are linked to **Register Number** and **Water Use Number** combination.

📋 *Note: The **Back** button will close the form and return to the Water Use Site Water Use Decision Criteria Wizard form.*

📋 *Note: The **Exi**t button will close the form and return to the main menu*.

2.7   Click on the **Next** button to open the **Water Use Site Water Use Maintenance Wizard** form with records for the specified Filter Criteria.

How to Add a new Water Use Site Water Use:

Note: Only the Central Administrator or Data Owner may delete it's Water Use Site or add a Water Use Site Water Use.

3.1   Select **Water Network Management** from the **WMS - Water Resource Management** menu bar, Select **Water Use Site Water Use** from the sub menu, this will open the **Water Use Site Water Use Decision Criteria Wizard**, click on the **Next** button form the **Decision Criteria** to open the **Water Use Site Water Use Filter Criteria Wizard**, and then click the **Next** button to open the **Water Use Site Water Use Maintenance Wizard** form.
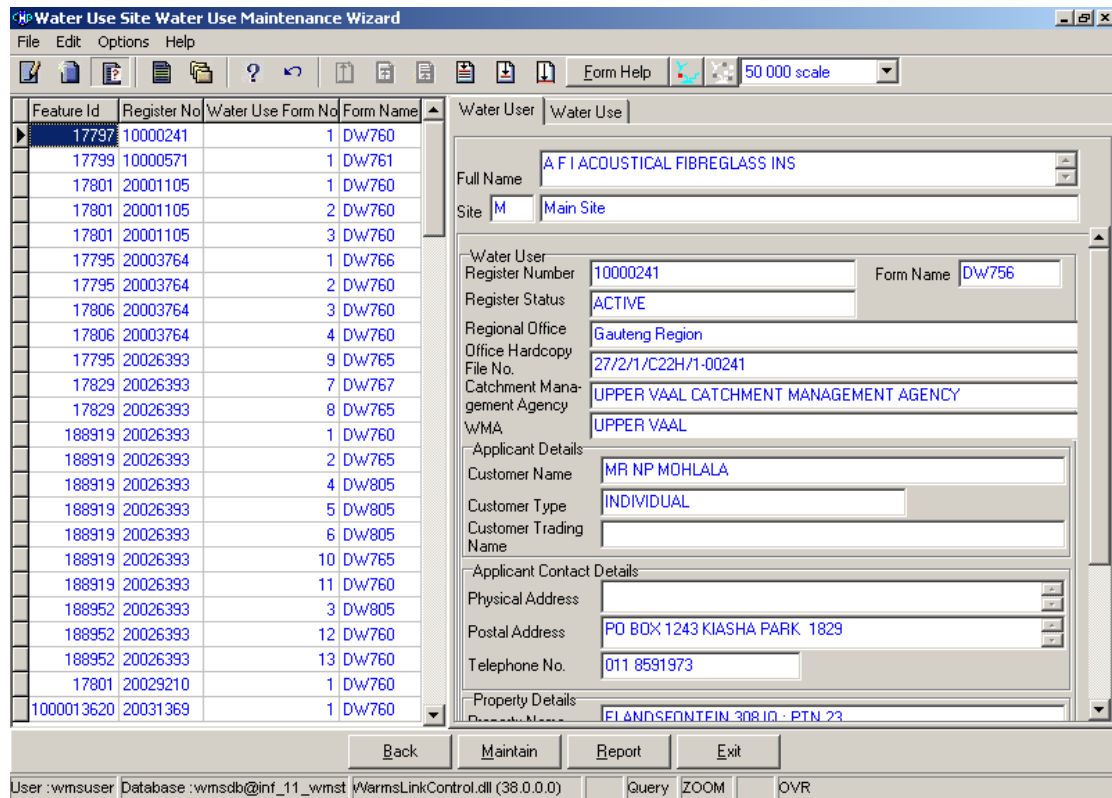
3.2   Click the 📁 **Create** button.

3.3   An empty row will be opened in the grid at the bottom left side of the maintenance form.

3.4   Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select a **WMS Water Use Site** to be used as filter and click on the **Select** **Select** button to return the selection.

3.5   Enter the **Register Number** or click on the **ZOOM** **Zoom** button to open the **Water User Filter Criteria Wizard** to filter, and click Next button to **WARMS Water Use Site Selection** form, select a **Register number** and **Form number** to be used as a filter and click on the **Select** **Select** button to return the selection

3.6   Tab to accept all newly created records.

📋 *Note: The **Back** button will close the form and return to the Filter Criteria form.*

📋 *Note: The **Maintenance** button will close the form and open the Option Decision Criteria where the user can select to maintain or view the parent or children records for the record that is selected.*

3.7   The **Exi**t button will close the form and return to the main menu.

How to Delete a Water Use Site Water Use:

📋 *Note: Only the Data Owner may delete it's Water Use Site Water Use record and the Central Administrator may delete any record.*

280

4.1   Click on the record to be deleted, to highlight it.

4.2   Click on the ![icon] Modify Records button to enable the ![icon] **Delete** button.

4.3   Click on the **Edit menu** and select **Delete Line** option or press **F3** on the keyboard.![icon] *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

4.4   A confirmation message will be displayed asking if you would like to delete the record.

4.5   Click on the **OK** option to confirm the deletion

Monitoring Point Maintenance

Introduction:

The Monitoring Point Feature module enables the user to maintain Monitoring Feature-Monitoring Point Information.

Business Rules:

xiv Ensure that the detail added to the system is correct and comprehensive.

xv   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

xvi The Central Administrator may insert, update or delete any Monitoring Point.

xvii Only the Central Administrator may cause the Quality Assurance date and the Close Date to be set to the system date

Path:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Monitoring Point Maintenance** from the sub menu.

1.3   This will open the **Monitoring Point Decision Criteria Wizard**

Note: The path is only visible to the Central Administrator
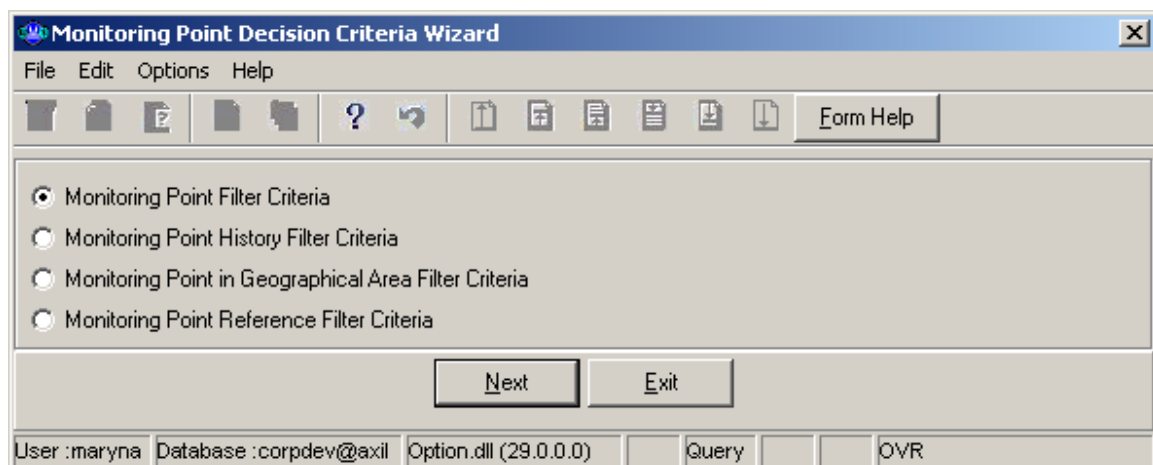
How to Search for a Monitoring Point

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

2.1   Open the **Monitoring Point Decision Criteria Wizard**

2.2   Choose any of the relevant options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

2   How to search for Monitoring Point Using Monitoring Point Filter Criteria Wizard

2.3   Click on the **Monitoring Point Filter Criteria** radio button, then click the **Next** button

2.4   This will open the **Monitoring Point Filter Criteria Wizard.**

2.5   Select **High Level Monitoring Point Type** of the Monitoring Point. [?] *Note: The default selection All retrieves Monitoring Point of all Types*

2.6   Enter the **Geographical Feature Type ID** or click on the `ZOOM` **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the [icon] **Select** button to return the selection.

2.7   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.8   Enter the **Feature ID** or click on the `ZOOM` **Zoom** button to open the **Monitoring Point Selection** form, select a **Monitoring Point ID** to be used as filter and click on the [Select] **Select** button to return the selection.

2.9   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.10   Enter the **Located Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Feature Selection** form, select a **Located Feature** to be used as filter and click on the Select **Select** button to return the selection.

2.11   The **Located Feature Name** field will be automatically populated as it is linked to the Located Feature ID

2.12   Enter the **Flow Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Flow Measuring Structure Type** to be used as filter and click on the **Select** button to return the selection.

2.13 The **Flow Type Name** field will be automatically populated as it is linked to the Flow Type ID

2.14 Enter the **Meteorological Type ID** or click on the `ZOOM` **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Meteorological Measuring Type** to be used as filter and click on the `🖳`**Select** button to return the selection.

2.15   The **Meteorological Class Type Name** field will be automatically populated as it is
        linked to the Meteorological Type ID**.**

2.16   Enter the **Quaternary Drainage Region Feature ID** or click on the ZOOM **Zoom**
        button to open the **Geographical Area Selection** form, select a **Quaternary**
        Drainage Region to be used as filter and click on the ⟨Select⟩ **Select** button to
        return the selection.

2.17   The **Quaternary Drainage Region Feature Name** field will be automatically
        populated as it is linked to the Quaternary Drainage Region Feature ID.

2.18   Enter the **Data Owner Organization ID** or click on the ZOOM **Zoom** button to open
        the **Login Organization Selection** form, select a the **Data Owner** to be used as filter
        and click on the Select **Select** button to return the selection.

2.19   The **Data Owner Organization Concatenated Name** field will be automatically
        populated as it is linked to the Data Owner Organization ID**.**

? *Note: The **Back** button will close the form and return to the Monitoring Point Decision Criteria.*

? *Note: The **Exi**t button will close the form and return to the main menu*.

2.20   Click on the **Next** button to open the **Monitoring Point Maintenance Wizard** with
        records for the specified Filter criteria.

How to search for Monitoring Point Using Monitoring Point History Filter Criteria

2.3   Click on the **Monitoring Point History Filter Criteria** radio button, then click the
        Next button.

2.4   This will open the **Monitoring Point History Filter Criteria Wizard.**

2.5 Select **High Level Monitoring Point Type** of the Monitoring Point. *Note: The default selection All retrieves Monitoring Point of all Types*

2.6 Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

2.7 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.8 Enter the **Feature ID** or click on the [ZOOM] **Zoom** button to open the **Monitoring Point History Selection** form, select a **Geographical Feature ID** to be used as filter and click on the [Select] **Select** button to return the selection.

2.9   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.10   Enter the **Locate Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Feature Selection** form, select a **Located Feature** to be used as filter and click on the **Select** **Select** button to return the selection.

2.11   The **Located Feature Name** field will be automatically populated as it is linked to the Located Feature ID

2.12   Enter the **Flow Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Flow Measuring Structure Type ID** to be used as filter and click on the Select button to return the selection.

2.13   The **Flow Type Name** field will be automatically populated as it is linked to the Flow
        Type ID

2.14   Enter the **Meteorological Type ID** or click on the **ZOOM** **Zoom** button to open the
        Associated Classes – Type Selection form, select a the **Meteorological**

        Measuring Type to be used as filter and click on the **Select** button to return the
        selection.

2.15 The **Meteorological Measuring Type** field will be automatically populated as it is linked to the Meteorological Type ID.

2.16 Enter the **Quaternary Drainage Region Feature ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Quaternary Drainage Region** to be used as filter and click on the **Select** **Select** button to return the selection.

2.17 The **Quaternary Drainage Region Feature Name** field will be automatically populated as it is linked to the Quaternary Drainage Region Feature ID.

2.18 Enter the **Data Owner Organization ID** or click on the ZOOM **Zoom** button to open the **Login Organization Selection** form, select a the **Data Owner** to be used as filter and click on the Select **Select** button to return the selection.

2.19 The **Data Owner Organization Concatenated Name** field will be automatically populated as it is linked to the Data Owner Organization ID.

2.20 Enter the **Change User Login** or click on the ZOOM **Zoom** button to open the **User Selection** form, select a **User** to be used as filter and click on the Select **Select** button to return the selection.

2.21   The **Change User Name** field will be automatically populated as it is linked to the Change User Login.

2.22   Enter the **Change User Organization ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select an **Organization** to be used as filter and click on the **Select** **Select** button to return the selection.

2.23 The **Change User Organization** field will be automatically populated as it is linked to the Change User Organization ID.

*Note: The **Back** button will close the form and return to the Monitoring Point Decision Criteria.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.24 Click on the **Next** button to open the **Monitoring Point History View** form with records for the specified Filter criteria.

2.25   Select the **Exit** button to close the form and return to the main menu

How to search for Monitoring Point Using Monitoring Point in Geographical Area Filter Criteria

2.3   Click on the **Monitoring Point in Geographical Area Filter Criteria** radio button, the click the **Next** button

2.4   This will open the **Monitoring Point in Geographical Area Filter Criteria Wizard.**

2.5 Enter the **Feature ID** or click on the `ZOOM` **Zoom** button to open the **Geographical Feature Selection** form, select a the **Monitoring Point ID** to be used as filter and click on the `Select` **Select** button to return the selection
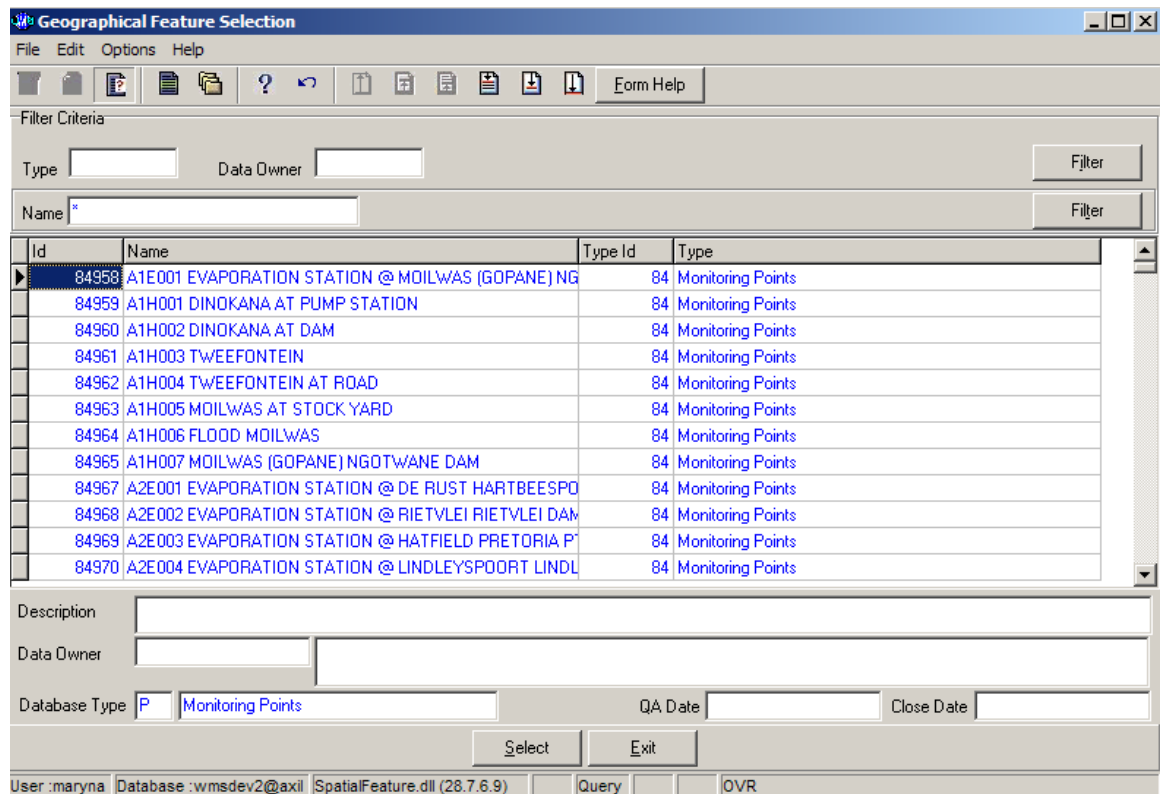
2.6 The **Feature Name** field will be automatically populated as it is linked to the Feature ID.

2.7 Select **High Level Geographical Area Type** to filter the records associated with a specific type of Geographical Feature.

2.8 Enter the **Management Area Feature ID** or click on the `ZOOM` **Zoom** button to open the **Geographical Area Selection** form, select a the **Geographical Area ID** to be used as filter and click on the `Select` **Select** button to return the selection

2.9 The **Geographical Area Name** field will be automatically populated as it is linked to the Management Area Feature ID.

Note: *The **Back** button will close the form and return to the Monitoring Point Decision Criteria.*

Note: *The **Exi**t button will close the form and return to the Main Menu*.

2.10 Click on the **Next** button to open the **Monitoring Point in Geographical Area View Wizard** form with records for the specified Filter criteria

2.11   Select the **Exit** button to close the form and return to the main menu

How to search for Monitoring Point Using Monitoring Point Reference   Filter Criteria

2.3   Click on the **Monitoring Point Reference Filter Criteria** radio button, the click the **Next** button

2.4   This will open the **Monitoring Point Reference Filter Criteria Wizard.**

2.5 Enter the **Feature ID** or click on the `ZOOM` **Zoom** button to open the **Geographical Feature Selection** form, select a the **Geographical Feature ID** to be used as filter and click on the `Select` **Select** button to return the selection

2.6 The **Feature Name** field will be automatically populated as it is linked to the Feature ID.

2.7 Enter the **System Datasource ID** or click on the `ZOOM` **Zoom** button to open the **System Datasource Selection** form, select a **System Datasource** to be used as filter and click on the `Select` **Select** button to return the selection

305

2.8 The **System Datasource Name** field will be automatically populated as it is linked to the   System Datasource ID.

2.9 Enter the **Numbering Conversion Type ID** or click on the **ZOOM** **Zoom** button to open   the **Associate Class Type Selection** form, select a the **Type ID** to be used as filter and click on the [Select] **Select** button to return the selection
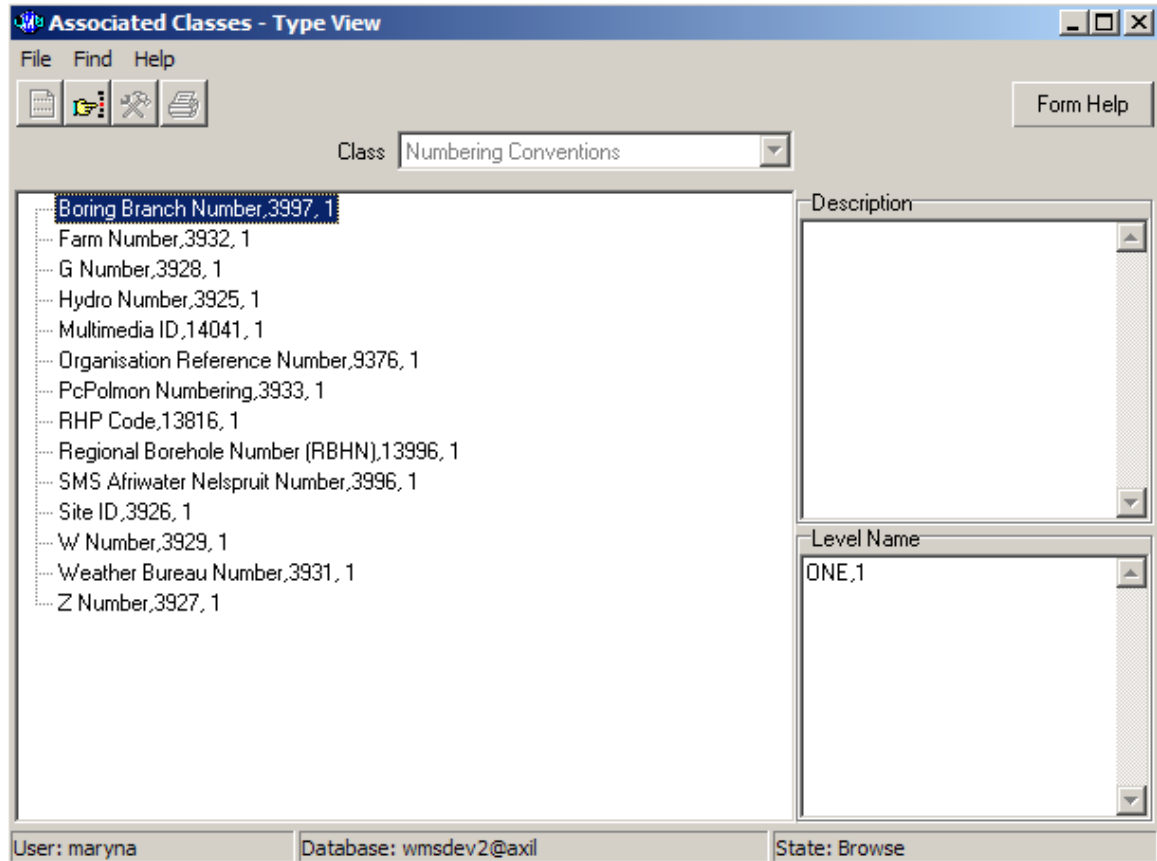
2.10 The **Numbering Conversion** field will be automatically populated as it is linked to the Numbering Conversion Type ID.

2.11 Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a the **Data Owner ID** to be used as filter and click on the [Select] **Select** button to return the selection

2.12   The **Data Owner Organization Name** field will be automatically populated as it is linked to the Data Owner ID.

2.13   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select an **Organization** to be used as filter and click on the **Select** **Select** button to return the selection.
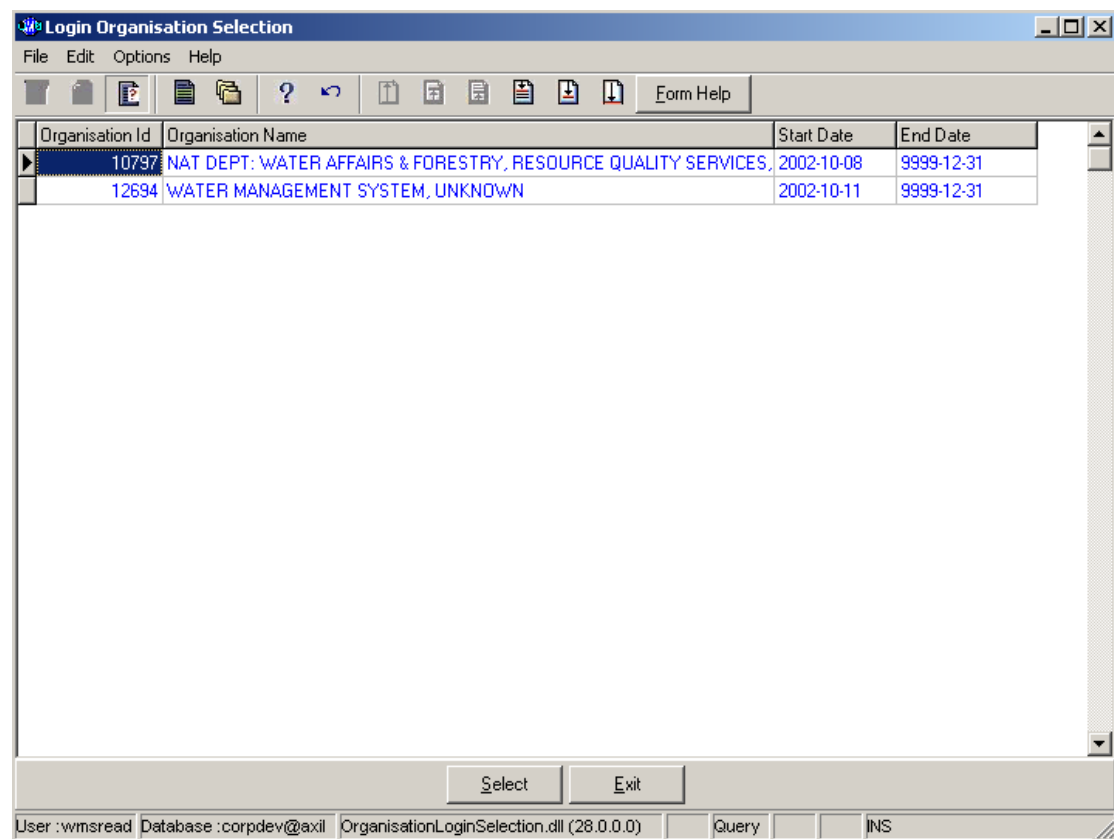
2.14 The **Change User Organization** field will be automatically populated as it is linked to the Change User Organization ID.

*Note: The **Back** button will close the form and return to the Monitoring Point Decision Criteria.*

*Note: The **Exi**t button will close the form and return to the Main Menu.*

2.15 Click on the **Next** button to open the **Monitoring Point Reference View Wizard** with records for the specified Filter criteria

2.16   Select the **Exit** button to close the form and return to the main menu

How to add a new Monitoring Point Feature

3.1   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Monitoring Point Maintenance** from the sub menu, this will open the **Monitoring Point Feature Decision Criteria Wizard**, Select one of the options form **Decision Criteria to** be able to open maintenance form.

*Note: if you click on the **Monitoring Point Feature Filter Criteria** radio button, and click on the **Next** button form the **Decision Criteria**, This will open the **Monitoring Point Feature Filter Criteria Wizard**, then click the **Next** button to open the **Monitoring Point Maintenance Wizard***

3.2   Click on the **Create** button to add a new record.

3.3   An empty line displays to allow the addition of a new record.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.4   Click checkbox to select **Geographical Feature Type** on the form.

3.5   Enter the **Farm Name** where the monitoring point is located.

3.6   Enter the **Reference Name** to define the feature reference.

3.7   Enter the **Description Name** to define the monitoring points name.

3.8   Enter the **Feature Name** to define the Feature name

3.9   Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the **Select** button to return the selection.

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3.10 The **Geographical Area Type Name** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.11 Enter the **Geographical Area Description** of spatial pressure indication.

3.12 Check the **Spatial Indicator** checkbox to indicate that the feature is currently presented on a shapefile

3.13 To change the **Located on Feature ID**, enter the **Feature** or click on the **ZOOM** **Zoom** button to open **Geographical Feature Selection** form, select the Located Feature where monitoring point is located, and click on the ___Select___ **Select** button to return the selection.

3.14   The **Located on Feature Name** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.15   Enter the **Flow Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Flow Type** to be used as filter and click on the [icon] **Select** button to return the selection.
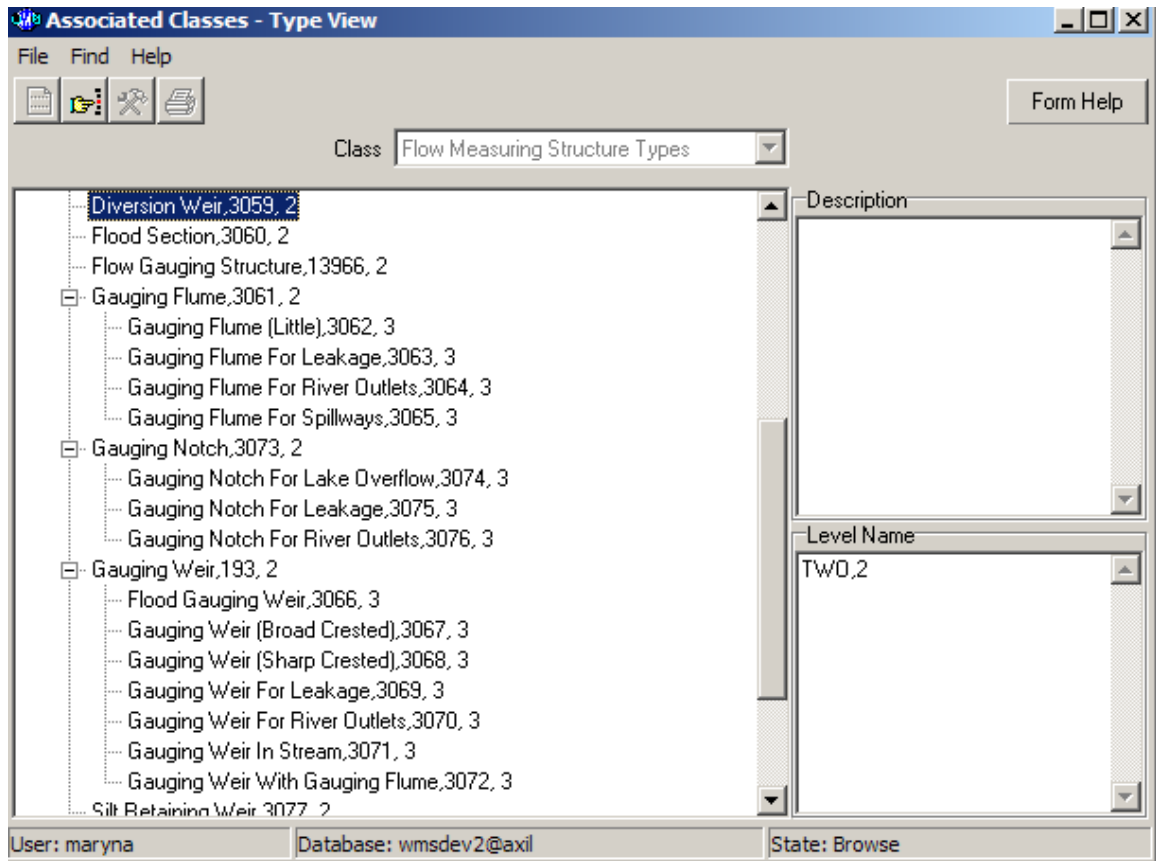
3.16   The **Flow Type Name** field will be automatically populated as it is linked to the Flow Type ID

3.17   Enter the **Meteorological Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Meteorological Measuring Type** to be used as filter and click on the **Select** button to return the selection.

3.18   The **Meteorological Type** field will be automatically populated as it is linked to the
        Meteorological Type ID**.**

3.19   Enter the **Quaternary Drainage Region Feature ID** or click on the `ZOOM` **Zoom**
        button to open the **Geographical Area Selection** form, select a **Quaternary
        Drainage Region** to be used as filter and click on the `Select` **Select** button to
        return the selection.

3.20   The **Quaternary Drainage Region Feature Name** field will be automatically populated as it is linked to the Quaternary Drainage Feature.

3.21   To change the **Data Owner Organisation**, enter the **Data Owner Organisation ID** or click on the `ZOOM` **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the `Select` **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*
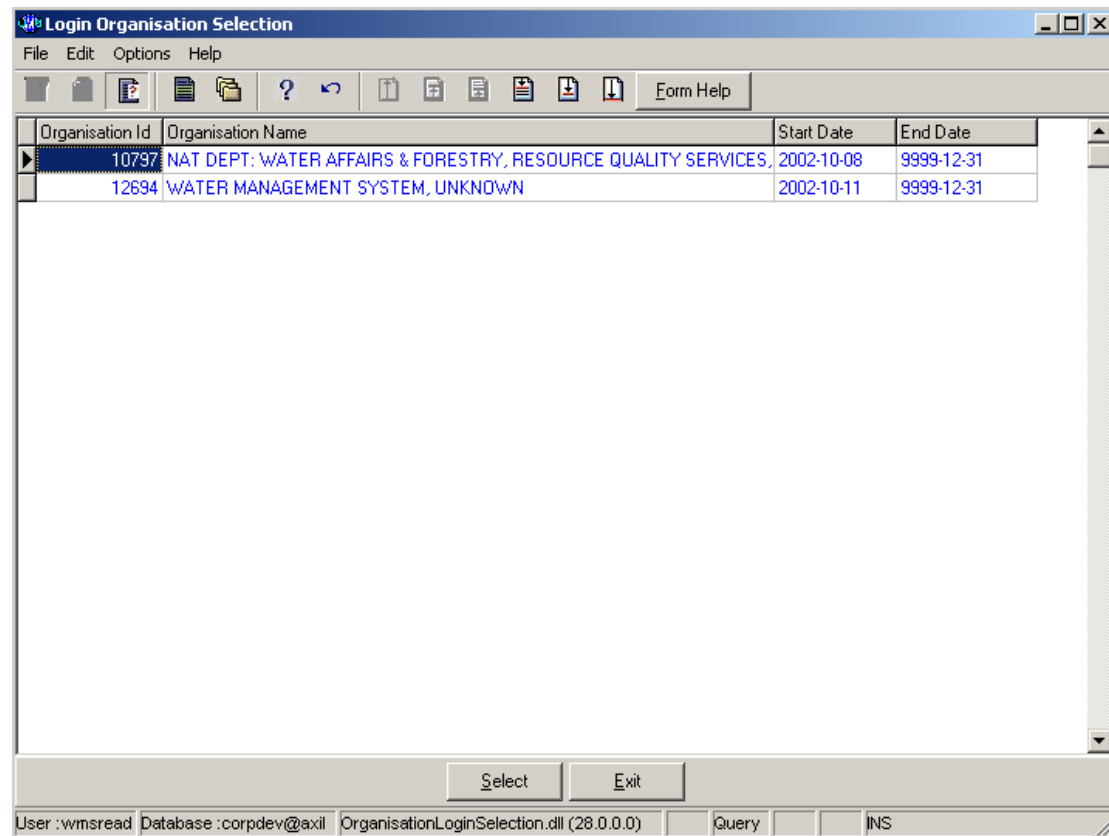
3.22   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

3.23   Enter the **Altitude** for the Point Related Feature

3.24   **Last Consolidated Date** is automatically populated with the last date of when Monitoring   feature was included in a Consolidation run.

3.25   The **Latitude Longitude Capture Method Code** will be automatically displayed form the **drop down** menu

3.26   Select the **Latitude Longitude Capture Method** form the **drop down** menu

3.27   The **Altitude Capture Method Code** will be automatically displayed form the **drop down** menu

3.28   Select **Altitude Capture Method** form the **drop down** menu

3.29   The **QA Date** field will by default be empty when creating the record. Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date file with the system date. *Note: This can only be performed by the Central Administrator*

3.30   The **Projection Type Code** will be automatically displayed

3.31   Select the Projection Type from the **drop down** menu

3.32   The **Close Date** will by default be empty when creating the record. Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

3.33   Tab to accept the newly created record.

Note: Maintain button open a Decision Form display a list of applicable programs that can be maintained for this Geographical Feature.

Note: the **Back** button will return to the previous Filter Criteria or Selection form.

Note: the **Report** button will open a Report Option Decision Form with a list of applicable reports that can be run for the Geographical feature to make a selection.

Note: the **GIS Browse** button display a group of spatial records on a map.

Note: the **GIS View/Maintain** button display spatial record or maintain a non-spatial record on a map.

Note: the **GIS Map Scale (Drop Down)** enables the user to select the scale to be used when displaying the feature on the map.

Note: The **Close** button allows the Central Administrator to indicate that the Geographical Feature is no longer an active Geographical Feature for WMS usage (**Note:** this button is only enabled when you have logged in as an Administrator, if any other user has logged in the button will be disabled)

3.34   Click on the **Exit** button to go to the main menu.

How to Edit a Monitoring Point Feature:

Note: Data Owners for the different Monitoring Point will be implemented to prevent non Data Owners from editing other Organisations' Monitoring Point information. Only the Data Owner may edit its Monitoring Point record.

4.1   On the Maintenance Tab click on the record to be edited to highlight it, and click on the **Modify Records** button.

Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, make your selection and click on the Select **Select** button to return your selection.

3.2 Edit the record as required.

3.3 Click on another record to accept the newly modified record.

Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab

4.7 Click on the applicable Photo or Map Tab to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.8 Click on the Accept button to accept the changes

Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.

How to Delete a Monitoring Point Feature:

Note: Only the Data Owner may delete it's Monitoring Point record and the Central Administrator may delete any record.

5.1 Click on the record to be deleted, to highlight it.

5.2 Click on the ✂ **Delete** button. *Note: When records are referenced else where in the system, the delete option will be disabled.*

5.3 A confirmation message will be displayed asking if you would like to delete the record.

5.4 Click on the OK option to confirm the deletion.

Monitoring Point Registration

Introduction:

The Monitoring Point Feature module enables the user to register new Monitoring Feature-Monitoring Point Information.

Business Rules:

xviii Ensure that the detail added to the system is correct and comprehensive.

xix Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

xx The Central Administrator may insert, update or delete any Monitoring Point.

xxi Only the Central Administrator may cause the Quality Assurance date and the Close Date to be set to the system date

Path:

1.1 Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2 Select **Monitoring Point Registration** from the sub menu.

1.3 This will open the **Monitoring Point Registration Decision Criteria Wizard**

[?] *Note: The path is only visible to the Central Administrator*

How to register a Monitoring Point using Meteorological Monitoring Point/ Monitoring Point not Located on a Feature

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

2.21   Open the **Monitoring Point Registration Decision Criteria Wizard**

2.22   Choose **Metereological Monitoring Point** options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Monitoring Point Maintenance**.

How to add a new Monitoring Point Feature

3.35   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Monitoring Point Registration** from the sub menu, this will open the **Monitoring Point Registration Decision Criteria Wizard**, Select one of the relevant options form **Decision Criteria to** be able to open maintenance form.

*Note: if you click on the **Monitoring Point Feature Filter Criteria** radio button, and click on the **Next** button form the **Decision Criteria**, This will open the **Monitoring Point Feature Filter Criteria Wizard**, then click the **Next** button to open the **Monitoring Point Maintenance Wizard***

3.36   Click on the **Create** button to add a new record.

3.37   An empty line displays to allow the addition of a new record.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.38   Click checkbox to select **Geographical Feature Type** on the form.

3.39   Enter the **Farm Name** where the monitoring point is located.

3.40   Enter the **Reference Name** to define the feature reference.

3.41   Enter the **Description Name** to define the monitoring points name.

3.42   Enter the **Feature Name** to define the Feature name

3.43   Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the [icon] Select button to return the selection.
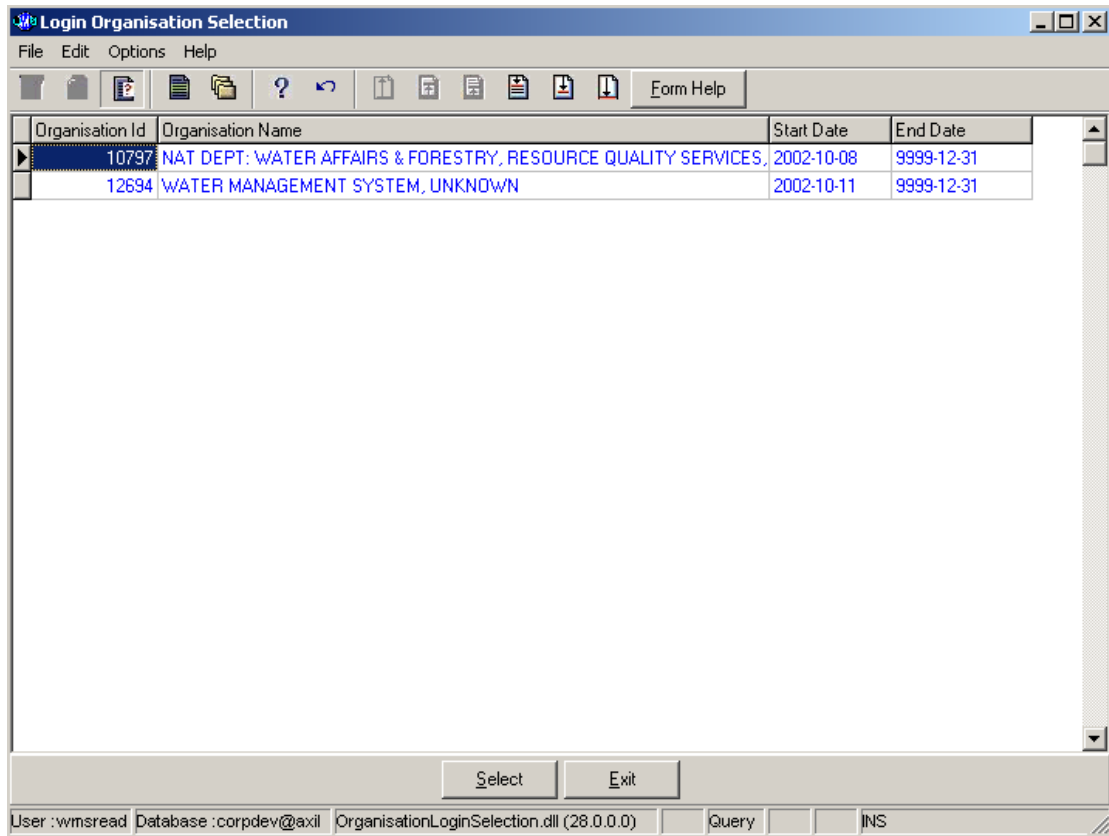

.
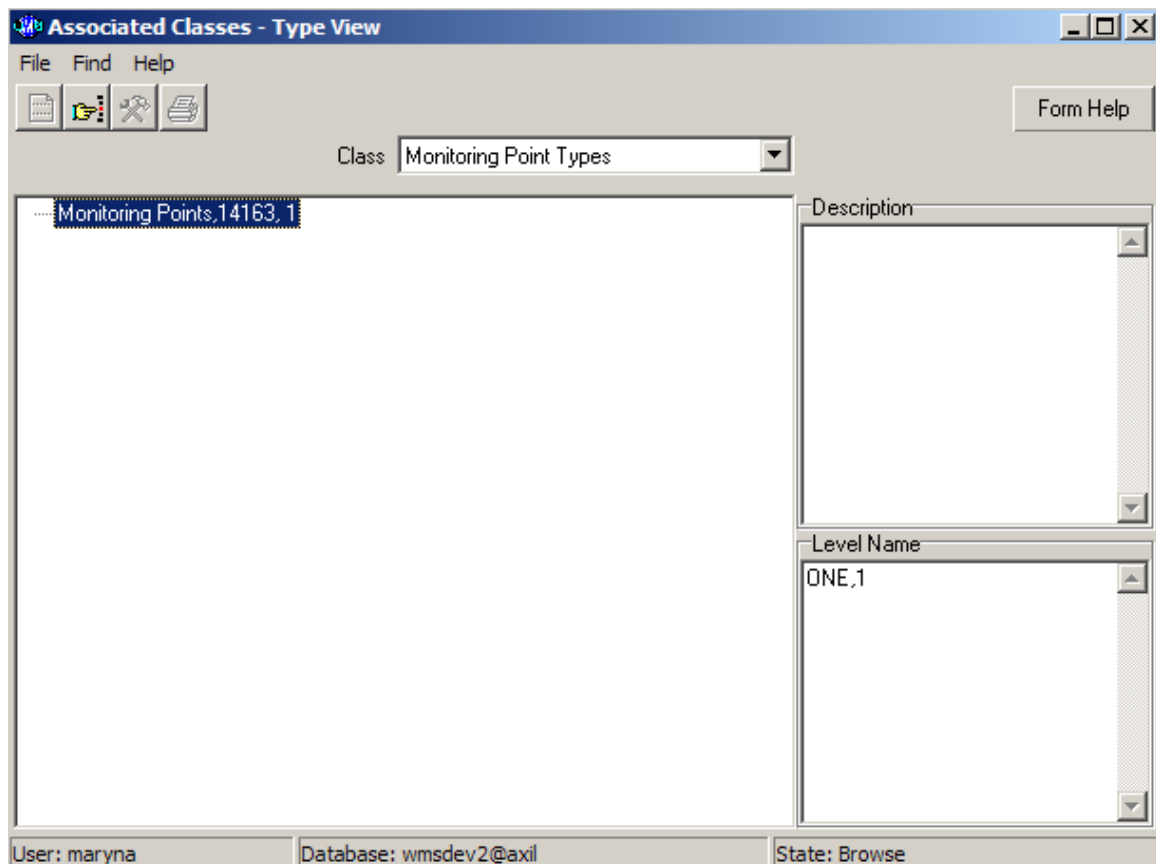
3.44   The **Geographical Area Type Name** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.45   Enter the **Geographical Area Description** of spatial pressure indication.

3.46   Check the **Spatial Indicator** checkbox to indicate that the feature is currently presented on a shapefile

3.47   To change the **Located on Feature ID**, enter the **Feature** or click on the **ZOOM** **Zoom** button to open **Geographical Feature Selection** form, select the Located Feature where monitoring point is located, and click on the [Select] **Select** button to return the selection.

3.48 The **Located on Feature Name** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.49 Enter the **Flow Type ID** or click on the `ZOOM` **Zoom** button to open the **Associated Classes – Type Selection** form, select a the **Flow Type** to be used as filter and click on the `⌨` **Select** button to return the selection.

3.50   The **Flow Type Name** field will be automatically populated as it is linked to the Flow
        Type ID

3.51   Enter the **Meteorological Type ID** or click on the **ZOOM** **Zoom** button to open the
        Associated Classes – Type Selection form, select a the **Meteorological**
        Measuring Type to be used as filter and click on the **Select** button to return the
        selection.

3.52   The **Meteorological Type** field will be automatically populated as it is linked to the Meteorological Type ID**.**

3.53   Enter the **Quaternary Drainage Region Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Area Selection** form, select a **Quaternary Drainage Region** to be used as filter and click on the Select **Select** button to return the selection.

3.54 The **Quaternary Drainage Region Feature Name** field will be automatically populated as it is linked to the Quaternary Drainage Feature.

3.55 To change the **Data Owner Organisation**, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the **Select** **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.56   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

3.57   Enter the **Altitude** for the Point Related Feature

3.58   **Last Consolidated Date** is automatically populated with the last date of when Monitoring feature was included in a Consolidation run.

3.59   The **Latitude Longitude Capture Method Code** will be automatically displayed form the **drop down** menu

3.60   Select the **Latitude Longitude Capture Method** form the **drop down** menu

3.61   The **Altitude Capture Method Code** will be automatically displayed form the **drop down** menu

3.62   Select **Altitude Capture Method** form the **drop down** menu

3.63   The **QA Date** field will by default be empty when creating the record. Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date file with the system date. *Note: This can only be performed by the Central Administrator*

3.64   The **Projection Type Code** will be automatically displayed

3.65   Select the Projection Type from the **drop down** menu

3.66   The **Close Date** will by default be empty when creating the record. Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

3.67   Tab to accept the newly created record.

Note: Maintain button open a Decision Form display a list of applicable programs that can be maintained for this Geographical Feature.

Note: the **Back** button will return to the previous Filter Criteria or Selection form.

Note: the **Report** button will open a Report Option Decision Form with a list of applicable reports that can be run for the Geographical feature to make a selection.

Note: the **GIS Browse** button display a group of spatial records on a map.

Note: the **GIS View/Maintain** button display spatial record or maintain a non-spatial record on a map.

Note: the **GIS Map Scale (Drop Down)** enables the user to select the scale to be used when displaying the feature on the map.

Note: The **Close** button allows the Central Administrator to indicate that the Geographical Feature is no longer an active Geographical Feature for WMS usage (**Note:** this button is only enabled when you have logged in as an Administrator, if any other user has logged in the button will be disabled)

3.68   Click on the **Exit** button to go to the main menu.

How to Edit a Monitoring Point Feature:

Note: Data Owners for the different Monitoring Point will be implemented to prevent non Data Owners from editing other Organisations' Monitoring Point information. Only the Data Owner may edit its Monitoring Point record.

4.1   On the Maintenance Tab click on the record to be edited to highlight it, and click on the **Modify Records** button.

Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, make your selection and click on the Select **Select** button to return your selection.

4.2   Edit the record as required.

4.3   Click on another record to accept the newly modified record.

Note: *The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab*

4.4   Click on the applicable **Photo or Map Tab** to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.5   Click on the **Accept** button to accept the changes

Note: *A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button*.

How to Delete a Monitoring Point Feature: =

Note: *Only the Data Owner may delete it's Monitoring Point record and the Central Administrator may delete any record.*

5.5   Click on the record to be deleted, to highlight it.

5.6   Click on the ✂ **Delete** button. **Note:** *When records are referenced else where in the system, the delete option will be disabled.*

5.7   A confirmation message will be displayed asking if you would like to delete the record.

5.8   Click on the OK option to confirm the deletion.

How to register a Monitoring Point using Monitoring Point Located on a Transfer Feature

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

2.1   Open the **Monitoring Point Registration Decision Criteria Wizard**
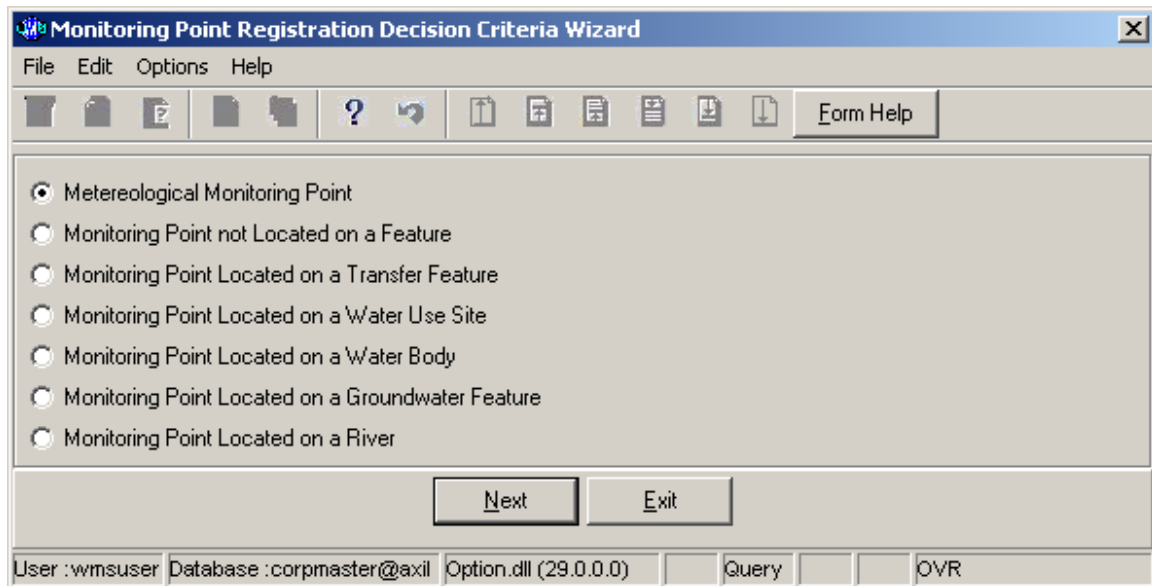
2.2   Choose any of the relevant options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Decision Criteria Wizard**

3   How to Search for a Transfer Feature record using the Transfer Feature Decision Criteria:

Note: When no filter criteria or many criteria are specified on the Transfer Feature Filter Criteria form, all Transfer Features for the selected criteria will be available for maintenance on the Transfer Feature Maintenance form.
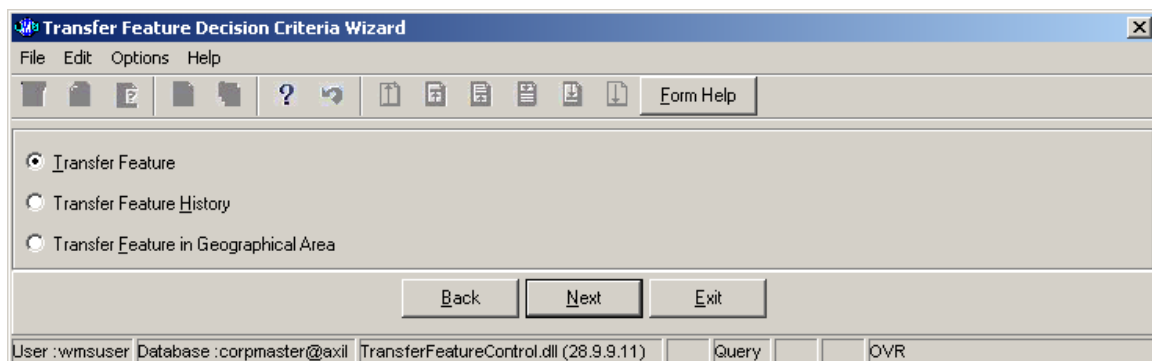
3.1   Open the **Transfer Feature Decision Criteria form**.

3.2   Select the Transfer Feature option to open the Transfer Feature Filter Criteria form.

3.3   Enter the **Feature ID** or click on the [ZOOM] Zoom button to open the **Transfer Feature Selection** form, select the applicable record and click on the [Select] Select button to return your selection.

3.4   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

3.5   Enter the **Feature Type ID** or click on the [ZOOM] Zoom button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the [Select] Select button to return your selection.
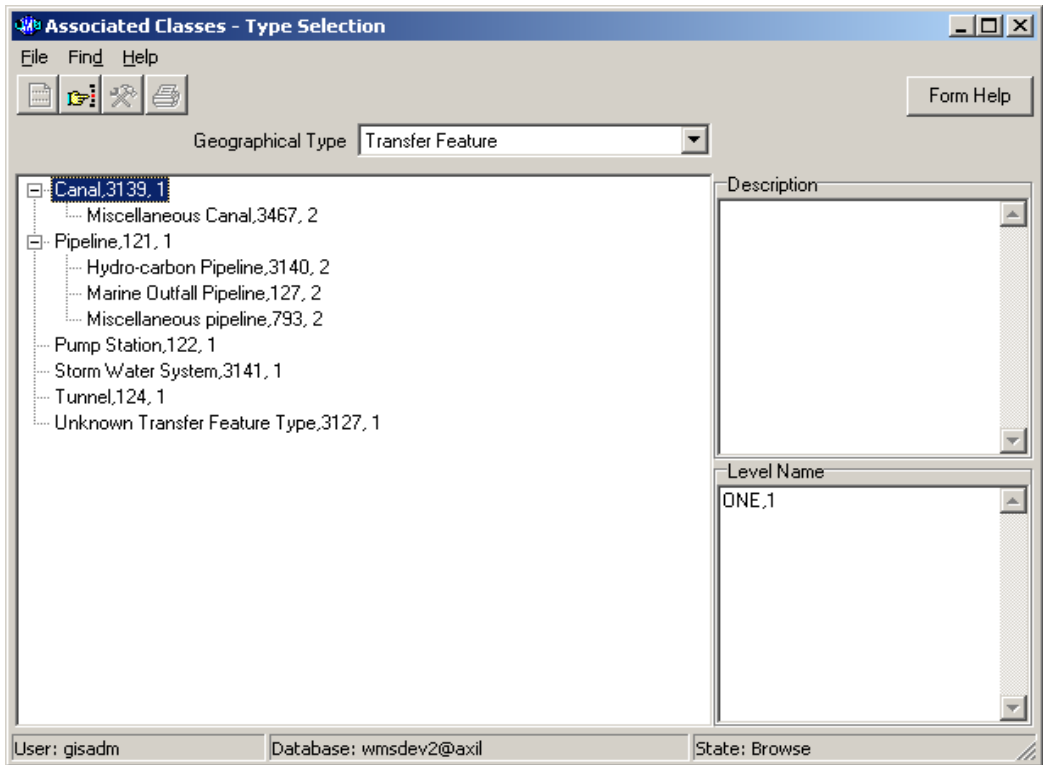
3.6   The **Feature Type Name** will be automatically displayed as it is linked to the Feature Type ID.

3.7   Enter the **Data Owner Organisation ID** or click on the **ZOOM** Zoom button to open the **Login Organisation Selection form**, select the applicable record and click on the Select button to return your selection.
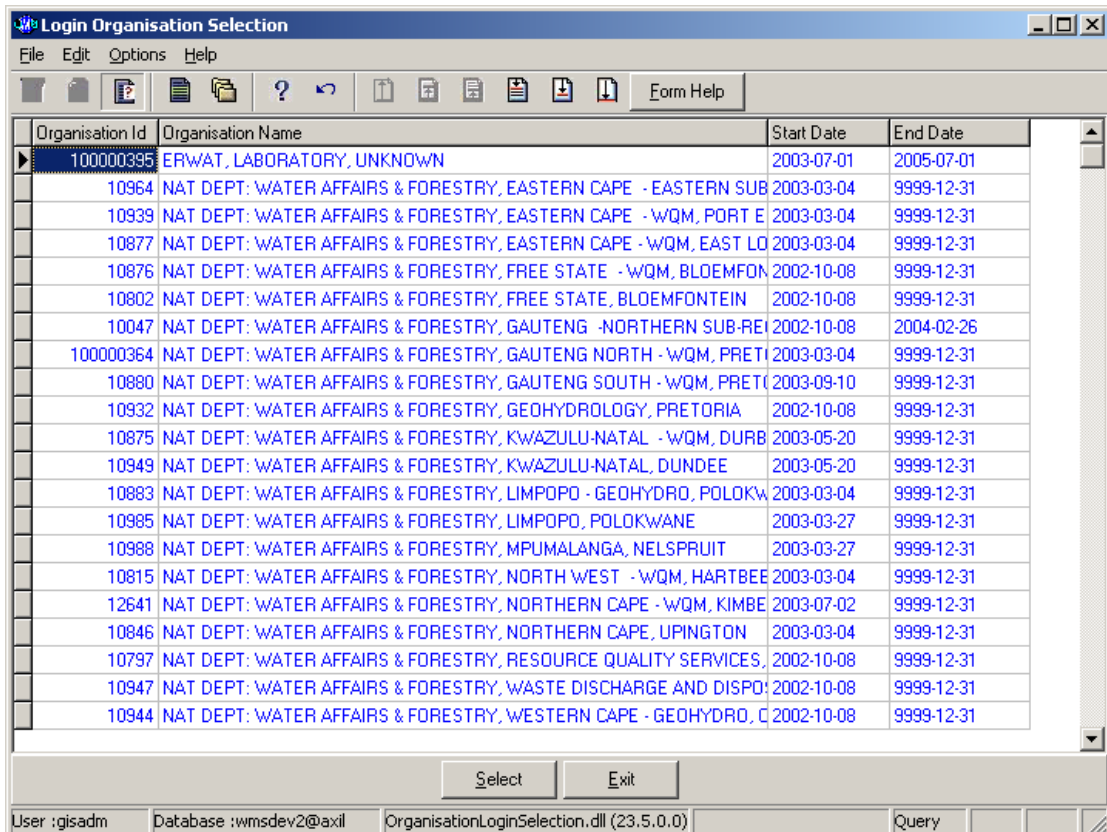
3.8   The **Data Owner Organisation** Abbreviation and the **Data Owner Organisation Name** fields will be automatically populated as they are linked to the Data Owner Organisation ID.

3.9   Click on the **Next** button to open the Transfer Feature Maintenance form.

3.10   Click on the **Back** button to go to the Decision Criteria form.

3.11   Click on the **Exit** button to go to the main menu.

Select the Transfer Feature History option to open the Transfer Feature History Filter Criteria form.

3.3   Select the applicable **Feature Type** from a list of given options on the drop-down list.

3.4   Enter the **Feature ID** or click on the **ZOOM** Zoom button to open the **Transfer Feature Selection** form, select the applicable record and click on the **Select** Select button to return your selection.

3.5   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

3.6   Enter the **Data Owner Organisation ID** or click on the **ZOOM** Zoom button to open
        the **Login Organisation Selection** form, select the applicable record and click on the
        Select Select button to return your selection.

Note: Only Data Owners of Transfer Feature historical records will be selectable.

3.7   The **Data Owner Organisation Abbreviation** and the **Data Owner Organisation Name** fields will be automatically populated as they are linked to the Data Owner Organisation ID.

3.8   Enter the **Change User Login** or click on the **ZOOM** Zoom button to open the **User Selection** form, select the applicable record and click on the ⬜ Select Select button to return your selection.

```
User Selection                                            _ □ ×
File   Edit   Options   Help

  🗑  📁  📋    📄  📑    ?  ↩    📑  📑  📑  📑  📑  📄   Form Help

Filter Criteria
Login Code [                    ]    User Name [                    ]        Filter

   │ Login Code  │ User Name                              │ Close Date │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │
   │             │                                        │            │

                         Select          Exit

UserInfo        ServerInfo        DllInfo                        Unc
```

Note: Only Users who created Transfer Feature history records will be selectable.

3.9   The **Change User Name** field will be automatically populated as it is linked to the Change User Login.

3.10   Enter the **Change User Organisation ID** or click on the **ZOOM** Zoom button to open the **Login Organisation Selection** form, select the applicable record and click on the Select Select button to return your selection.

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO:	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

Select   Exit

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

3.11   The **Change User Organisation Abbreviation** and the **Change User Name** fields will be automatically populated as they are linked to the Change User Organisation ID.

3.12   Click on the **Next** button to open the Transfer Feature History Selection form with the specified Filter criteria.

3.13   Click on the **Back** button to return to the Decision Criteria form.

3.14   Click on the **Exit** button to go to the main menu.
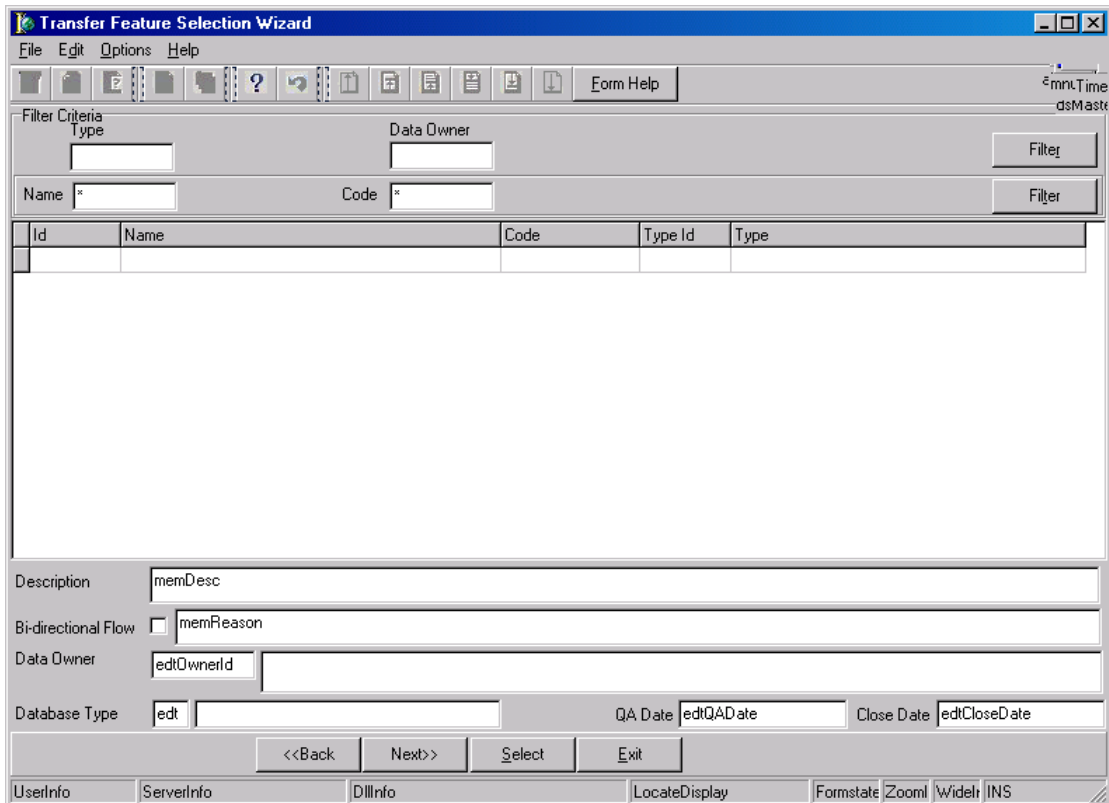
3.15 Click on the **Next** button to open the **Transfer Feature Maintenance** form for the focused or with no record.

3.16 Select the Transfer Feature in Geographical Area option to open the Transfer Feature in Geographical Area Filter Criteria form.
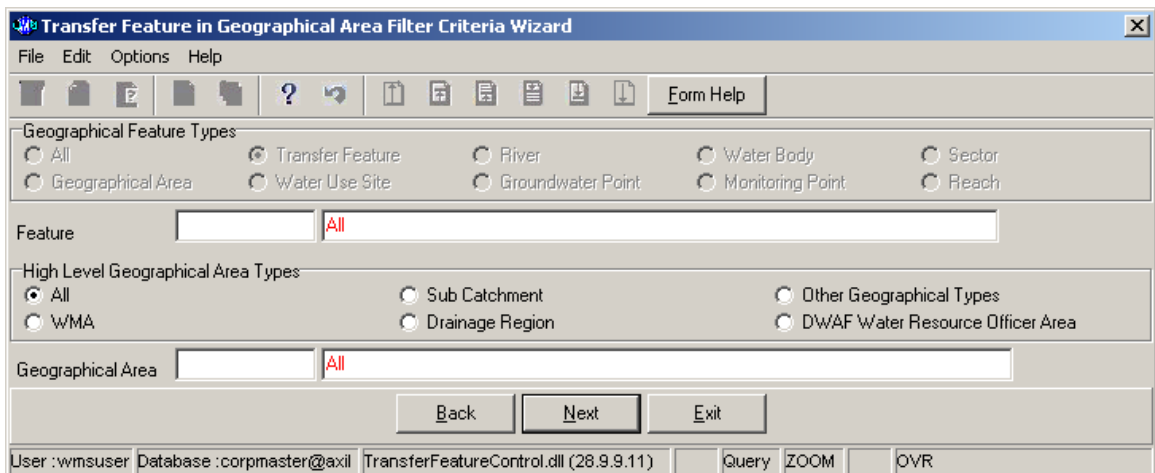
Note: *You will be able to specify the Filter Criteria of a Geographical Area and/or Transfer Feature.*

3.17 On the **Geographical Feature Types radio group**, the **Transfer Feature** option will be selected. Note: You will not be able to change it.

3.18   Enter the **Feature ID** or click on the ~~ZOOM~~ Zoom button to open the **Transfer Feature Selection** form, select the applicable record and click on the ~~Select~~ Select button to return your selection.

3.19   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

3.20   On the **High Level Geographical Area Types**, select the **WMA, Sub Catchment, Drainage Region, DWAF Water Resources Officer, Other Geographical Types** or the None option from a list of given options.

3.21   Enter the **Geographical Area ID** or click on the ~~ZOOM~~ Zoom button to open the **Geographical Area Selection** form, select the applicable record and click on the ~~Select~~ Select button to return your selection.

3.22 The **Geographical Area Name** field will be automatically displayed as it is linked to the Geographical Area ID.

3.23 Click on the **Back** button to go to the Decision Criteria form.

3.24 Click on the **Exit** button to close the form.

3.25 Click on the **Next** button to open the **Geographical Feature** in **Geographical Area Selection** form with the records for the specified Filter criteria.
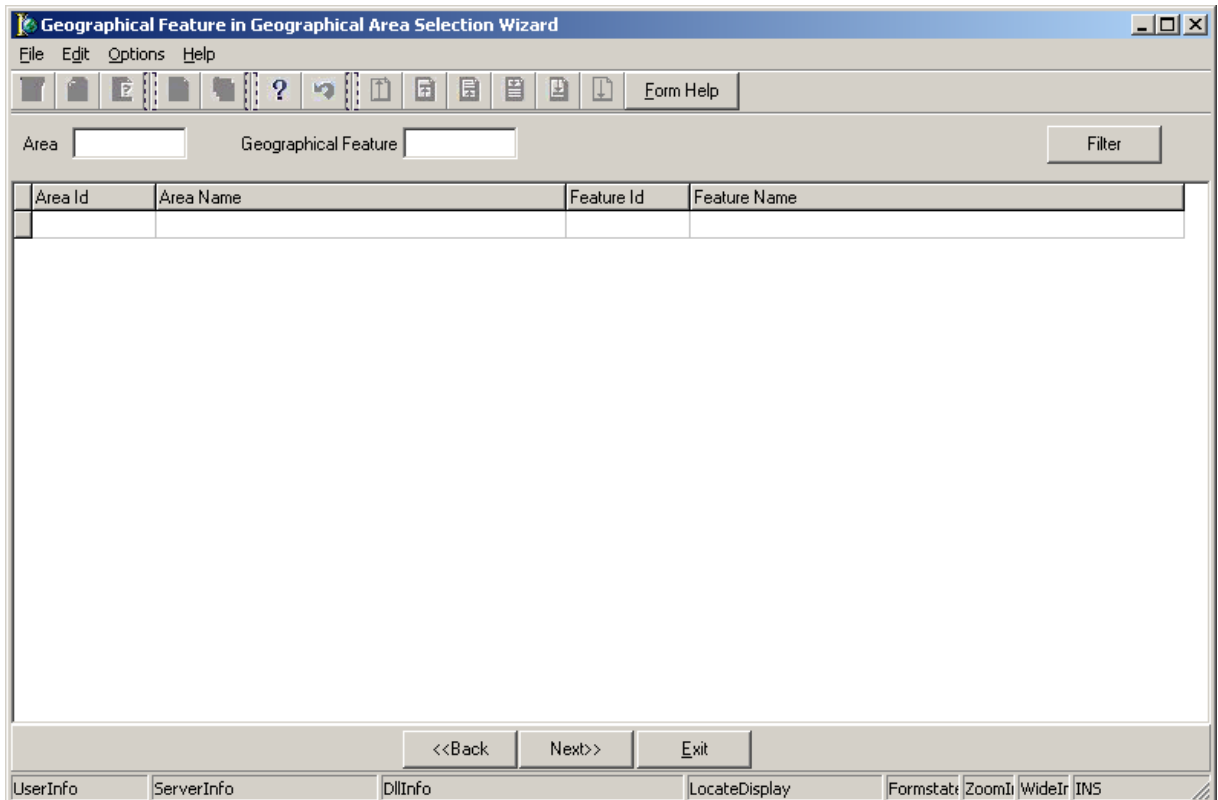
3.26   Click on the **Next** button to open the **Transfer Feature Maintenance** form for the focused or with no records.

3   How to Add a Transfer Feature:
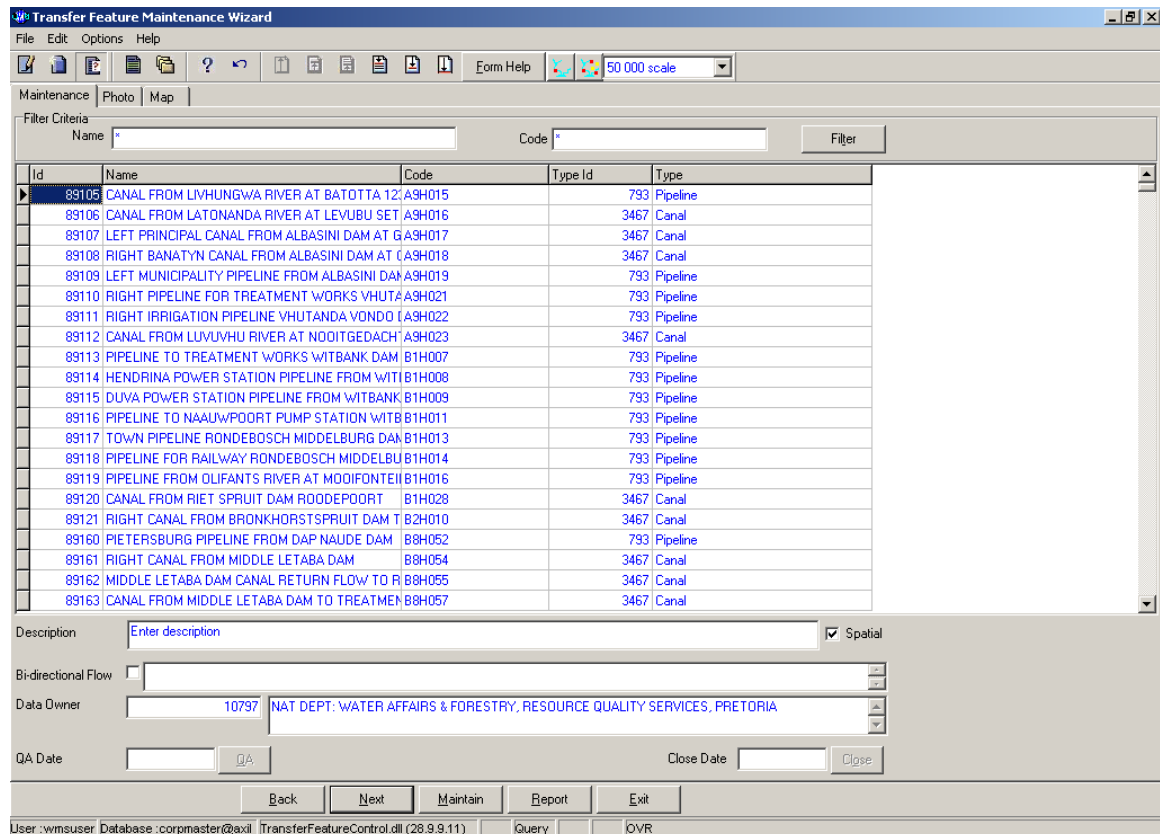
*If the Transfer Feature you are looking for does not exist:*

4.1 Click on the **Create** button to add a new record.

4.2 A new line displays to allow the addition of a new record.

4.3 The **Transfer Feature ID** will be automatically generated by the system.

4.4 Enter the **Transfer Feature Name**. Note: The Transfer Feature Name must be unique.

4.5 Enter the **Transfer Feature Code**.

4.6 Enter the **Feature Type ID** or click on the **ZOOM** Zoom button to open the **Associated Class – Type Selection** form, select the applicable record and click on the Select button to return your selection.
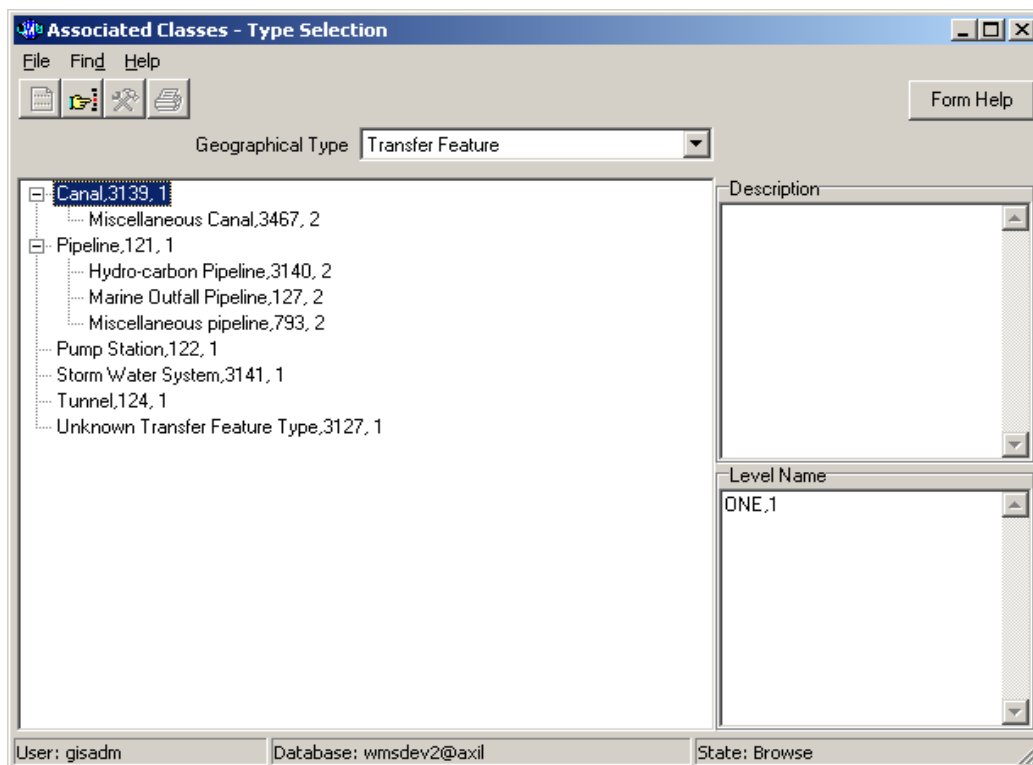
4.7 The **Transfer Feature Type** will be automatically displayed as it is linked to the Transfer Feature Type ID.

4.8 Enter the **Description** for the Transfer Feature.

4.9 Click on the **Bi-Directional Flow** checkbox to indicate whether the Transfer Feature is bi-directional or not.

4.10 Enter the **Bi-Directional Flow Reason** to indicate why a transfer feature is bi-directional. *Note: By default the **Data Owner Organisation** is the same as the **Login Organisation ID**. When you insert a new record, the Data Owner for the Transfer Feature will automatically be created with the Login Organisation ID, but you may change it.*

4.11   Enter the **Data Owner Organisation ID** or click on the `ZOOM` Zoom button to open a **Login Organisation Selection** form, select the applicable record and click on the `Select` Select button to return your selection.

4.12   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

4.13   *The QA Date field will by default be empty when creating a record.*

4.14   Click on the **QA** button to indicate that the Transfer Feature's information is **Quality Assured** on WMS. And populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

4.15   The **Close Date** field will by default be empty when creating a record.

4.16   Click on the **Close** button to indicate that the Transfer Feature is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator*

4.17   Click on the **Back** button to return to the previous form.

4.18   Click on the **Report** button to generate a .csv file with all the information of the records retrieved according to the parameters received as input to this form.

4.19   Click on the **Exit** button to go to the main menu.

343

5   How to Edit a Transfer Feature:

 Note: *Data Owners for the different Transfer Features will be implemented to prevent non Data Owners from editing other Organisations' Transfer Feature information. Only the Data Owner may edit its Transfer Feature record.*

5.1   On the **Maintenance Tab** click on the record to be edited to highlight it, and click on the Modify Records button.

 Note*: If you want to assign the new **Data Owner** to the record, enter the **Data Owner Organisation ID**, or click on the* **ZOOM** *Zoom button to open the* **Login Organisation Selection** *form, make your selection and click on the* **Select** *Select button to return your selection.*
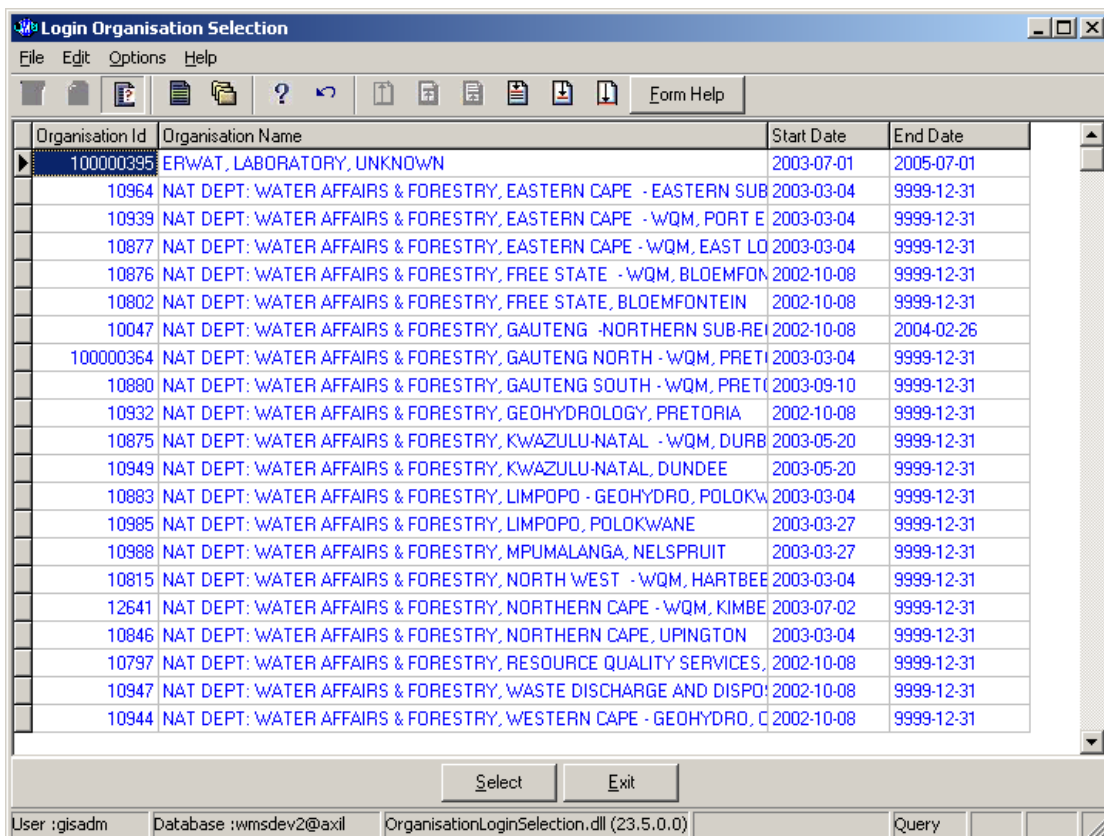
5.2   Edit the record as required.

5.3   Click on another record to accept the newly modified record.

Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab

5.4   Click on the applicable **Photo or Map Tab** to enter the **Media Id** of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia **Library Maintenance** form make your selection and click on the Select button to return your selection

5.5   Click on the **Accept** button to accept the changes

Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.

6   How to Delete a Transfer Feature:

Note: Data Owners for the different Transfer Features will be implemented to prevent non Data Owners from deleting other Organisations' Transfer Feature information. Only the Data Owner may delete its Transfer Feature record. A record can only be deleted if it is not being linked or used elsewhere.

6.1   Click on the record to be deleted, to highlight it.

6.2   Click on the **Delete** button. *Note: When records are referenced elsewhere on the system, the Delete option will be disable.*

6.3   A confirmation message will be displayed asking if you would like to delete the record.

6.4   Click on the **OK** option to confirm the deletion.

How to register a Monitoring Point using Water Use Site

 Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

2.1   Open the **Monitoring Point Registration Decision Criteria Wizard**
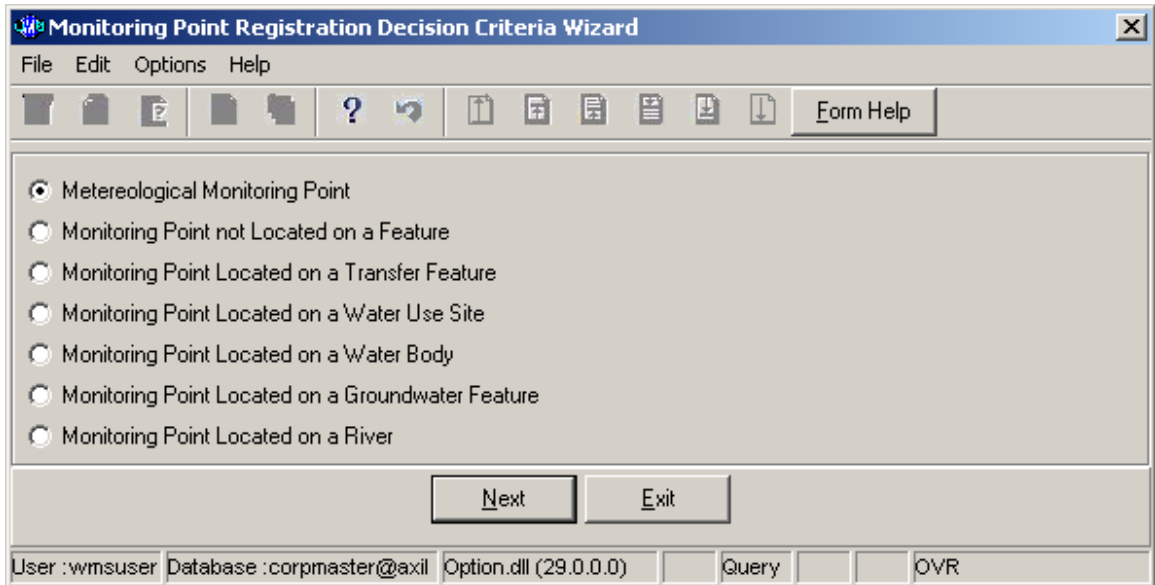
2.2   Choose any of the relevant options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Decision Criteria Wizard**

How to Search for a Water Use Site:

 Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for Water Use Site.

2.3   Open the **Water Use Site Decision Criteria Wizard**.
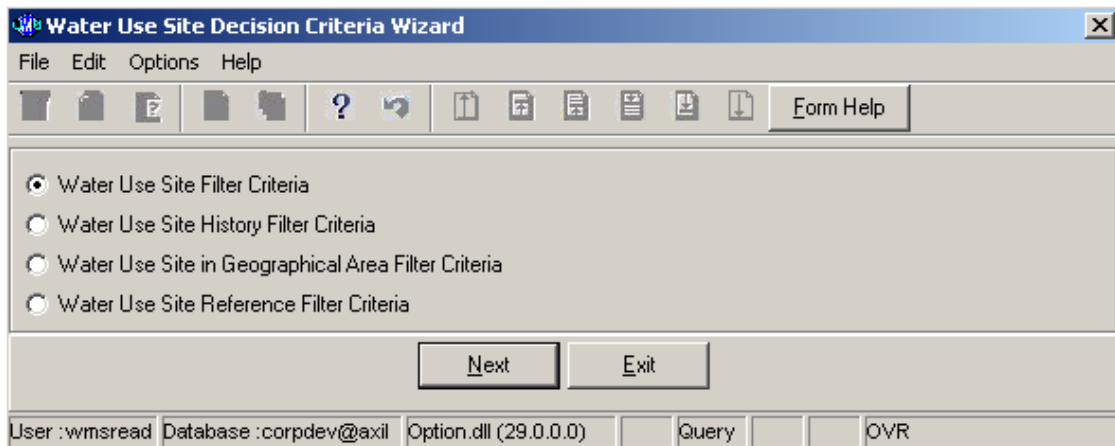
2.4   Choose any of the relevant options to search for a **Water Use Site** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

How to Search for a Water Use Site using Water Use Site Filter Criteria.

2.5   Click on the **Water Use Site Filter Criteria** radio button, then click the **Next** button

2.6   This will open the **Water Use Site Filter Criteria Wizard**

2.7   On the **High Level Water Use Site Types**, click on the **Agricultural, industrial, Mine, Solid Waste, Urban or Water care Works** or the **All** option to filter out records associated with a selected type of **Water Use Site Types**

2.8   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.
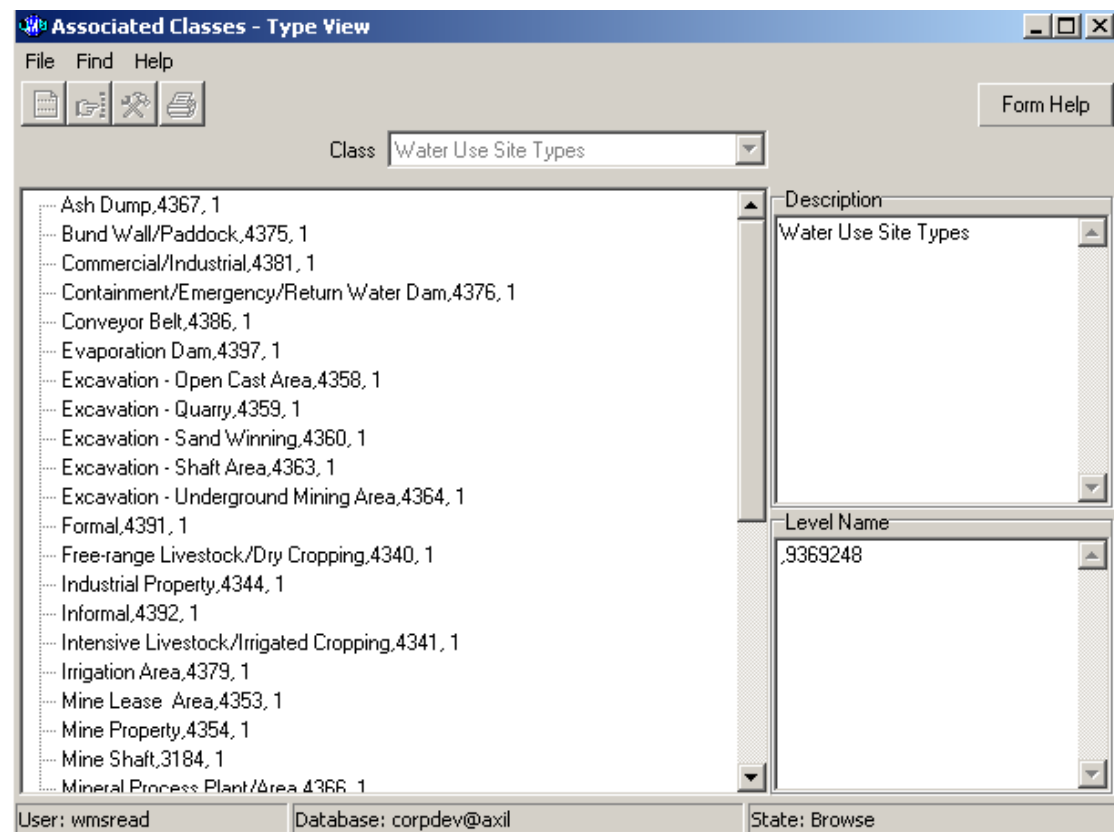
2.9   The **Feature Type** field will be automatically populated as it is linked to the **Geographical Feature Type ID**

2.10   Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select a **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

2.11   The **Feature Name** field will be automatically populated as it is linked to the **Geographical Feature ID**

2.12   Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

2.13   The **Legal Responsible Organisation Abbreviation & Name** field will be automatically populated as they are linked to the **Legal Responsible Organisation ID**

2.14   Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** button to return the selection

2.15   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

2.16   Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** button to return the selection

2.17 The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

2.18 Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

2.19 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

2.20 Enter the **Site Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

2.21   The **Site Owner Abbreviation & Name** field will be automatically populated as they are linked to the **Site Owner Organisation ID**

2.22   Enter the **Management Authority Organisation ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the `Select` **Select** button to return the selection

2.23   The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

2.24   Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

2.25   The **Main Site Name** field will be automatically populated as it is linked to the **Main Site Feature ID**

2.26   Enter the **Sub Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

353

2.27 The **Sub Site Name** field will be automatically populated as it is linked to the **Sub Site Feature ID**

2.28 Enter the **Data Owner LE ID** or click on the [ZOOM] **Zoom** button to open the **Login Organisation** form, select a **Data Owner LE** to be used as a filter and click on the [Select] **Select** button to return the selection.

2.29   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.30   Click on the **Next** button to open the **Water Use Site View Wizard** with records for the specified Filter Criteria.

2.31   Select the **Exit** button to close the form and return to the main menu

How to search for Water Use Site using Water Use Site History Filter Criteria wizard.

2.11   Click on the **Water Use Site Filter Criteria** radio button, then click the **Next** button

2.12   This will open the **Water Use Site History Filter Criteria Wizard**

2.13 On the **High Level Water Use Site Types**, click on the **Agricultural, industrial, Mine, Solid Waste, Urban or Water care Works** or the **All** option to filter out records associated with a selected type of **Water Use Site Types**

2.14 Enter the **Geographical Feature Type ID** or click on the **ZOOM Zoom** button to open the **Associated Classes – Type Selection** form, select a Feature Type to be used as a filter and click on the **Select** button to return the selection.
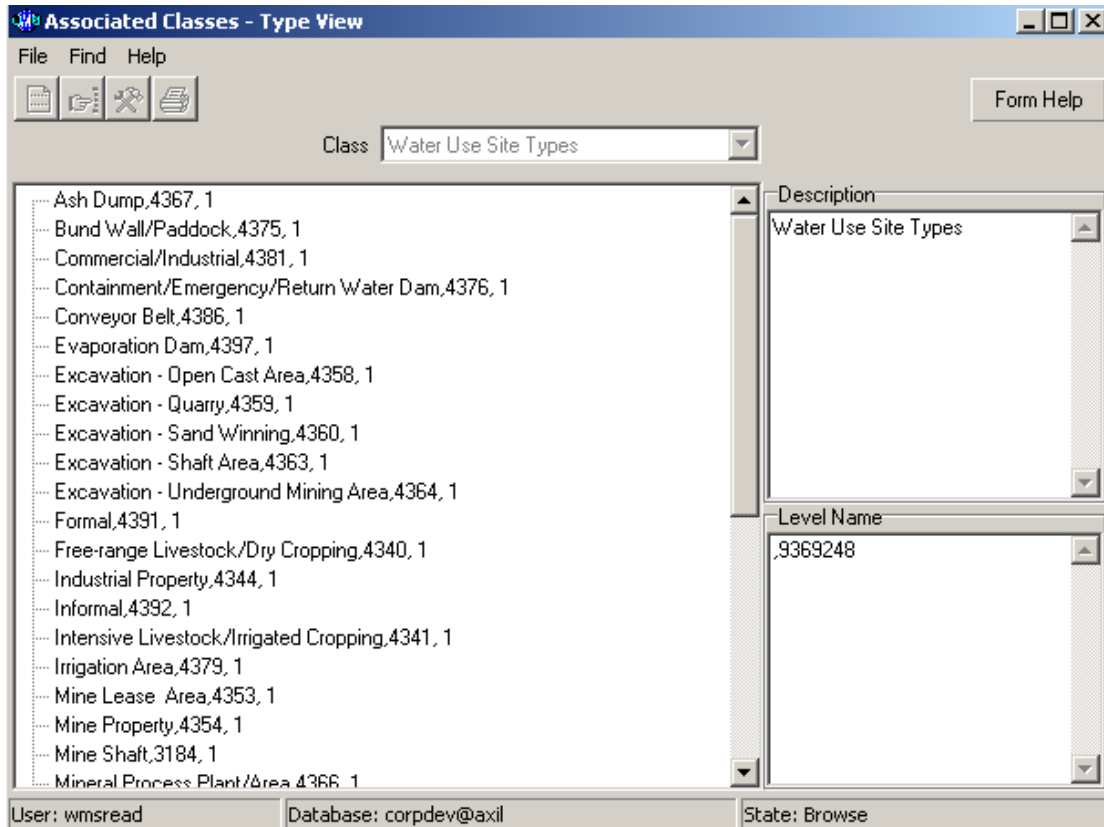
2.15 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.16 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site History Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection

2.17   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.18   Enter the **Legal Responsible Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the _Select_ **Select** button to return the selection

2.19   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

2.20   Enter the **Regional Office Authority ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the _Select_ **Select** button to return the selection

2.21   The **Regional Office Authority Abbreviation** field will be automatically populated as it is linked to the **Regional Office Authority ID**

2.22   Enter the **Regional Officer Employee ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the [Select] **Select** button to return the selection

2.23   The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

2.24   Enter the **Contact Person ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the [Select] **Select** button to return the selection

2.25   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

2.26   Enter the **Site Owner Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

2.27   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

2.28   Enter the **Management Authority Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

2.29 The **Management Authority Abbreviation** field will be automatically populated as it is linked to the **Management Authority Organisation ID**

2.30 Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

2.31 The **Main Site Name** field will be automatically populated as it is linked to the **Main Site Feature ID**

2.32 Enter the **Sub Site Feature ID** or click on the `ZOOM` **Zoom** button to open the **Water Use Site Selection** form, select an **Feature** to be used as a filter and click on the `Select` **Select** button to return the selection

2.33 The **Sub Site Name** field will be automatically populated as it is linked to the **Sub Site Feature ID**

2.34 Enter the **Data Owner LE ID** or click on the `ZOOM` **Zoom** button to open the **Login Organisation** form, select a Data Owner LE to be used as a filter and click on the `Select` **Select** button to return the selection.

2.35 The **Data Owner Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the **Data Owner LE ID**

2.36 Enter the **Change User Login** or click on the ZOOM **Zoom** button to open the **User Selection** form, select a **Change User** to be used as a filter and click on the **Select** button to return the selection.

2.37   The **Change User Name** field will be automatically populated as it is linked to the **Change User Login**

2.38   Enter the **Change User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the Select **Select** button to return the selection.

2.39   The **Change User Organisation Abbreviation** fields will be automatically populated as it is linked to the **Change User Organisation ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.40   Click on the **Next** button to open the **Water Use Site History View Wizard** with records for the specified Filter criteria.

2.41   Select the **Exit** button to close the form and return to the main menu

How to search for a Water Use Site using Water Use Site in Geographical Area wizard.

2.42   Click on the **Water Use Site in Geographical Area Filter Criteria** radio button, then click the **Next** button

2.43   This will open the **Geographical Feature in Geographical Area Filter Criteria** form

2.44   On the **High Level Geographic Feature Types**, the **Water Use Site Point** will be checked and the user cannot change it. It gives the option to filter out records associated with Water Use Site.

2.45   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Feature Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection.

2.46   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.47   On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

 Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared

2.48   Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

2.49   The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.50   Click on the **Next** button to open the **Water Use Site in Geographical Area View Wizard** with records for the specified Filter criteria.

2.51   Select the **Exit** button to close the form and return to the main menu

How to Add a new Water Use Site:

*Note: Water Use Site can be added using three different forms. The **Water Use Main Site**, **Water Use Sub Site** or the **Water Use Site Component** Maintenance depending on the Site Type*

3.8   Select **Water Network Management** from the **Water** *Note:* **Resource Management** menu bar, Select **Water Use Site** from the sub menu, this will open the **Water Use Site Decision Criteria Wizard**, Select **Water Use Site Filter Criteria** radio button, and click on the **Next** button form the **Decision Criteria**; this will open the **Water Use Site Filter Criteria Wizard**, and then click the **Next** button to open the **Water Use Site View Wizard** then click the **Create** button to open the Maintain Decision Criteria
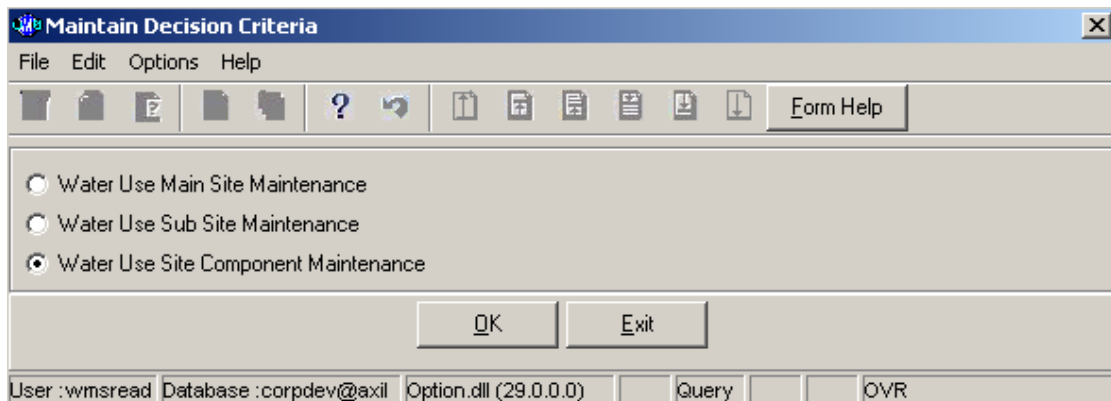
How to Add a new Water Use Main Site record

3.29   Click on the **Water Use Main Site Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

3.30   This will open the **Water Use Main Site Maintenance**

3.31   Select a **High Level Type** of the Water Use Site from the drop down list

3.32   **High Level Code ID** will be automatically displayed. *Note: This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works*

3.33   Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. *Note: if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.*

3.34   **Site Type ID** and **Site Type Name** will be automatically displayed

3.35   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.
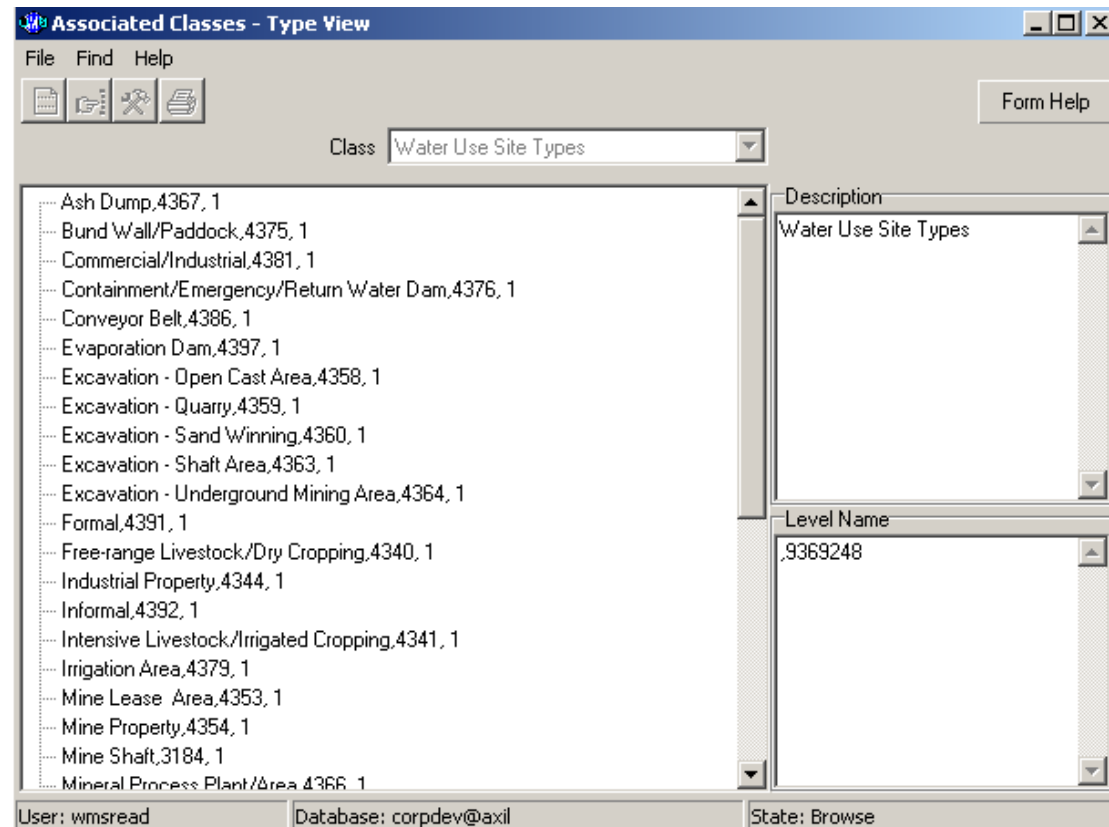
3.36   The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

? *Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.37   Enter the **Geographical Feature Name**. **?** *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.38   Enter the **Geographical Feature Description**.

3.39   The **Site Full Name** will be automatically displays

3.40   Enter the **File Number**

3.41   Enter the **Legal Responsible Organisation ID** or click on the **ZOOM Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select Select** button to return the selection

3.42   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.43   Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the ┌ Select ┐ **Select** button to return the selection

3.44   The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.45   Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the ┌ Select ┐ **Select** button to return the selection

3.46   The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

3.47   Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** button to return the selection

3.48   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.49   Enter the **Site Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** button to return the selection

374

3.50   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.51   Enter the **Management Authority Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

3.52   The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.53   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the ZOOM **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the Select **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.54   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

Note: The QA Date field will by default be empty when creating the record. Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. *Note: The Central Administrator can only perform this. This button is only enabled when you are in a Modify State.*

Note: The Close Date will by default be empty when creating the record. Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: The Central Administrator can only perform this. If any other user has logged in the button will be disabled.*

Note: The Report button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature. (this is for future development)

3.55   Click the **Accept** button to accept the newly created record.

How to Add a new Water Use Sub Site record

3.31   Click on the **Water Use Sub Site Maintenance** radio button and click the OK button
        from the **Maintain Decision Criteria**

3.32   This will open the **Water Use Sub Site Maintenance**

3.33   Select a **High Level Type** of the Water Use Site from the drop down list

3.34   **High Level Code ID** will be automatically displayed. *Note: This field will be
        populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or
        Water Care Works*

3.35   Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently

        presented on a shape file. *Note: if the user has the correct shape file on PC, the
        feature can be viewed in ArcView if spatially represented.*

3.36   **Site Type ID** and **Site Type Name** will be automatically displayed

3.37   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to
        open the **Associated Classes – Type Selection** form, select the applicable record

        and click on the Select button to return the selection.
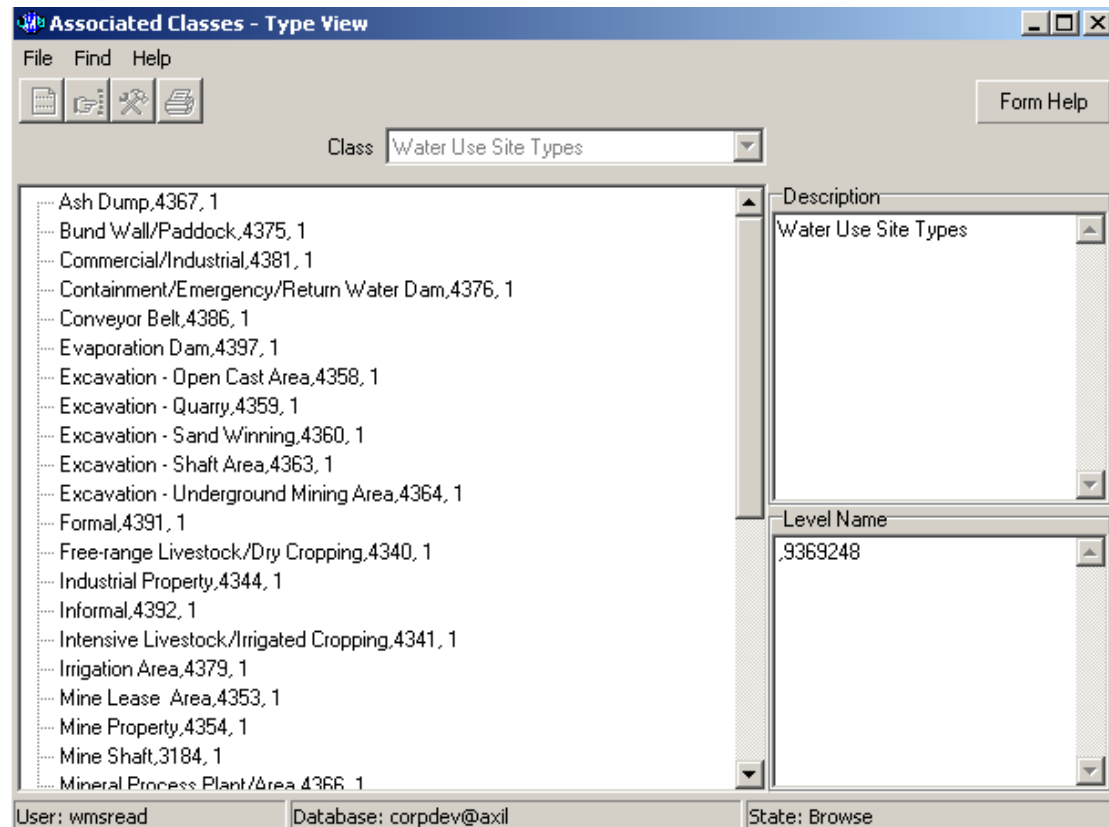
3.38 The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.39 Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select the applicable record and click on the **Select** Select button to return the selection.
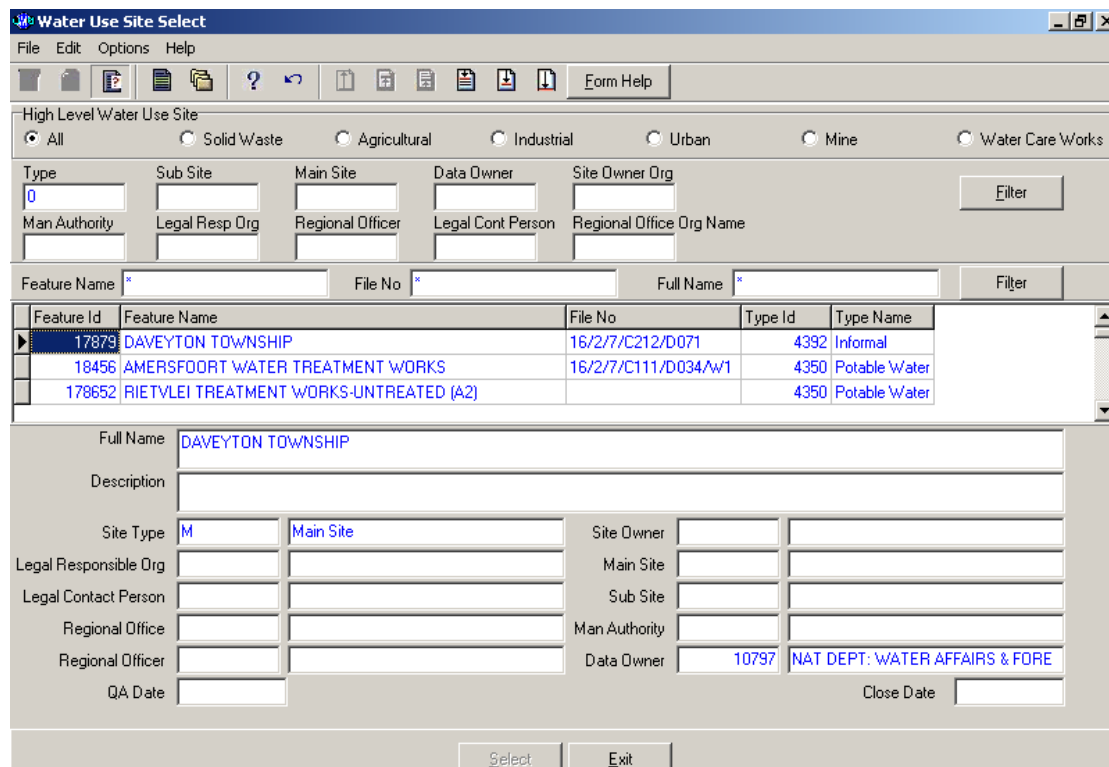
3.40   The **Main Site Feature Name** will be automatically displayed as it is linked to the **Main Site Feature ID**.

[?] *Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.41   Enter the **Geographical Feature Name**. [?] *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.42   Enter the **Geographical Feature Description**.

3.43   The **Site Full Name** will be automatically displays

3.44   Enter the **File Number**

3.45   Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.46   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.47   Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.48   The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.49   Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** **Select** button to return the selection

3.50   The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

3.51   Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.52   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.53   Enter the **Site Owner Organisation ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the `Select` **Select** button to return the selection

3.54   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.55   Enter the **Management Authority Organisation ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the `Select` **Select** button to return the selection

3.56   The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.57   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the ⬚ **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.58   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

*Note: The **QA Date** field will by default be empty when creating the record. Click on the* **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

*Note: The **Close Date** will by default be empty when creating the record. Click on the* **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: The Central Administrator can only perform this. If any other user has logged in the button will be disabled.*

*Note: The **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature (this is for future development)*

3.59   Click the **Accept** button to accept the newly created record

How to Add a new Water Use Site Component record

5.5   Click on the **Water Use Site Component Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

5.6   This will open the **Water Use Site Component Maintenance**

5.5 Select a **High Level Type** of the Water Use Site from the drop down list

5.6 **High Level Code ID** will be automatically displayed. *Note: This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works*

5.7 Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. *Note: if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.*

5.8 **Site Type ID** and **Site Type Name** will be automatically displayed

5.9 Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.

5.10 The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

5.11 Enter the **Main Site Feature ID** or click on the ZOOM **Zoom** button to open the **Water Use Site Selection** form, select the applicable record and click on the Select Select button to return the selection.

5.12   The **Main Site Feature Name** will be automatically displayed as it is linked to the **Main Site Feature ID**.

5.13   Enter the **Sub Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Selection** form, select the applicable record and click on the **Select** Select button to return the selection.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

5.14   Enter the **Geographical Feature Name**. *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

5.15   Enter the **Geographical Feature Description**.

5.16   The **Site Full Name** will be automatically displays

5.17   Enter the **File Number**

5.18   Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

5.19   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

5.20   Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

5.21   The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

5.22   Enter the **Regional Office Authority ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the `Select` **Select** button to return the selection

5.23   The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

5.24   Enter the **Contact Person ID** or click on the `ZOOM` **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the `Select` **Select** button to return the selection

5.25   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

5.26   Enter the **Site Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

5.27   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

5.28   Enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

389

5.29   The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

5.30   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the **Select** **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

5.31   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

Note: The **QA Date** *field will by default be empty when creating the record.* Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. **Note:** *The Central Administrator can only perform this. This button is only enabled when you are in a Modify State.*

Note: The **Close Date** *will by default be empty when creating the record.* Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage.

Note: *The Central Administrator can only perform this. If any other user has logged in the button will be disabled.*

Note: *the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature (this is for future development)*

5.32   Click the **Accept** button to accept the newly created record

How to Edit a Water Use Site:

Note: *Only the Data Owner may edit it's Water Use Site record and the Central Administrator may edit any record.*

4.4   Click on the record to be edited to highlight it, and click on the ✏️ Modify Records button.

Note: If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.

4.5 Edit the record as required.

4.6 Click on another record to accept the newly modified record.

5 How to Delete a Water Use Site:

Note: Only the Data Owner may delete its Water Use Site record and the Central Administrator may edit any record.

5.5 Click on the record to be deleted, to highlight it.

5.6 Click F3 or Select Delete for the Edit main menu. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.7 A confirmation message will be displayed asking if you would like to delete the record.

5.8 Click on the OK option to confirm the deletion

3.3   Click on the [Select] **Select** button to return the selection

3.4   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.5   Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the [Select] **Select** button to return the selection

3.6 The **Regional Office Authority Abbreviation** field will be automatically populated as it is linked to the **Regional Office Authority ID**

3.7 Enter the **Regional Officer Employee ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the _____ Select **Select** button to return the selection

3.8 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.9 Enter the **Contact Person ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the _____ Select **Select** button to return the selection

3.10   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.11   Enter the **Site Owner Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

3.12   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.13   Enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the [Select] **Select** button to return the selection

3.14   The **Management Authority Abbreviation** field will be automatically populated as it is linked to the **Management Authority Organisation ID**

3.15   Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Select** form, select an **Feature** to be used as a filter and click on the [Select] **Select** button to return the selection

3.16 The **Main Site Name** field will be automatically populated as it is linked to the **Main Site Feature ID**

3.17 Enter the **Sub Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Select** form, select an **Feature** to be used as a filter and click on the **Select** button to return the selection

3.18   The **Sub Site Name** field will be automatically populated as it is linked to the **Sub Site Feature ID**

3.19   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation** form, select a Data Owner LE to be used as a filter and click on the **Select** **Select** button to return the selection.
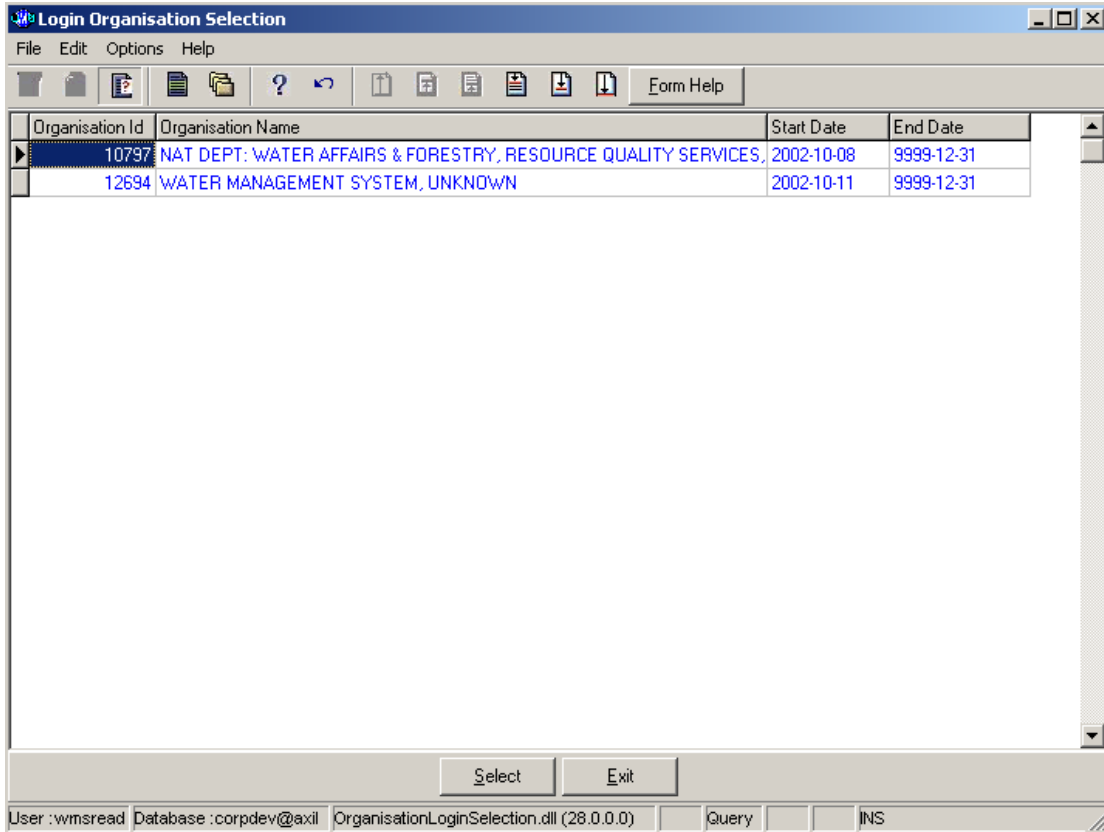
3.20   The **Data Owner Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the **Data Owner LE ID**

3.21   Enter the **Change User Login** or click on the **ZOOM** **Zoom** button to open the **User Selection** form, select a **Change User** to be used as a filter and click on the **Select** button to return the selection.

3.22   The **Change User Name** field will be automatically populated as it is linked to the **Change User Login**

3.23   Enter the **Change User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the Select **Select** button to return the selection.

3.24   The **Change User Organisation Abbreviation** fields will be automatically populated as it is linked to the **Change User Organisation ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

3.25   Click on the **Next** button to open the **Water Use Site History View Wizard** with records for the specified Filter criteria.

3.26   Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Use Site using Water Use Site in Geographical Area.

3.3   Click on the **Water Use Site in Geographical Area Filter Criteria** radio button, the click the **Next** button

3.4   This will open the **Geographical Feature in Geographical Area Filter Criteria** form

3.5   On the **High Level Geographic Feature Types**, the **Water Use Site Point** will be checked and the user cannot change it. It gives the option to filter out records associated with Water Use Site.

3.6   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection.

3.7 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

3.8 On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared

3.9 Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

3.10 The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID
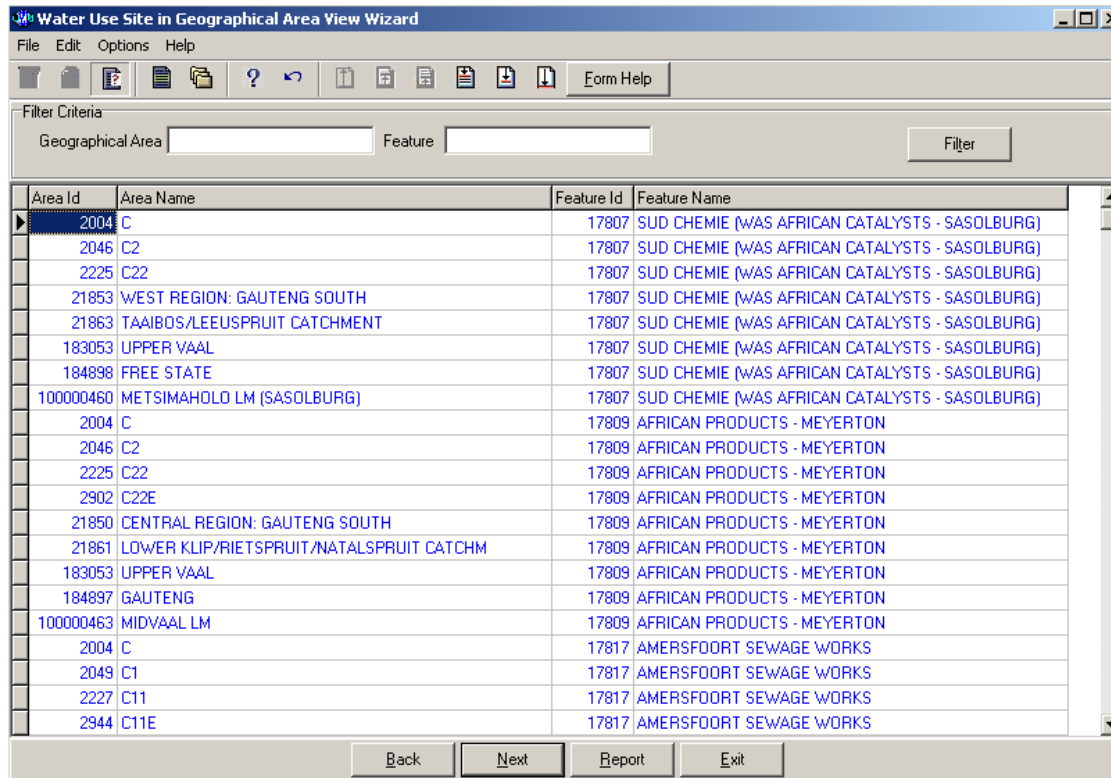
*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

3.11 Click on the **Next** button to open the **Water Use Site History View Wizard** with records for the specified Filter criteria.

3.12   Select the **Exit** button to close the form and return to the main menu

How to add a new Water Use Site:

[?] *Note: Water Use Site can be added using three different forms. The **Water Use Main Site**, **Water Use Sub Site** or the **Water Use Site Component** Maintenance depending on the Site Type*

3.9   Select **Water Network Management** from the **Water** [?] *Note:* **Resource Management** menu bar, Select **Water Use Site** from the sub menu, this will open the **Water Use Site Decision Criteria Wizard**, Select **Water Use Site Filter Criteria** radio button, and click on the **Next** button form the **Decision Criteria**; this will open the **Water Use Site Filter Criteria Wizard**, and then click the **Next** button to open the **Water Use Site View Wizard** then click the **Create** button to open the Maintain Decision Criteria

How to Add a new Water Use Main Site record

3.10 Click on the **Water Use Main Site Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

3.11 This will open the **Water Use Main Site Maintenance**

3.12 Select a **High Level Type** of the Water Use Site from the drop down list

3.13 **High Level Code ID** will be automatically displayed. *Note: This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works*

3.14 Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. *Note: if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.*

3.15 **Site Type ID** and **Site Type Name** will be automatically displayed

3.16 Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.

3.17   The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.18   Enter the **Geographical Feature Name**. *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.19   Enter the **Geographical Feature Description**.

3.20   The **Site Hierarchy Name** will be automatically displays

3.21   Enter the **File Number**

3.22   Enter the **Legal Responsible Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

3.23 The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.24 Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.25 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.26 Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** **Select** button to return the selection

3.27   The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

3.28   Enter the **Contact Person ID** or click on the ZOOM **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the Select **Select** button to return the selection

3.29   The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.30   Enter the **Site Owner Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the Select **Select** button to return the selection

408

3.31   The **Site Owner Abbreviation** field will be automatically populated as it is linked to
        the **Site Owner Organisation ID**

3.32   Enter the **Management Authority Organisation ID** or click on the ZOOM **Zoom**
        button to open the **Organisation Selection** form, select an **Organisation** to be used
        as a filter and click on the [Select] **Select** button to return the selection

3.33 The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.34 To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the [Select] **Select** button to return the selection. Note: *Only active organisations with passwords are available for selection.*

3.35 The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

Note: *The QA Date field will by default be empty when creating the record.*

3.36 Note: *The QA Date field will by default be empty when creating the record.* Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date file with the system date. Note: *This can only be performed by the Central Administrator.*

3.37 Note: *The Close Date will by default be empty when creating the record*. Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. Note: *This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

Note: *the Report button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature. (this is for future development)*

3.38 Click the **Accept** button to accept the newly created record.

How to Add a new Water Use Sub Site record

3.60   Click on the **Water Use Sub Site Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

3.61   This will open the **Water Use Sub Site Maintenance**

3.62   Select a **High Level Type** of the Water Use Site from the drop down list

3.63   **High Level Code ID** will be automatically displayed. **Note: This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works**

3.64   Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. **Note: if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.**

3.65   **Site Type ID** and **Site Type Name** will be automatically displayed

3.66   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.

3.67   The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.68   Enter the **Main Site Feature ID** or click on the `ZOOM` **Zoom** button to open the **Water Use Site Select** form, select the applicable record and click on the `Select` Select button to return the selection.

412

3.69   The **Main Site Feature Name** will be automatically displayed as it is linked to the **Main Site Feature ID**.
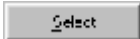
? *Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

3.70   Enter the **Geographical Feature Name**. **?** *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

3.71   Enter the **Geographical Feature Description**.

3.72   The **Site Hierarchy Name** will be automatically displays

3.73   Enter the **File Number**

3.74   Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection

3.75   The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

3.76   Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.77 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

3.78 Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** **Select** button to return the selection

3.79 The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

3.80 Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

3.81 The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

3.82 Enter the **Site Owner Organisation ID** or click on the **ZOOM Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** button to return the selection

3.83 The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

3.84 Enter the **Management Authority Organisation ID** or click on the **ZOOM Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** button to return the selection

415

3.85 The **Management Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Management Authority Organisation ID**

3.86 To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the **Select** **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

3.87   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

*Note: The **QA Date** field will by default be empty when creating the record.*

3.88   *Note: The **QA Date** field will by default be empty when creating the record.* Click on the **QA** button to indicate that the Geographical Area's information is Quality

Assured on WMS and populates the QA date file with the system date. *Note: This can only be performed by the Central Administrator.*

3.89   *Note: The **Close Date** will by default be empty when creating the record.* Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS

usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

*Note: the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature (this is for future development)*

3.90   Click the **Accept** button to accept the newly created record

How to Add a new Water Use Site Component record

5.1   Click on the **Water Use Site Component Maintenance** radio button and click the OK button from the **Maintain Decision Criteria**

5.2   This will open the **Water Use Site Component Maintenance**

417

5.3   Select a **High Level Type** of the Water Use Site from the drop down list

5.4   **High Level Code ID** will be automatically displayed. *Note: This field will be populated if the Water Use Site is Solid Waste, Industrial, Mine, Agricultural, Urban or Water Care Works*

5.5   Click on the **Spatial Pres Indicator** check box to indicate that the feature is currently presented on a shape file. *Note: if the user has the correct shape file on PC, the feature can be viewed in ArcView if spatially represented.*

5.6   **Site Type ID** and **Site Type Name** will be automatically displayed

5.7   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.
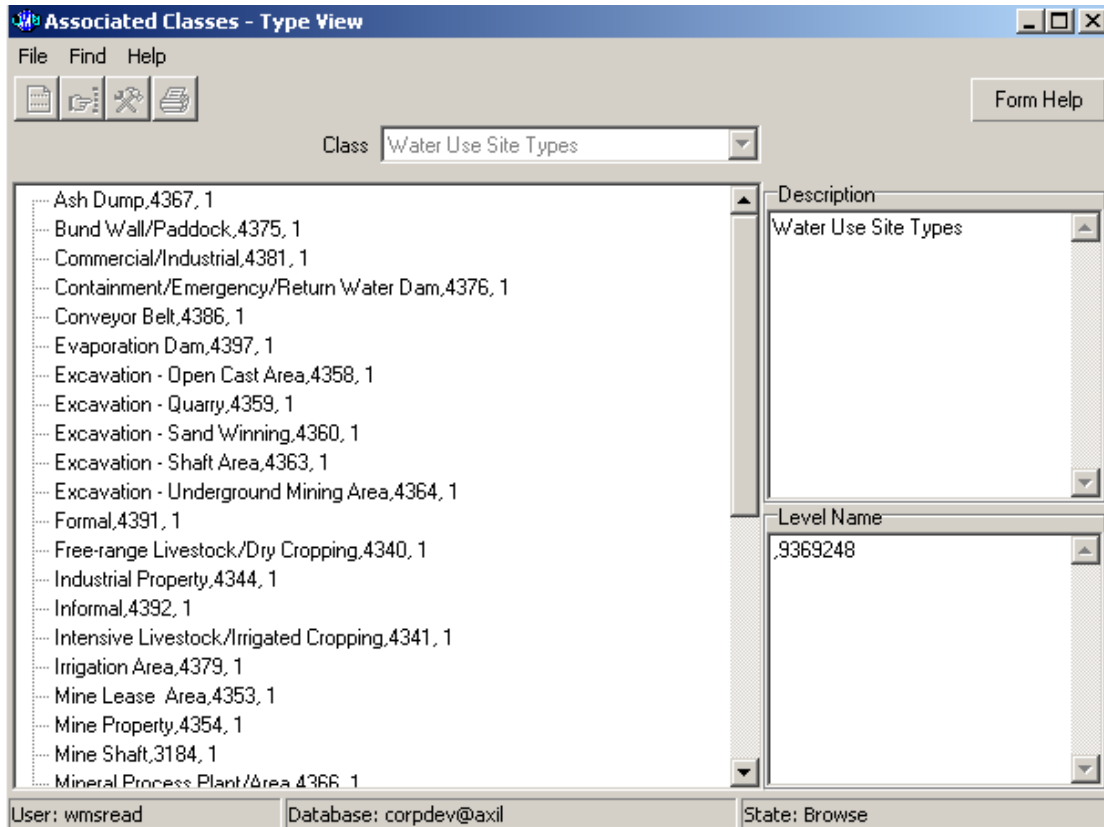
5.8 The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

5.9 Enter the **Main Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Select** form, select the applicable record and click on the **Select** Select button to return the selection.
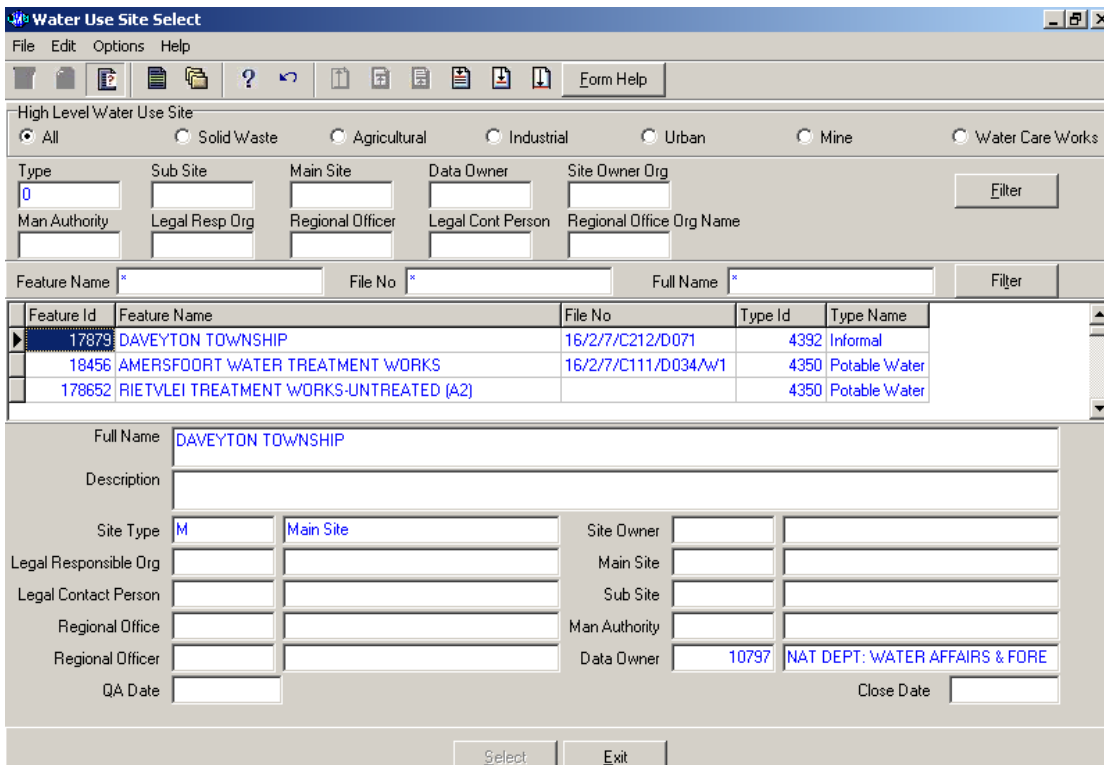
5.10   The **Main Site Feature Name** will be automatically displayed as it is linked to the **Main Site Feature ID**.

5.11   Enter the **Sub Site Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Use Site Select** form, select the applicable record and click on the [Select] Select button to return the selection.

*Note: The **Feature ID** will be automatically generated by the system when the record is successfully created*

5.12   Enter the **Geographical Feature Name**. *Note: The Geographical Feature Name shall be unique for all the Geographical Feature records.*

5.13   Enter the **Geographical Feature Description**.

5.14   The **Site Hierarchy Name** will be automatically displays

5.15   Enter the **File Number**

5.16   Enter the **Legal Responsible Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the [Select] **Select** button to return the selection

5.17 The **Legal Responsible Organisation Abbreviation** field will be automatically populated as it is linked to the **Legal Responsible Organisation ID**

5.18 Enter the **Regional Officer Employee ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** **Select** button to return the selection

5.19 The **Regional Officer Name** field will be automatically populated as it is linked to the **Regional Officer Employee ID**

5.20 Enter the **Regional Office Authority ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Regional Office** to be used as a filter and click on the **Select** **Select** button to return the selection

5.21 The **Regional Office Authority Abbreviation & Name** field will be automatically populated as they are linked to the **Regional Office Authority ID**

5.22 Enter the **Contact Person ID** or click on the **ZOOM** **Zoom** button to open the **Employee Selection** form, select an **Person** to be used as a filter and click on the **Select** button to return the selection

5.23 The **Legal Contact Person Name** field will be automatically populated as it is linked to the **Contact Person ID**

5.24 Enter the **Site Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the **Select** button to return the selection

422

5.25   The **Site Owner Abbreviation** field will be automatically populated as it is linked to the **Site Owner Organisation ID**

5.26   Enter the **Management Authority Organisation ID** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form, select an **Organisation** to be used as a filter and click on the `Select` **Select** button to return the selection

5.27   The **Management Authority Abbreviation & Name** field will be automatically
         populated as they are linked to the **Management Authority Organisation ID**

5.28   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or
         click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form,
         select the applicable record, and click on the ⬚ *Select* ⬚ **Select** button to return the
         selection. 🔲 *Note: Only active organisations with passwords are available for
         selection.*

5.29   The **Data Owner Organisation Name** will be automatically displayed as it is linked to
         the Data Owner Organisation ID.

🔲 *Note: The **QA Date** field will by default be empty when creating the record.*

5.30   🔲 *Note: The **QA Date** field will by default be empty when creating the record.* Click
         on the **QA** button to indicate that the Geographical Area's information is Quality

         Assured on WMS and populates the QA date file with the system date. 🔲 *Note: This
         can only be performed by the Central Administrator.*

5.31   🔲 *Note: The **Close Date** will by default be empty when creating the record.* Click on
         the **Close** button to indicate that the Geographical Area is no longer active for WMS

         usage. 🔲 *Note: This can only be performed by the Central Administrator. If any other
         user has logged in the button will be disabled.*

🔲 ***Note:** the **Report** button will open a Report Option Decision form that displays a list of
reports that can be run for this Geographical Feature (this is for future development)*

5.32   Click the **Accept** button to accept the newly created record

6   How to Edit a Water Use Site:

Note: Only the Data Owner may edit it's Water Use Site record and the Central Administrator may edit any record.

6.1   Click on the record to be edited to highlight it, and click on the [icon] Modify Records button.

Note: If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.

6.2   Edit the record as required.

6.3   Click on another record to accept the newly modified record.

7   How to Delete a Water Use Site:

Note: Only the Data Owner may delete it's Water Use Site record and the Central Administrator may edit any record.

7.1   Click on the record to be deleted, to highlight it.

7.2   Click on the [icon] **Delete** button. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

7.3   A confirmation message will be displayed asking if you would like to delete the record.

7.4   Click on the **OK** option to confirm the deletion.

How to register a Monitoring Point using Water Body

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

3.1   Open the **Monitoring Point Registration Decision Criteria Wizard**

3.2   Choose any of the relevant options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Decision Criteria Wizard**.

2   How to Search for a Water Body:

? *Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for Water Body.*

2.1   Open the **Water Body Decision Criteria Wizard**.

2.2   Choose any of the relevant options to search for a **Water Body** and click on the **Next** button to open a specific filter criteria wizard.

? *Note: If you select Waters Body Filter Criteria then Waters Body Filter Criteria Wizard will be opened.*

How to Search for a Water Body using Water Body Filter Criteria.

2.3   Click on the **Water Body Filter Criteria** radio button, the click the **Next** button

2.4   This will open the **Water Body Filter Criteria Wizard**

2.5 Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

2.6 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7 Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Body Selection** form, select a **Feature** to be used as a filter and click on the **Select** button to return the selection

2.8 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.9 Enter the **Component of Feature Id** or click on the **ZOOM** **Zoom** button to open the **Water Body Hierarchy Selection** form, select a **Water Body** to be used as a filter and click on the **Select** button to return the selection. *Note: To select a Component of Feature Id it is compulsory to enter the Geographical Type ID first*

2.10   The **Component of Feature Name** field will be automatically populated as they are linked to the **Component of Feature Id**

2.11   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a **Data Owner LE** to be used as a filter and click on the **Select** **Select** button to return the selection.

2.12   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu*.

2.13   Click on the **Next** button to open the **Water Body Maintenance** form with records for the specified Filter criteria.

2.14   Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Body using Water Body History Filter Criteria.

4.4   Click on the **Water Body Filter Criteria** radio button, the click the **Next** button

4.5   This will open the **Water Body History Filter Criteria Wizard**

4.6   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to
        open the **Associated Classes – Type Selection** form, select a Feature Type to be

        used as a filter and click on the [icon] **Select** button to return the selection.

4.6 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

4.7 Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **Water Body History Selection** form, select a Feature to be used as a filter and click on the Select **Select** button to return the selection

4.8   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

4.9   Enter the **Component of Feature Id** or click on the ZOOM **Zoom** button to open the **Water Body Hierarchy Selection** form, select a **Water Body** to be used as a filter and click on the [Select] **Select** button to return the selection. *Note: To select a Component of Feature Id it is compulsory to enter the Geographical Type ID first*
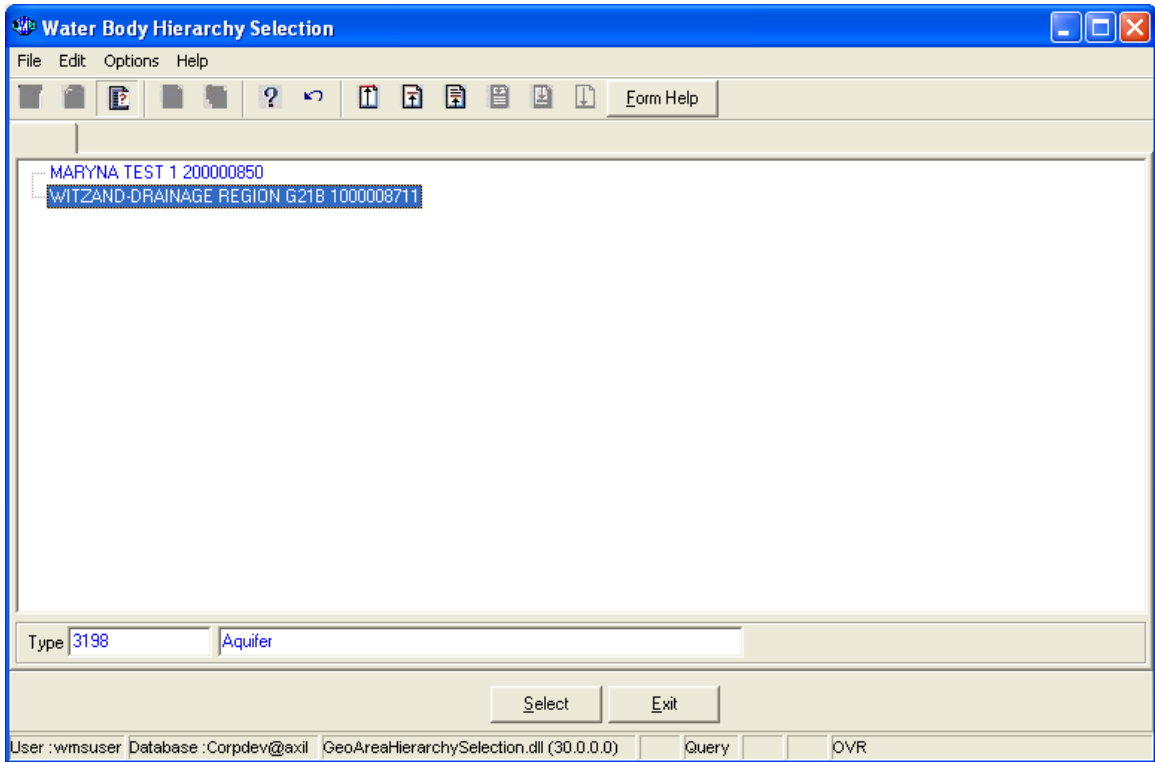
4.10   The **Component of Feature Name** field will be automatically populated as they are linked to the **Component of Feature Id**

4.11   Enter the **Data Owner LE ID** or click on the ZOOM **Zoom** button to open the **Login Organisation** form, select a Data Owner LE to be used as a filter and click on the [Select] **Select** button to return the selection.

4.12   The **Data Owner Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the **Data Owner LE ID**

4.13   Enter the **Change User ID** or click on the **ZOOM** **Zoom** button to open the **User Selection** form, select a **Change User** to be used as a filter and click on the **Select** **Select** button to return the selection.
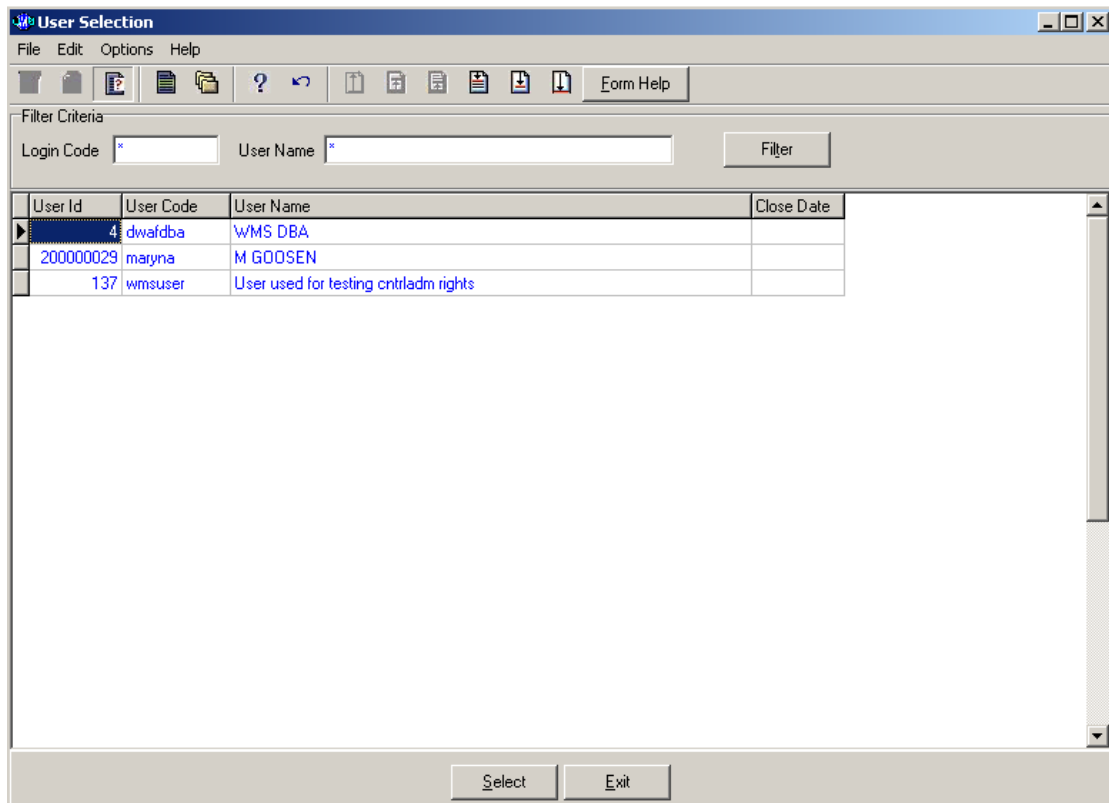
4.14   The **Change User Name** field will be automatically populated as it is linked to the Change User ID

4.15   Enter the **Change User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the Select **Select** button to return the selection.

4.16   The **Change User Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the Change User Organisation ID.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu*.

4.17   Click on the **Next** button to open the **Water Body History Selection** form with records for the specified Filter criteria.

4.18   Select the **Exit** button to close the form and return to the main menu

How to Search for a Water Body using Water Body in Geographical Area.

4.3   Click on the **Water Body in Geographical Area** radio button, the click the **Next** button

4.4   This will open the **Water Body in Geographical Area Filter Criteria Wizard**

4.5   On the **High Level Geographic Feature Types**, click on the **Reach, Sector, Monitoring Point, Water Body Point, Transfer Feature, River. Water Body, Water Use Site, Geographical Area** or the **All Features** option to filter out records associated with a selected type of Geographical Feature.

4.6   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Water Body Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection.

4.7   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

4.8   On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

 Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared.

4.9   Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

4.10   The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area Type ID

 *Note: The **Back** button will close the form and return to the Decision Criteria form.*

 *Note: The **Exi**t button will close the form and return to the main menu.*

4.11   Click on the **Next** button to open the **Water Body in Geographical Area Selection Wizard** with records for the specified Filter criteria.

4.12   Select the **Exit** button to close the form and return to the main menu

5   How to Add a new Water Body:

5.1   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Water Body** from the sub menu, This will open the **Water Body Decision Criteria Wizard**, Click on the **Water Body Filter Criteria** radio button, the click the **Next** button, This will open the **Water Body Filter Criteria Wizard**,

5.2   Click the **Next** button to open the **Water Body Maintenance Wizard**

5.3   Click on the 📁**Create** button to add a new record.
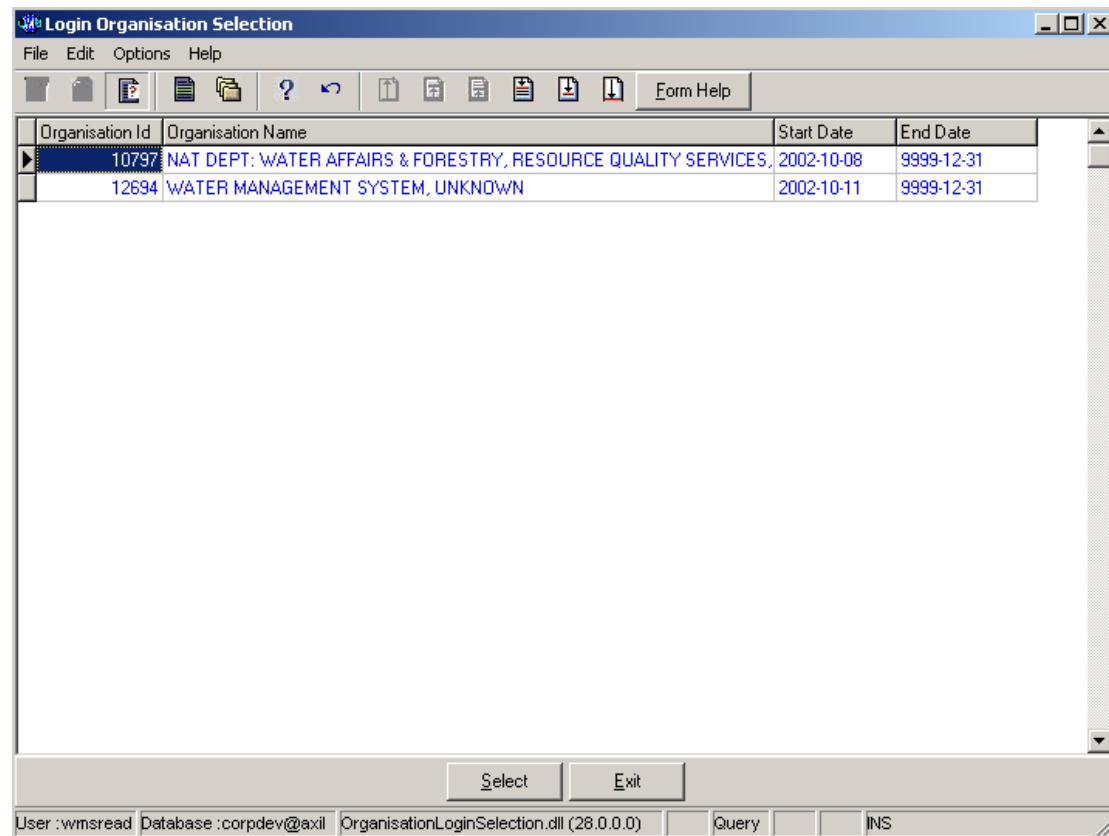
5.4   An empty line displays to allow the addition of a new record.

Note: *The **Geographical Area ID** will be automatically generated by the system when the record is successfully created*

5.5   Enter the **Geographical Feature Name**. *Note: The Geographical Area Name shall be unique for all the Geographical Area records.*

5.6   Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the 📇 Select button to return the selection.

5.7   The **Geographical Feature Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

5.8   Enter the **Geographical Area Description**.

5.9   The **Component of Feature Id** will automatically display the Id of the Water Body this Water Body is a Component of.

5.10   The **Component of Feature Name** will automatically display the Name of the Water Body this Water Body is a Component of.

5.11   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the [Select] **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

5.12   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

5.13   *The **QA Date** field will by default be empty when creating the record.*

5.14   Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date file with the system date. *Note: This can only be performed by the Central Administrator.*

*Note: The **Close Date** will by default be empty when creating the record.*

5.15   Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

5.16   Tab to accept the newly created record.

*Note: the **Back** button will return to the previous Filter Criteria or Selection form.*

5.17   Click on the **Exit** button to go to the main menu.

6   How to Edit a Water Body:

Note: The Central administrator may edit any record, else only the Data Owner may edit it's Water Body record.

6.1   Click on the record to be edited to highlight it, and click on the Modify Records button.

Note: If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.

6.2   Edit the record as required.

6.3   Click on another record to accept the newly modified record.

7   How to Delete a Water Body:
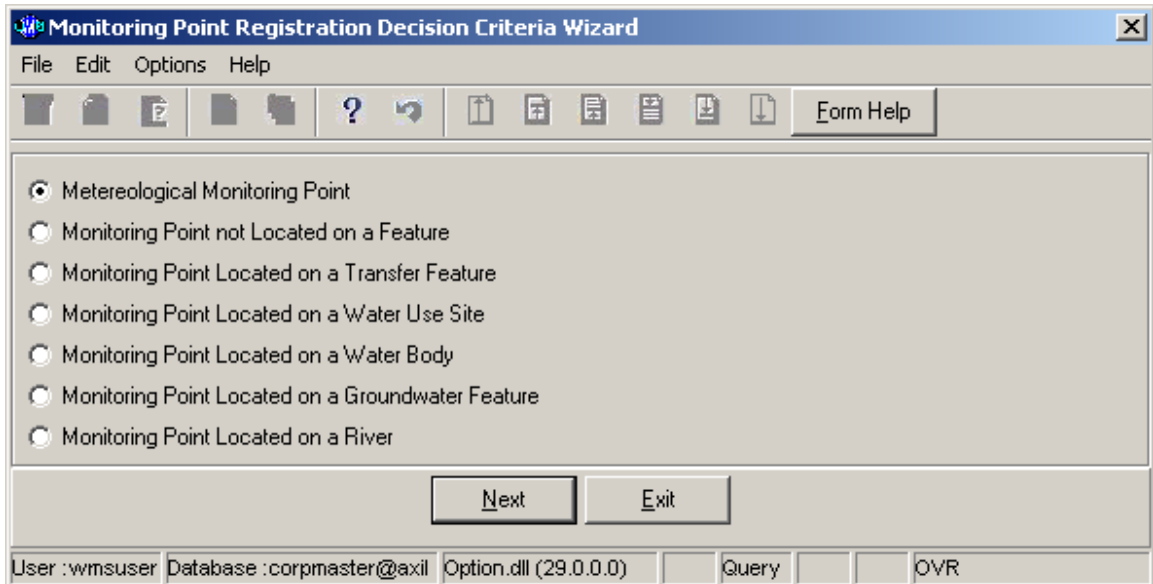
Note: Only the Data Owner may delete it's Water Body record.

7.1   Click on the record to be deleted, to highlight it.

7.2   Click on the   **Delete** button. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

7.3   A confirmation message will be displayed asking if you would like to delete the record.

7.4   Click on the OK option to confirm the deletion.

How to register a Monitoring Point using Groundwater Feature

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

3.1   Open the **Monitoring Point Registration Decision Criteria Wizard**

3.2   Choose any of the relevant options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Decision Criteria Wizard**.

4   How to Search for a Groundwater Feature:

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for Groundwater Feature.

4.1 Open the **Groundwater Feature Decision Criteria Wizard**.

4.2 Choose any of the relevant options to search for a **Groundwater Feature** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

How to Search for a Groundwater using Groundwater Feature Filter Criteria.

4.3 Click on the **Groundwater Feature Filter Criteria** radio button, the click the **Next** button

4.4 This will open the **Groundwater Feature Filter Criteria Wizard**

4.5 Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

444
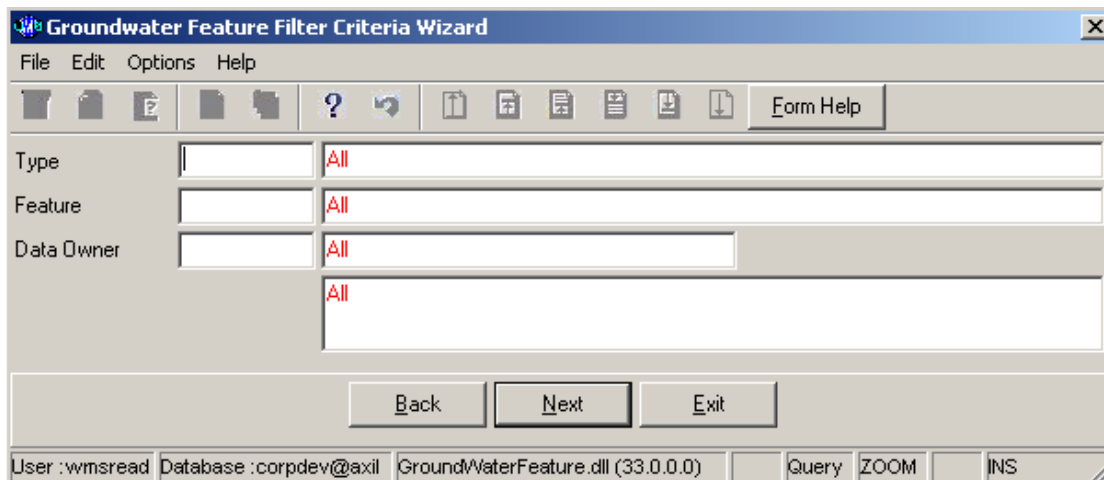
4.6 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

4.7 Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **Groundwater Selection** form, select a **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection

4.8   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

4.9   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation** form, select a **Data Owner LE** to be used as a filter and click on the ⬚ **Select** **Select** button to return the selection.

Organisation Id	Organisation Name	Start Date	End Date
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
12694	WATER MANAGEMENT SYSTEM, UNKNOWN	2002-10-11	9999-12-31

4.10   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu*.

4.11   Click on the **Next** button to open the **Groundwater Feature Maintenance Wizard** form with records for the specified Filter criteria.

4.12   Select the **Exit** button to close the form and return to the main menu

How to Search for a Groundwater using Groundwater Feature History Filter Criteria.

4.3   Click on the **Groundwater Feature History Filter Criteria** radio button, the click the **Next** button

4.4   This will open the **Groundwater Feature History Filter Criteria Wizard**

4.5   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a Feature Type to be used as a filter and click on the **Select** button to return the selection.

4.6 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

4.7 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Groundwater Feature Selection Wizard** form, select a Feature to be used as a filter and click on the **Select** button to return the selection

4.8 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

4.9 Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a Data Owner LE to be used as a filter and click on the **Select** **Select** button to return the selection.

4.10 The **Data Owner Organisation Abbreviation and Name** fields will be automatically populated as they are linked to the **Data Owner LE ID**

4.11 Enter the **Change User ID** or click on the **ZOOM** **Zoom** button to open the **User Selection** form, select a **Change User** to be used as a filter and click on the **Select** button to return the selection.

4.12   The **Change User Name** field will be automatically populated as it is linked to the Change User ID

4.13   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the **Select** **Select** button to return the selection.

4.14   The **Change User Organisation Abbreviation and Name** fields will be automatically
        populated as they are linked to the Change User Organisation ID.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exit** button will close the form and return to the main menu.*

4.15   Click on the **Next** button to open the **Groundwater Feature History View** form with
        records for the specified Filter criteria.

4.16   Select the **Exit** button to close the form and return to the main menu

How to Search for a Groundwater using Groundwater Feature in Geographical Area.

4.3   Click on the **Groundwater Feature in Geographical Area Filter Criteria** radio button, the click the **Next** button

4.4   This will open the **Groundwater Feature in Geographical Area Filter Criteria Wizard**

4.5 On the **High Level Geographic Feature Types**, click on the **Reach, Sector, Monitoring Point, Water Body Point, Transfer Feature, River. Water Body, Water Use Site, Geographical Area** or the **All Features** option to filter out records associated with a selected type of Geographical Feature.

4.6 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Groundwater Feature Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection.

4.7 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

4.8 On the **High Level Geographical Area Types**, click on the **WMA**, **Sub catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **All** radio button to select a specific High Level Geographical Area Type.

Note: The Selection of WMA, Sub catchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Sub catchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared.

4.9 Enter the **Geographical Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

4.10   The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

4.11   Click on the **Next** button to open the **Groundwater Feature in Geographical Area Select Wizard** form with records for the specified Filter criteria.

4.12   Select the **Exit** button to close the form and return to the main menu

How to Search for a Groundwater Feature using Groundwater Feature Reference

4.3   Click on the **Groundwater Feature Reference** radio button, the click the **Next** button

4.4   This will open the **Feature Reference Filter Criteria Wizard**

Note: Any combination or no filter criteria may be specified.

4.5   On the **High Level Geographic Feature Types**, click on the **Reach Zoning Purposes, Water Quality Feature, Monitoring Feature, Transfer Feature, Geographical Area** or the **All Features** option to filter out records associated with a selected type of Geographical Feature

4.6   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Feature Selection** form to select a specific **Geographical Feature ID** according to the selected **High Level Geographical Feature Type**, select a **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection.

4.7   The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

4.8   Enter the **System Datasource ID** or click on the **ZOOM** **Zoom** button to open the **System Datasource Selection** form, select a System Datasource to be used as a filter and click on the **Select** **Select** button to return the selection.
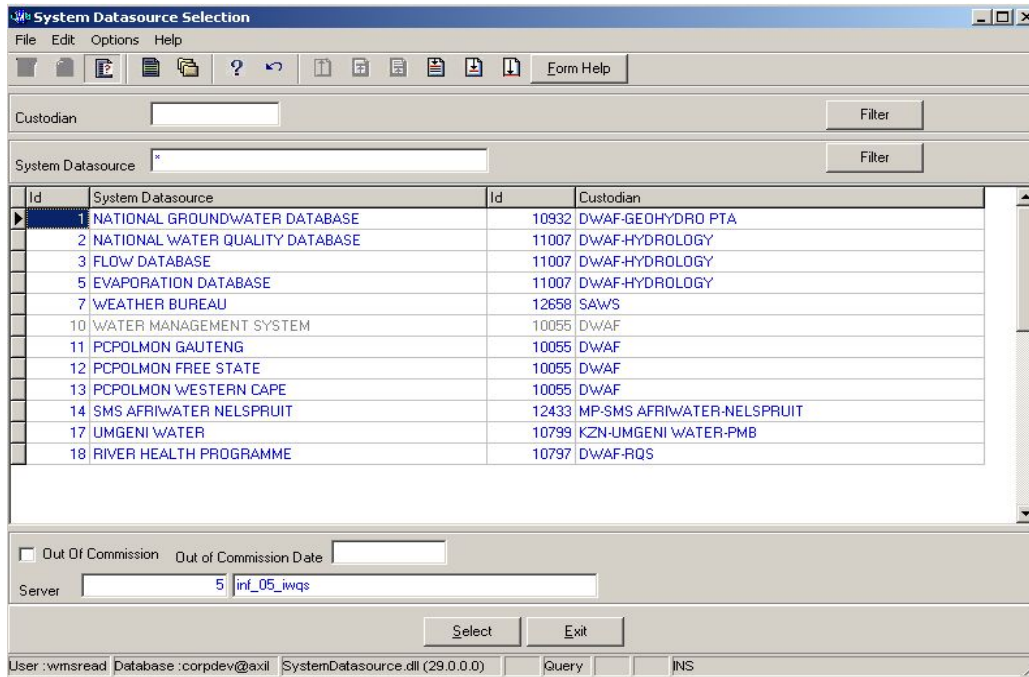
4.9 The **System Datasource Name** will be automatically displayed as it is linked to the System Datasource ID.

4.10 Enter the **Numbering Convention Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the Numbering Convention to be used as a filter and click on the **Select** button to return the selection.
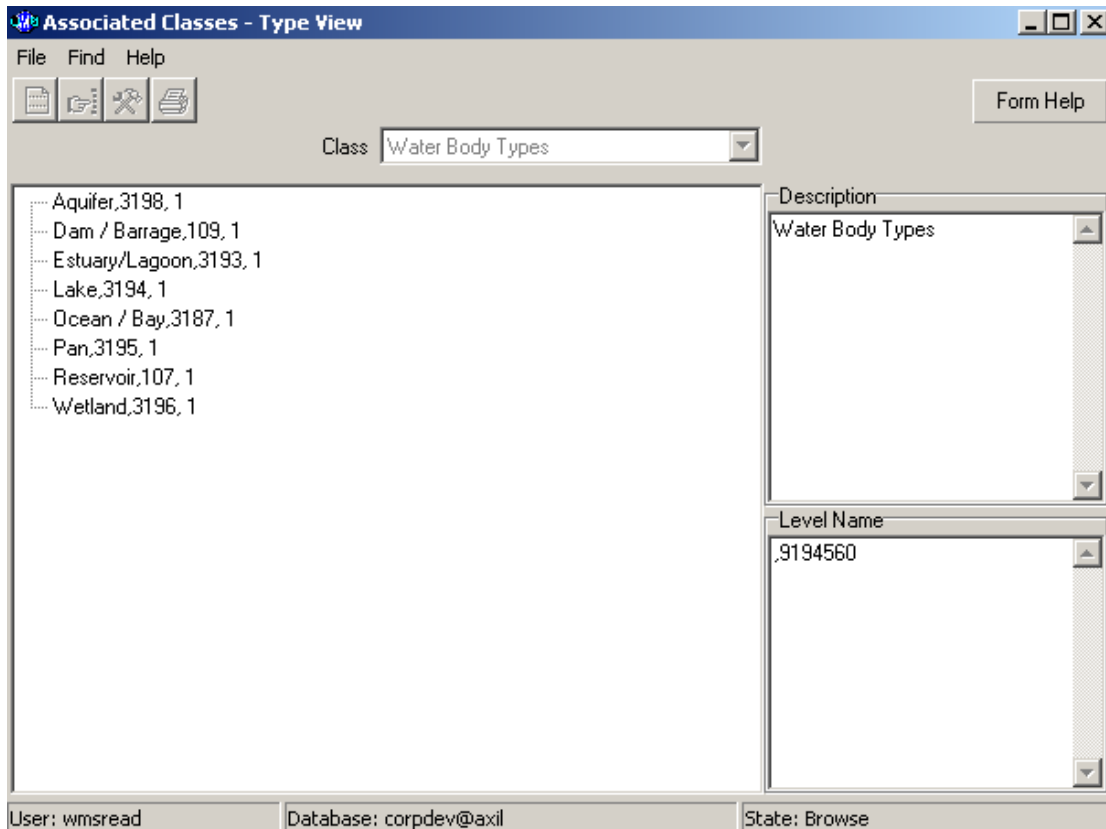
4.11   The **Numbering Convention Type Name** will be automatically displayed as it is linked to the Numbering Convention Type ID.

4.12   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the Data Owner to be used as a filter and click on the ⎣ _Select_ ⎦ **Select** button to return the selection.
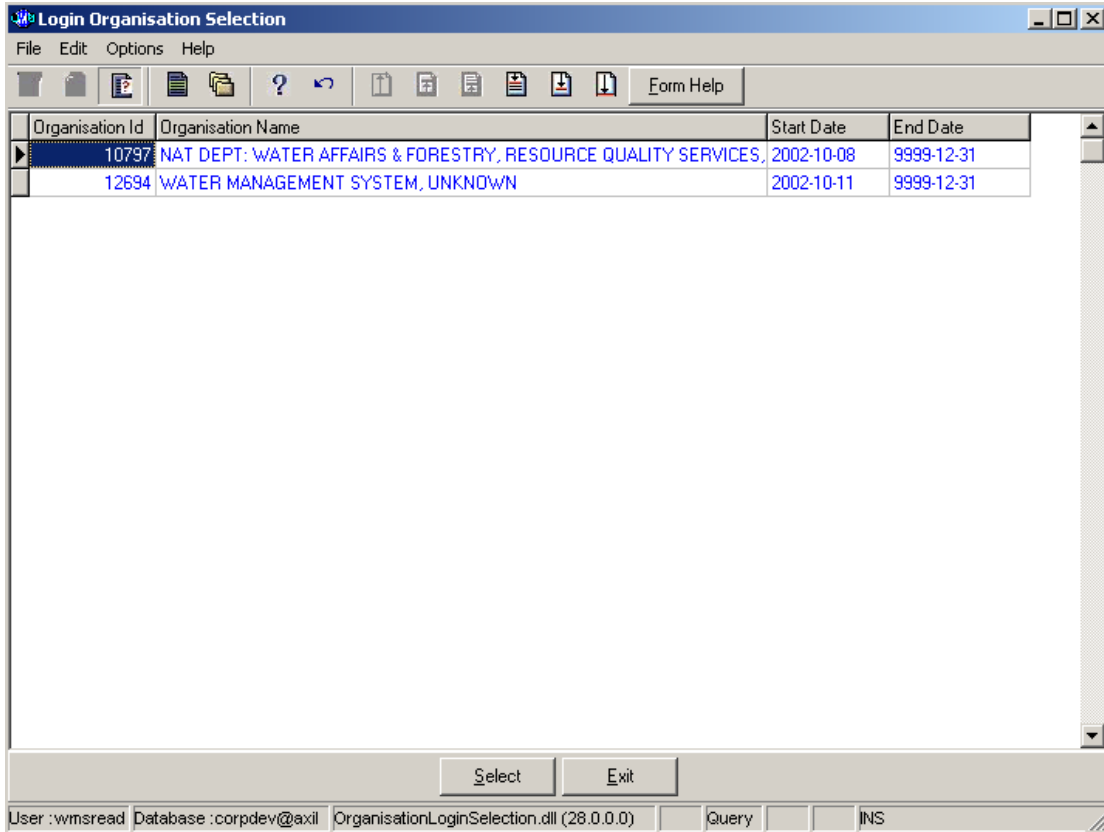
4.13   The **Data Owner Caption** and the **Data Owner LE Abbreviation** will be automatically displayed as they are linked to the Data Owner LE ID.

4.14   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the Change User Organisation to be used as a filter and click on the ⎣ _Select_ ⎦ **Select** button to return the selection.

4.15   The **Change User Organisation Abbreviation** will be automatically displayed as it is linked to the Create User Organisation ID.

Note: The **Back** button will close the form and return to the Decision Criteria form.

Note: The **Exi**t button will close the form and return to the main menu.

4.16   Click on the **Next** button to open the **Feature Reference Maintenance Wizard** with the records for the specified filter criteria.

4.17   Click the **Exi**t button will close the form and return to the main menu.

5   How to Add a new Groundwater Feature:

5.3   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Groundwater** from the sub menu, this will open the **Groundwater Feature Decision Criteria Wizard**, Select one of the options form **Decision Criteria to** be able to open maintenance form.

Note: if you click on the Groundwater Feature Filter Criteria radio button, and click on the Next button form the Decision Criteria, This will open the Groundwater Feature Filter Criteria Wizard, then click the Next button to open the Groundwater Feature Maintenance Wizard

5.4   Click on the **Create** button to add a new record.

5.5   An empty line displays to allow the addition of a new record.

*Note: The **Geographical Area ID** will be automatically generated by the system when the record is successfully created*

5.6   Enter the **Geographical Area Name**. *Note: The Geographical Area Name shall be unique for all the Geographical Area records.*

5.7   Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the Select button to return the selection.
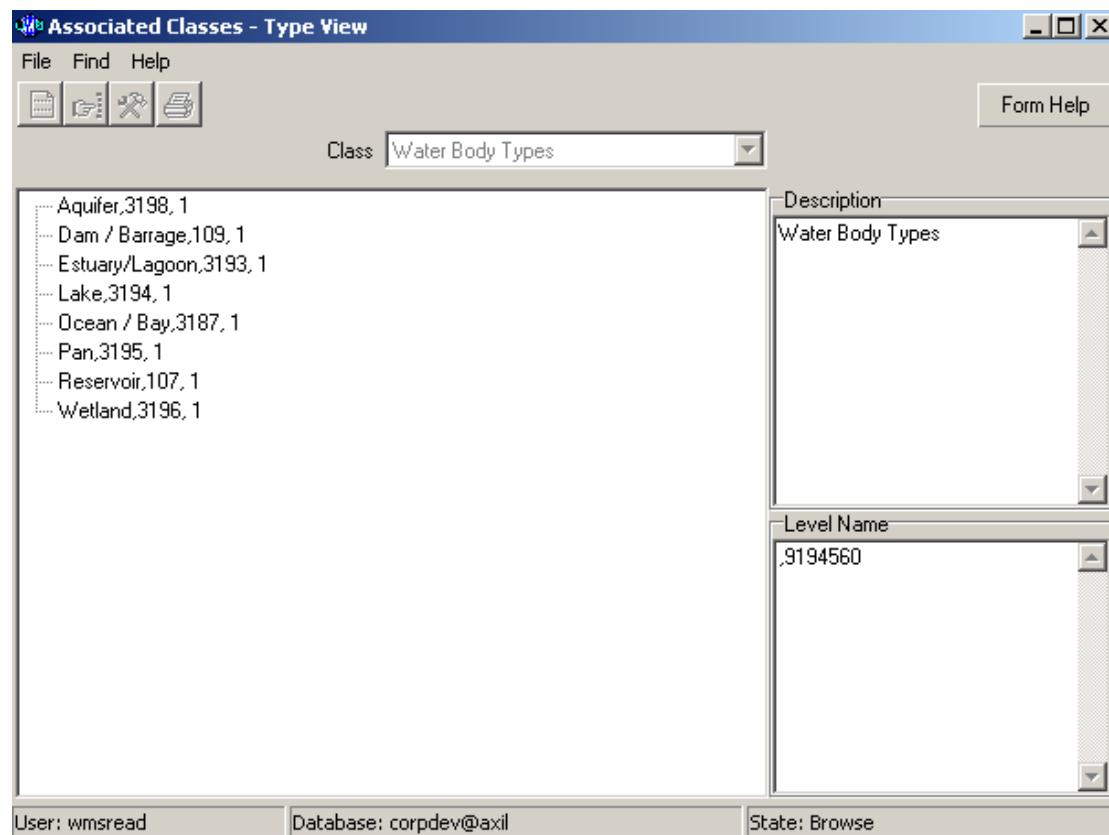
5.8   The **Geographical Area Type Name** will be automatically displayed as it is linked to the Geographical Area Type ID.

5.9   Enter the **Geographical Area Description**.

5.10   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the ZOOM **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the ⌐Select¬ **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*

5.11   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

5.12   *The **QA Date** field will by default be empty when creating the record.*

5.13   Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date file with the system date. *Note: This can only be performed by the Central Administrator.*

*Note: The **Close Date** will by default be empty when creating the record.*

5.14   Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

5.15   The **Point Latitude, Point Longitude, Longitude & Latitude Degrees** will be automatically displayed

5.16   Enter the **Altitude** for the Point Related Feature

5.17   Select a **Latitude Longitude Capture Method** form the **drop down** menu

5.18   The **Latitude Longitude Capture Method Code** will be automatically displayed

5.19   Select a **Altitude Capture Method** form the **drop down** menu

5.20   The **Altitude Capture Method Code** will be automatically displayed

5.21   Select a **Projection Type** form the **drop down** menu

5.22   The **Projection Type Code** will be automatically displayed

5.23   Tab to accept the newly created record.

*Note: the **Back** button will return to the previous Filter Criteria or Selection form.*

5.24   Click on the **Exit** button to go to the main menu.

6   How to Edit a Groundwater Feature:

Note: Only the Data Owner may edit it's Groundwater Feature record and the Central Administrator may edit any record.

6.1   Click on the record to be edited to highlight it, and click on the Modify Records button.

Note: If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.

6.2   Edit the record as required.

6.3   Click on another record to accept the newly modified record.

7   How to Delete a Groundwater Feature:

Note: Only the Data Owner may delete it's Groundwater Feature record and the Central Administrator may edit any record.

7.1   Click on the record to be deleted, to highlight it.

7.2   Click on the **Delete** button. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

7.3   A confirmation message will be displayed asking if you would like to delete the record.

7.4   Click on the OK option to confirm the deletion.

How to register a Monitoring Point using River

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for a Monitoring Point.

3.1   Open the **Monitoring Point Registration Decision Criteria Wizard**

3.2   Choose any of the relevant options to search for a **Monitoring Point** and click on the **Next** button to open a specific **Decision Criteria Wizard**.

How to Search for a River:

Note: All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for River.

3.3   Open the **River Decision Criteria Wizard**.

3.4   Choose any of the relevant options to search for a **River** and click on the **Next** button to open a specific **Filter Criteria Wizard**.

How to Search for a River using River Filter Criteria.

3.5 Click on the **River Filter Criteria** radio button, the click the **Next** button

3.6 This will open the **River Filter Criteria Wizard**
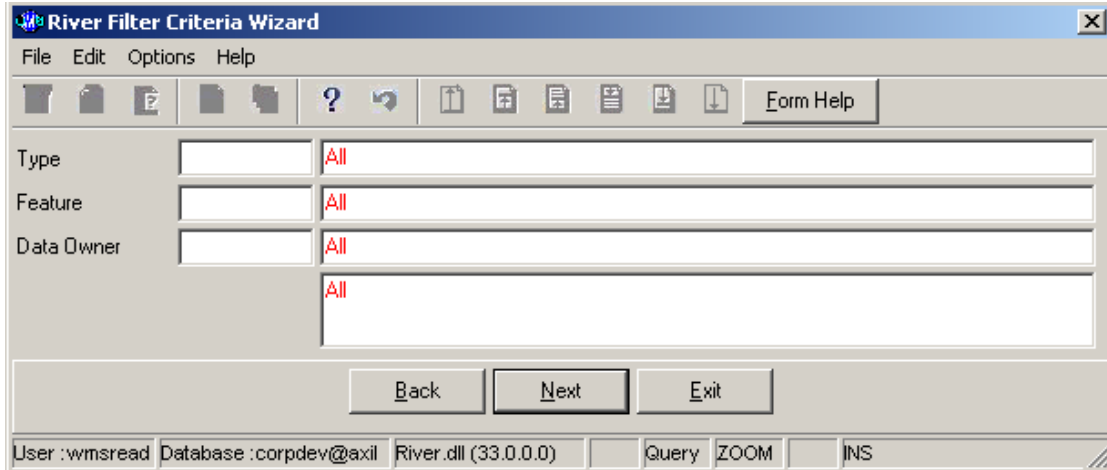
3.7 Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associated Classes – Type Selection** form, select a **Geographical Feature Type** to be used as filter and click on the [icon] **Select** button to return the selection.
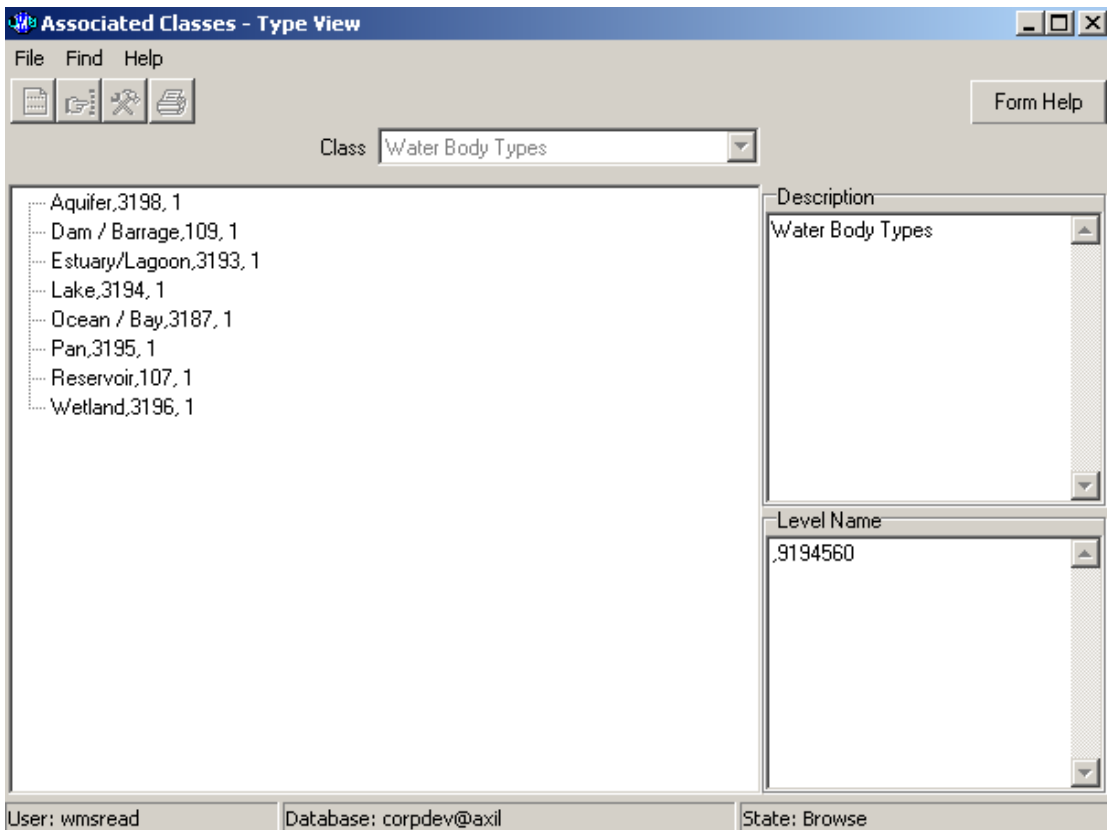
3.8 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

3.9   Enter the **Geographical Feature ID** or click on the **ZOOM** **Zoom** button to open the **River Selection** form, select a **Feature** to be used as a filter and click on the **Select** button to return the selection

3.10   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

3.11   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation** form, select a **Data Owner LE** to be used as a filter and click on the **Select** button to return the selection.

3.12   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner LE ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exit** button will close the form and return to the main menu.*

3.13   Click on the **Next** button to open the **River Maintenance Wizard** form with records for the specified Filter criteria.
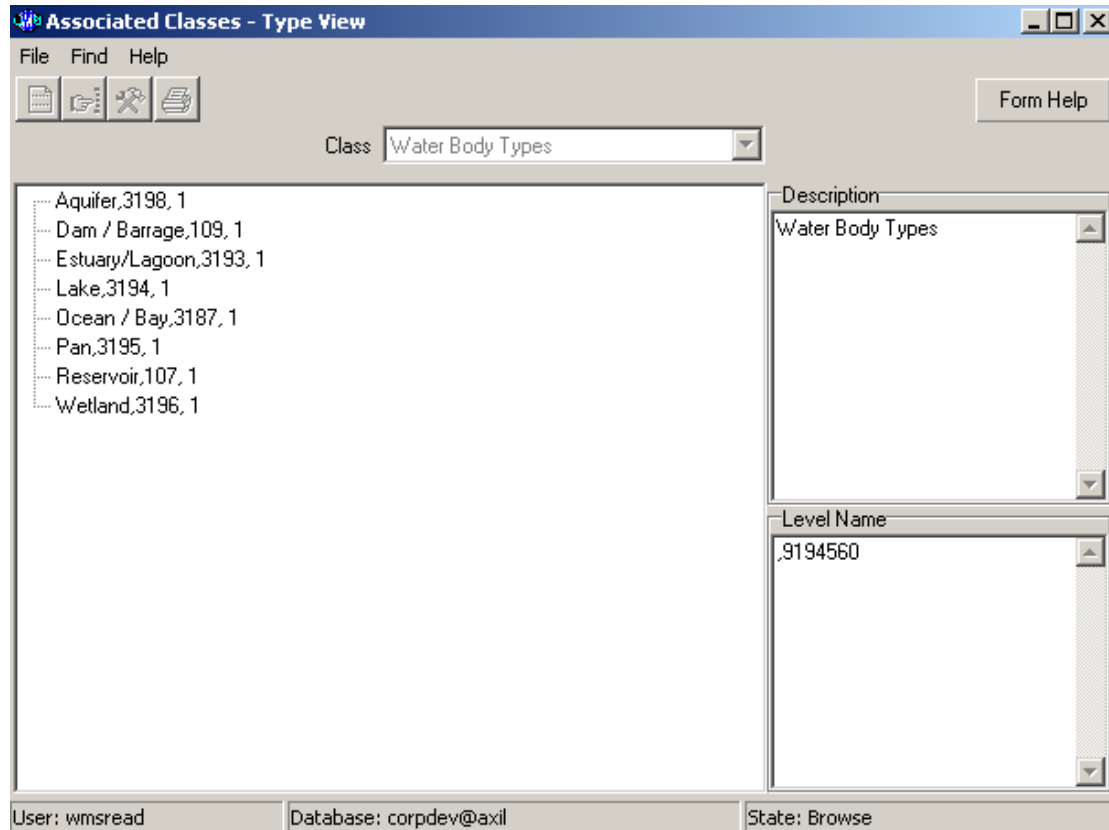
3.14   Select the **Exit** button to close the form and return to the main menu

How to Search for a River using River History Filter Criteria.

3.3   Click on the **River Filter Criteria** radio button, the click the **Next** button

3.4   This will open the **River History Filter Criteria Wizard**

3.5   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to
       open the **Associated Classes – Type Selection** form, select a Feature Type to be

       used as a filter and click on the ▣**Select** button to return the selection.

3.6   The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

3.7   Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **River Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection
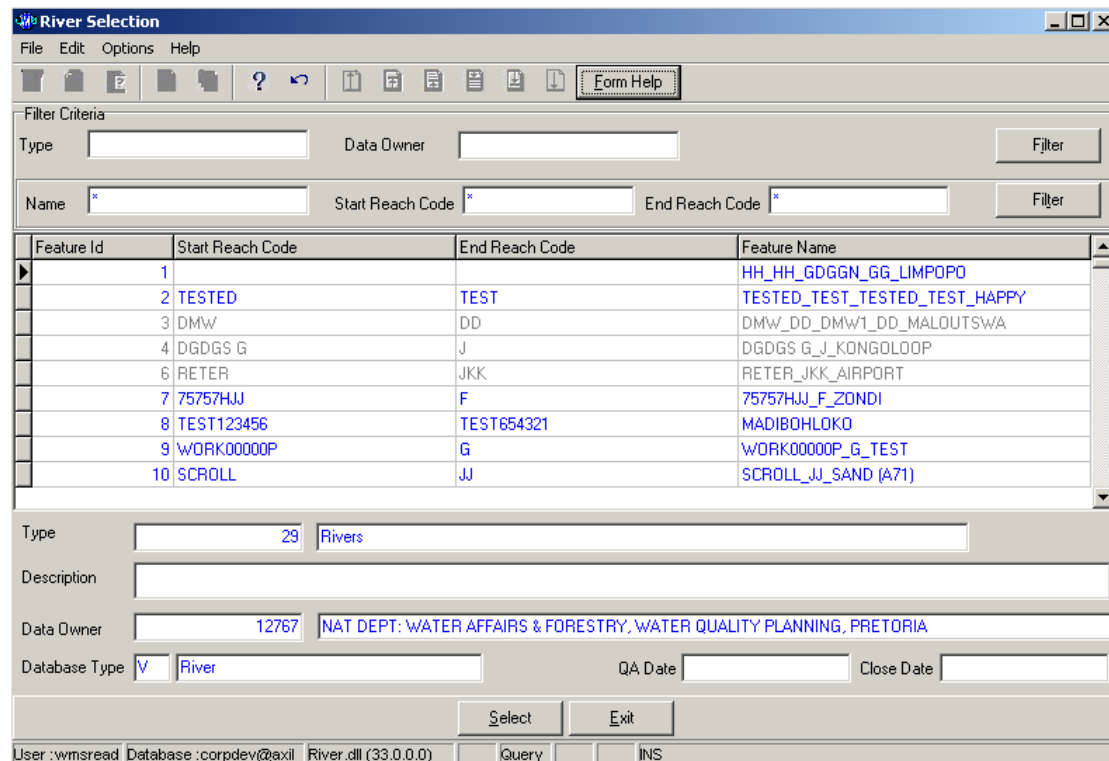
3.8   The **Feature Name** field will be automatically populated as it is linked to the Feature
       ID

3.9   Enter the **Data Owner LE ID** or click on the ZOOM **Zoom** button to open the **Login
       Organisation** form, select a Data Owner LE to be used as a filter and click on the
       [Select] **Select** button to return the selection.

Organisation Id	Organisation Name	Start Date	End Date
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
12694	WATER MANAGEMENT SYSTEM, UNKNOWN	2002-10-11	9999-12-31
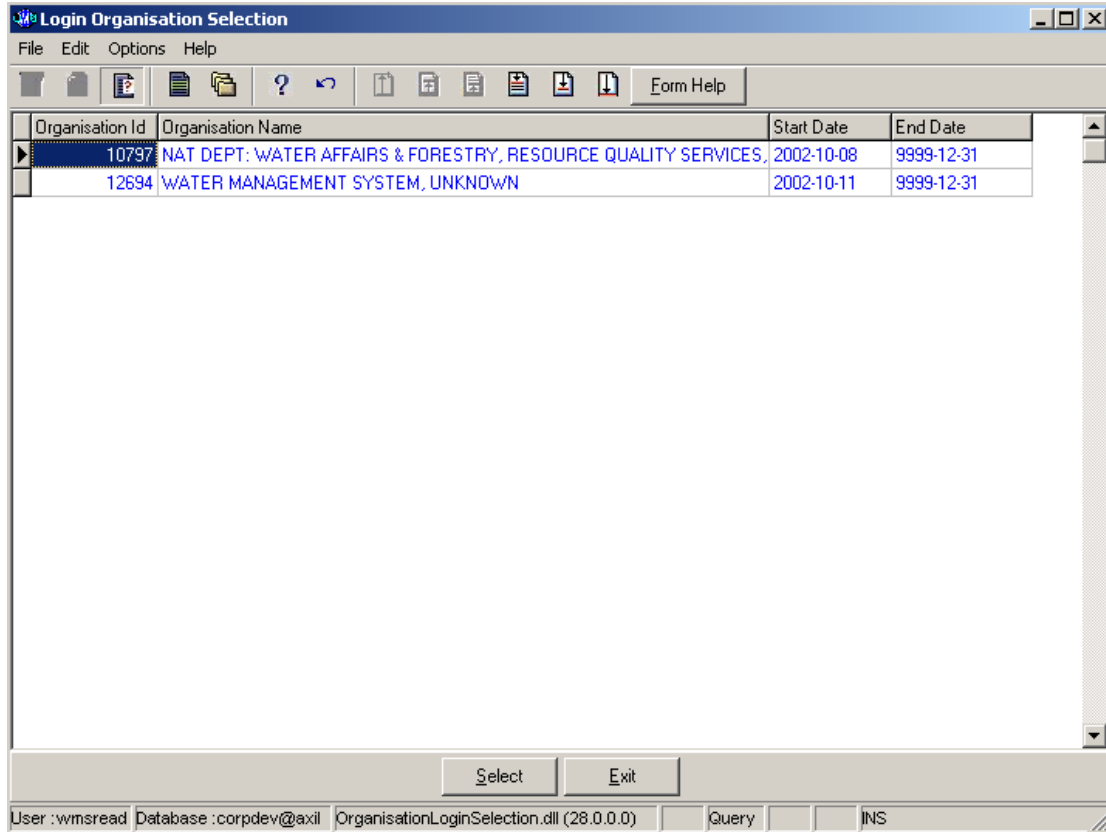
3.10   The **Data Owner Organisation Abbreviation** fields will be automatically populated
       as it is linked to the **Data Owner LE ID**

3.11   Enter the **Change User Login** or click on the ZOOM **Zoom** button to open the **User
       Selection** form, select a **User** to be used as a filter and click on the
       [Select] **Select** button to return the selection.
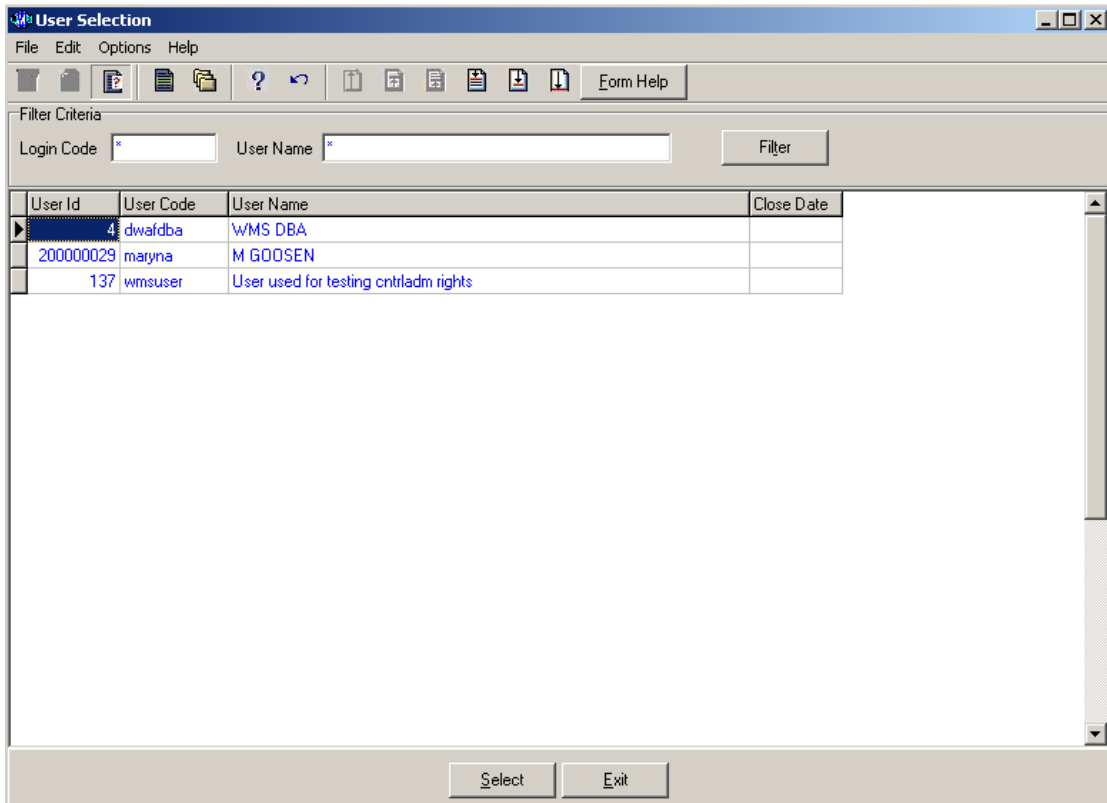
3.12 The **Change User Name** field will be automatically populated as it is linked to the Change User ID

3.13 Enter the **Change User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select a **Change User Organisation** to be used as a filter and click on the Select **Select** button to return the selection.

3.14   The **Change User Organisation Abbreviation** fields will be automatically populated as it is linked to the Change User Organisation ID.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

3.15   Click on the **Next** button to open the **River History View Wizard** form with records for the specified Filter criteria.

3.16 Select the **Exit** button to close the form and return to the main menu

How to Search for a River using River in Geographical Area.

3.3 Click on the **River in Geographical Area Filter Criteria** radio button, the click the **Next** button

3.4 This will open the **River Feature in Geographical Area Filter Criteria Wizard**

3.5 On the **High Level Geographic Feature Types**, click on the **Reach, Sector, Monitoring Point, Transfer Feature, River, Water Body, Water Use Site, Geographical Area, Ground Water Feature** or the option to filter out records associated with a selected type of Geographical Feature.

*Note: By default the **All** feature option will be selected*

3.6 Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **River Selection** form to select a specific **Geographical Feature ID** according to the selected **High Level Geographical Feature Type**, select a **Feature** to be used as a filter and click on the Select **Select** button to return the selection.

3.7 The **Feature Name** field will be automatically populated as it is linked to the Feature ID

3.8 Enter the **Geographical Area ID** or click on the ZOOM **Zoom** button to open the **Geographical Area Selection** form, select a Geographical Area to be used as a filter and click on the **Select** button to return the selection.

3.9 The **Geographical Area Name** field will be automatically populated as it is linked to the Geographical Area ID

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

3.10 Click the **Next** button to open the **Geographical Feature in Geographical Area Select Wizard** with the records for the specified Filter criteria.

3.11   Select the **Exit** button to close the form and return to the main menu

How to Search for a River using River Feature Reference

3.3   Click on the **River Feature Reference** radio button, the click the **Next** button

3.4   This will open the **River Feature Reference Filter Criteria Wizard**

Note: Any combination or no filter criteria may be specified.

3.5 On the **High Level Geographic Feature Types**, click on the **Reach Zoning Purposes, Monitoring Feature**, **Transfer Feature, River, Water Body, Water Use Site, Geographical Area, Ground Water Feature** or the option to filter out records associated with a selected type of Geographical Feature.

Note: *By default the All feature option will be selected*

3.6 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Feature Selection** form to select a specific **Geographical Feature ID** according to the selected **High Level Geographical Feature Type**, select a **Feature** to be used as a filter and click on the **Select** **Select** button to return the selection.

3.7 The **Feature Name** will be automatically displayed as it is linked to the Feature ID.

3.8 Enter the **System Datasource ID** or click on the **ZOOM** **Zoom** button to open the **System Datasource Selection** form, select a System Datasource to be used as a filter and click on the **Select** **Select** button to return the selection.

3.9 The **System Datasource Name** will be automatically displayed as it is linked to the System Datasource ID.

3.10 Enter the **Numbering Convention Type ID** or click on the **ZOOM Zoom** button to open the **Associated Classes – Type Selection** form, select the Numbering Convention to be used as a filter and click on the **Select** button to return the selection.
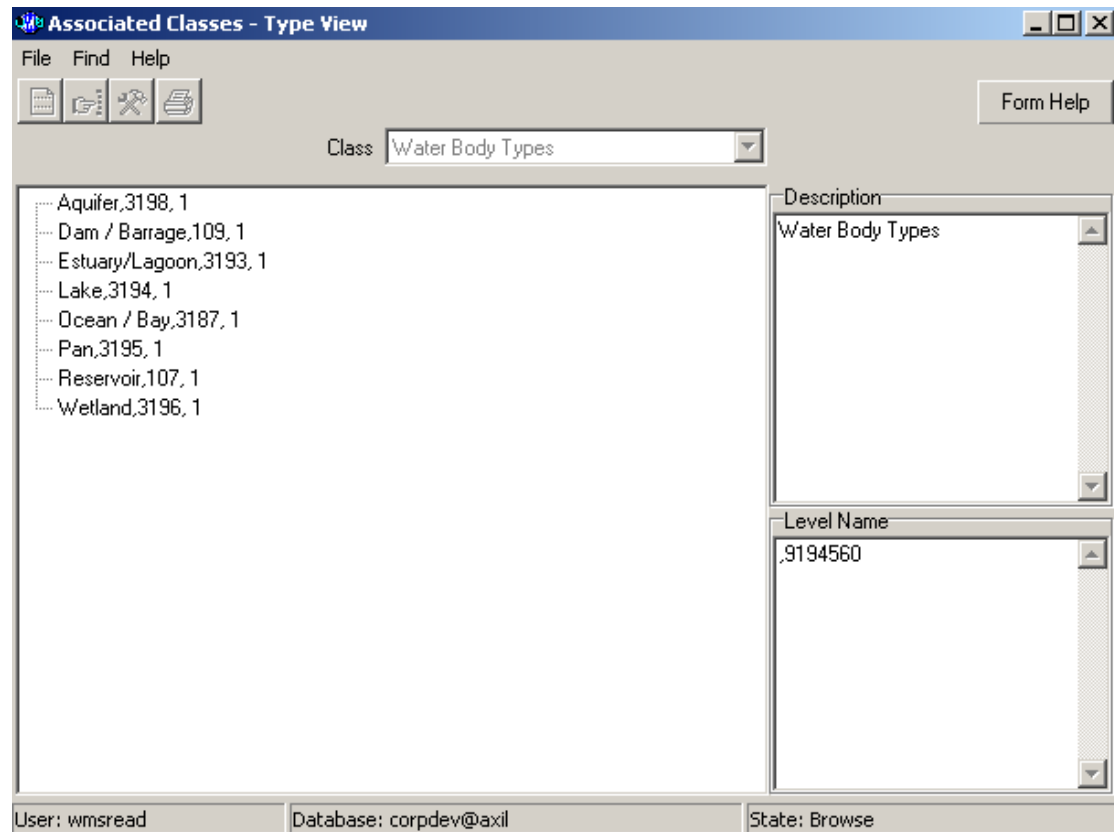
3.11   The **Numbering Convention Type Name** will be automatically displayed as it is linked to the Numbering Convention Type ID.

3.12   Enter the **Data Owner LE ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the Data Owner to be used as a filter and click on the **Select** **Select** button to return the selection.

3.13　The **Data Owner Caption** and the **Data Owner LE Abbreviation** will be automatically displayed as they are linked to the Data Owner LE ID.

3.14　Enter the **Create User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select the **User Organisation** to be used as a filter and click on the Select **Select** button to return the selection.

3.15   The **Create User Organisation Abbreviation** will be automatically displayed as it is linked to the Create User Organisation ID.

Note: The **Back** button will close the form and return to the Decision Criteria form.

Note: The **Exi**t button will close the form and return to the main menu.

3.16   Click on the **Next** button to open the **River Reference Selection Wizard** with the records for the specified filter criteria.

3.17   Click the **Exi**t button will close the form and return to the main menu.

4   How to Add a new River:

4.3   Select **Water Network Management** from the **Water Resource Management**
              menu bar, Select **River** from the sub menu, this will open the **River Decision**
              Criteria Wizard, Select one of the options form **Decision Criteria to** be able to
              open maintenance form.

Note: if you click on the River Filter Criteria radio button, and click on the Next button
form the Decision Criteria, This will open the River Filter Criteria Wizard, then click the
Next button to open the River Maintenance Wizard

4.4   Click on the [icon]**Create** button to add a new record.

4.5   An empty line displays to allow the addition of a new record.

[icon] *Note: The **Geographical Area ID** will be automatically generated by the system when the record is successfully created*

4.6   Enter the **Start Reach Code**

4.7   Enter the **End Reach Code**

4.8   Enter the **River Name**.

4.9   The **Feature Name** will be automatically displayed

4.10   Enter the **Geographical Area Type ID** or click on the [ZOOM] **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the [icon]Select button to return the selection.

4.11   The **Geographical Area Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

4.12   Enter the **Feature Description**

4.13   To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open **a Login Organisation Selection** form, select the applicable record, and click on the [Select] **Select** button to return the selection. *Note: Only active organisations with passwords are available for selection.*
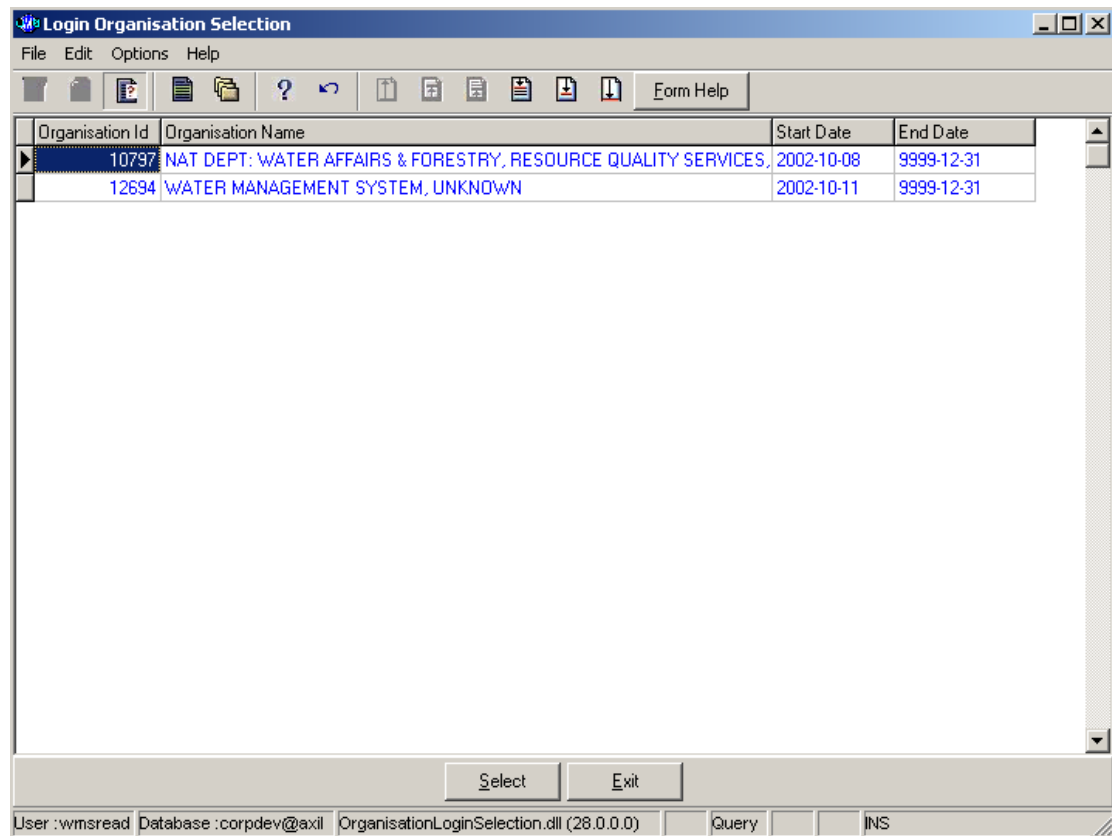
4.14   The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

4.15   The **QA Date** will be automatically displayed.

4.16   Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date file with the system date. *Note: This can only be performed by the Central Administrator.*

*Note: The **Close Date** will by default be empty when creating the record.*

4.17   Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator. If any other user has logged in the button will be disabled.*

*Note: the **Maintain** button will open the Decision form that displays a list of programs that can be maintained from this Geographical Feature*

*Note: the **Report** button will open a Report Option Decision form that displays a list of reports that can be run for this Geographical Feature*

*Note: the **Back** button will return to the previous Filter Criteria or Selection form.*

4.18   Tab to accept the newly created record.

4.19   Click on the **Exit** button to go to the main menu.

5   How to Edit a River:

Note: *Only the Data Owner may edit it's River record and the Central Administrator may edit any record.*

5.1   Click on the record to be edited to highlight it, and click on the Modify Records button.

Note: *If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.*

5.2   Edit the record as required.

5.3   Click on another record to accept the newly modified record.

6   How to Delete a River:

Note: *Only the Data Owner may delete it's River record and the Central Administrator may edit any record.*

6.1   Click on the record to be deleted, to highlight it.

6.2   Click on the **Delete** button. **Note:** *When records are referenced elsewhere in the system, the delete option will be disabled.*

6.3   A confirmation message will be displayed asking if you would like to delete the record.

6.4   Click on the OK option to confirm the deletion.

Flow Association

Introduction:

The Flow Association module enables the user to maintain Flow Association Information.

Business Rules:

xxii Ensure that the detail added to the system is correct and comprehensive.

xxiii Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

xxiv The Central Administrator may insert, update or delete any Flow Association.

xxv Only the Central Administrator may cause the Quality Assurance date and the Close Date to be set to the system date.

Path:

1.1 Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2 Select **Flow Association** from the sub menu.

1.3 This will open the **Flow Association Decision Criteria Wizard**

Note: The path is only visible to the Central Administrator
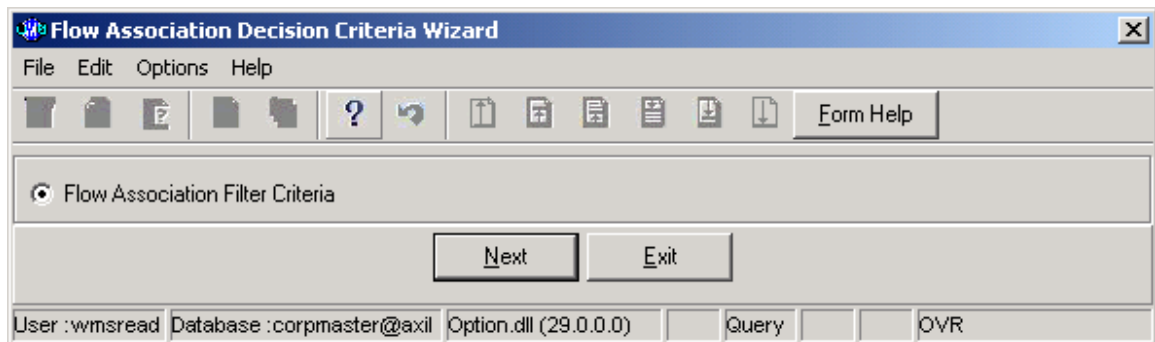
How to Search for a Flow Association

2.1   Open the **Flow Association Decision Criteria Wizard**
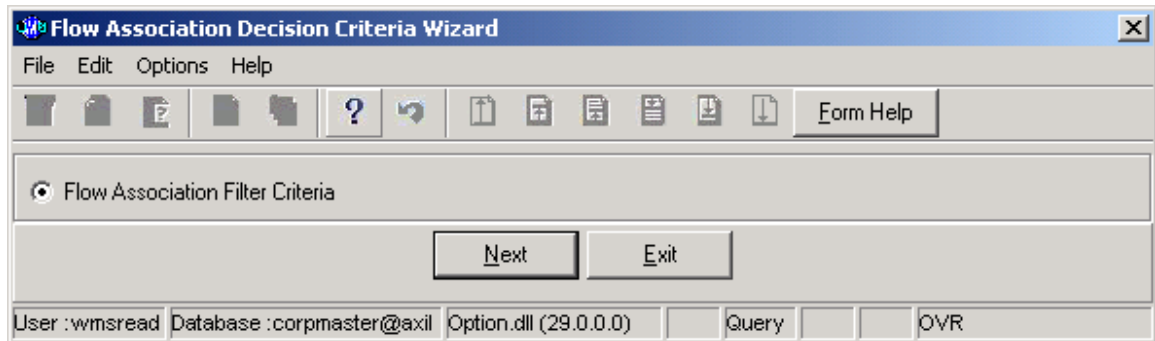
2.2   Click on the **Flow Association Filter Criteria** radio button, the click the **Next** button

2.3   This will open the **Flow Association Filter Criteria Wizard**
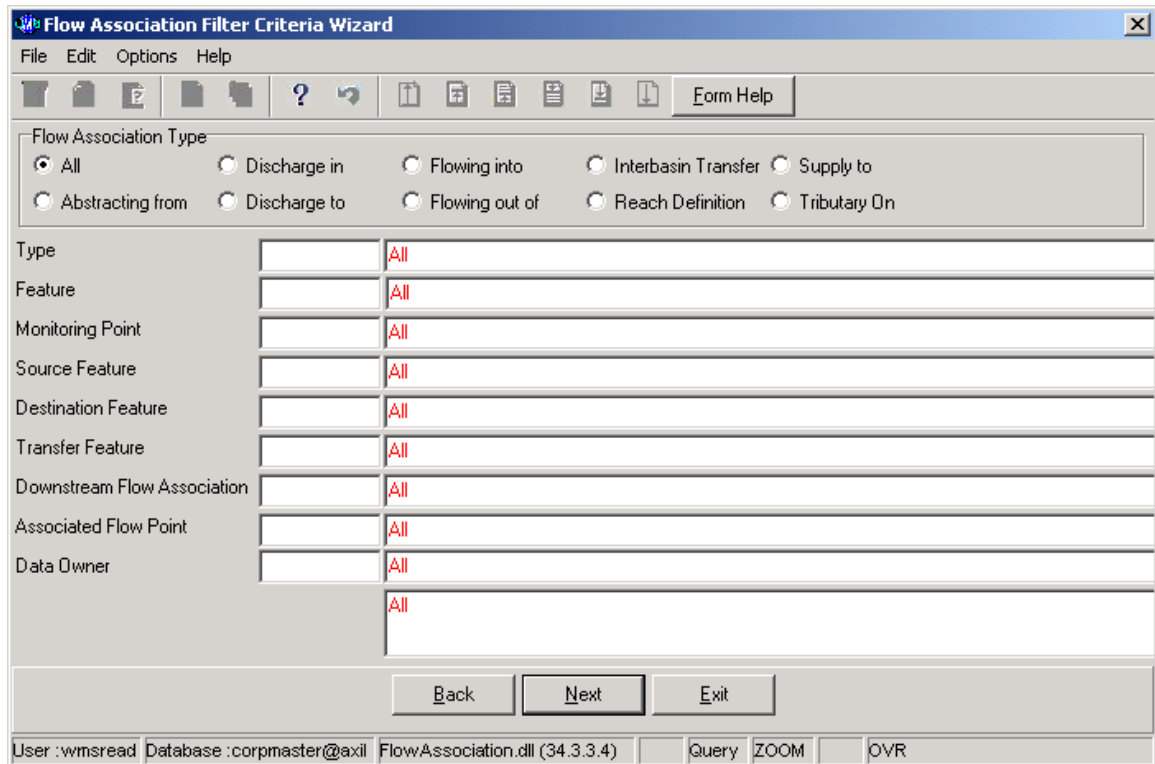
2.4   Select the **Flow Association Type** from the Flow Association Type Radiogroup.

2.5   Enter the **Geographical Feature Type ID** or click on the **ZOOM Zoom** button to open the **Associated Classes – Type View** form, select a **Geographical Feature Type** to be used as filter and click on the **Select** button to return the selection.

2.6 The **Geographical Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

2.7 Enter the **Feature ID** or click on the `ZOOM` **Zoom** button to open the **Flow Association Selection** form, select a Feature to be used as a filter and click on the **Select** button to return the selection

2.8   The **Feature Name** field will be automatically populated as it is linked to the Feature ID

2.9   Enter the **Monitoring Point ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Point Selection** form, select a **Monitoring Point ID** to be used as filter and click on the **Select** **Select** button to return the selection.

2.10   The **Monitoring Point Name** field will be automatically populated as it is linked to the Monitoring Point ID.

2.11   Enter the **Source Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Feature Selection** form, select a **Source Feature ID** to be used as filter and click on the   Select   **Select** button to return the selection.

2.12   The **Source Feature Name** field will be automatically populated as it is linked to the Source Feature ID.

2.13   Enter the **Destination Feature ID** or click on the `ZOOM` **Zoom** button to open the **Geographical Feature Selection** form, select a **Destination Feature ID** to be used as filter and click on the `Select` **Select** button to return the selection.
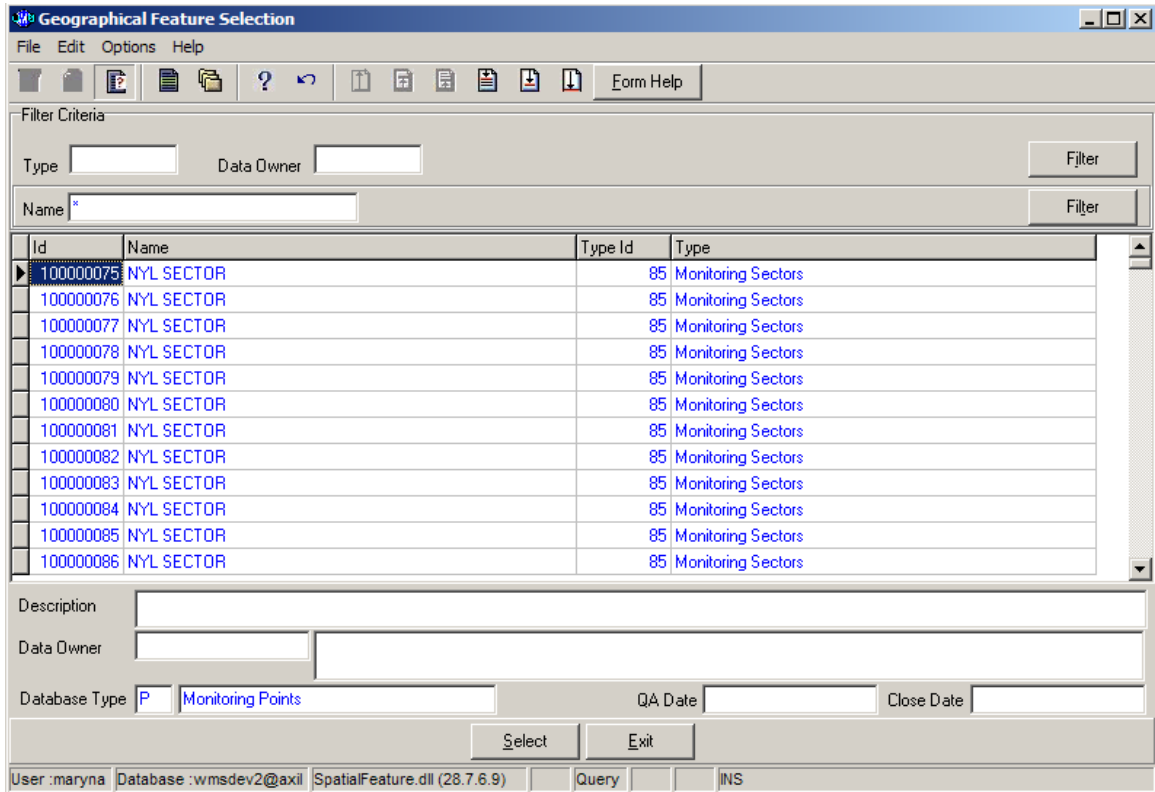
2.14   The **Destination Feature Name** field will be automatically populated as it is linked to the Destination Feature ID.

2.15   Enter the **Transfer Feature ID** or click on the `ZOOM` **Zoom** button to open the **Transfer Feature Selection** form, select a **Transfer Feature ID** to be used as filter and click on the `Select` **Select** button to return the selection.

2.16   The **Transfer Feature Name** field will be automatically populated as it is linked to the Transfer Feature ID

2.17   Enter the **Downstream Flow Feature ID** or click on the **ZOOM** **Zoom** button to open the **Flow Association Selection** form, select a **Downstream Flow Feature ID** to be used as filter and click on the **Select** **Select** button to return the selection.
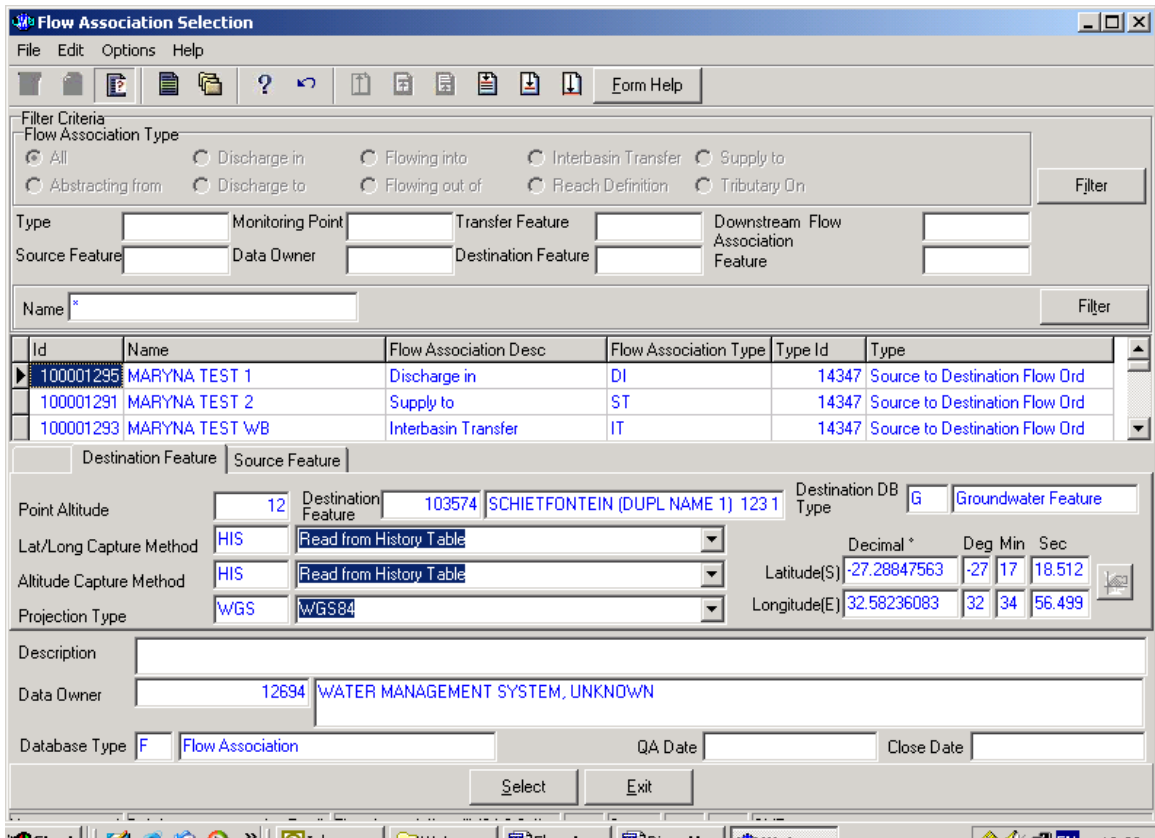
2.18   The **Downstream Flow Association Name** field will be automatically populated as it is linked to the Downstream Flow Feature ID.

2.19   Enter the **Association Flow Point ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Point Selection** form, select a **Association Flow Point ID** to be used as filter and click on the **Select** **Select** button to return the selection.

2.20   The **Association Flow Point Name** field will be automatically populated as it is linked to the Association Flow Point ID.

2.21   Enter the **Data Owner ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation** form, select a **Data Owner** to be used as a filter and click on the **Select** **Select** button to return the selection.

2.22   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner ID**.

*Note: The **Back** button will close the form and return to the Decision Criteria form.*

*Note: The **Exit** button will close the form and return to the main menu.*

2.23   Click on the **Next** button to open the **Flow Association Maintenance Form** with records for the specified Filter criteria.

How to add a new Flow Association

3.1   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Flow Association** from the sub menu, this will open the **Flow Association Decision Criteria Wizard**.

3.2 Click on the 🗋**Create** button to add a new record.

3.3 An empty line displays to allow the addition of a new record

3.4 Enter Geographical Feature **Name**.

3.5 Select **Flow Association Type Description** from the Flow Association Type Dropdown.

3.6 **Flow Association Type** will be automatically populated as it is linked to Flow Association Type Description Dropdown.

3.7 Enter the Geographical Feature **Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type View** form, select a Feature Type to be used as a filter and click on the **Select** button to return the selection.
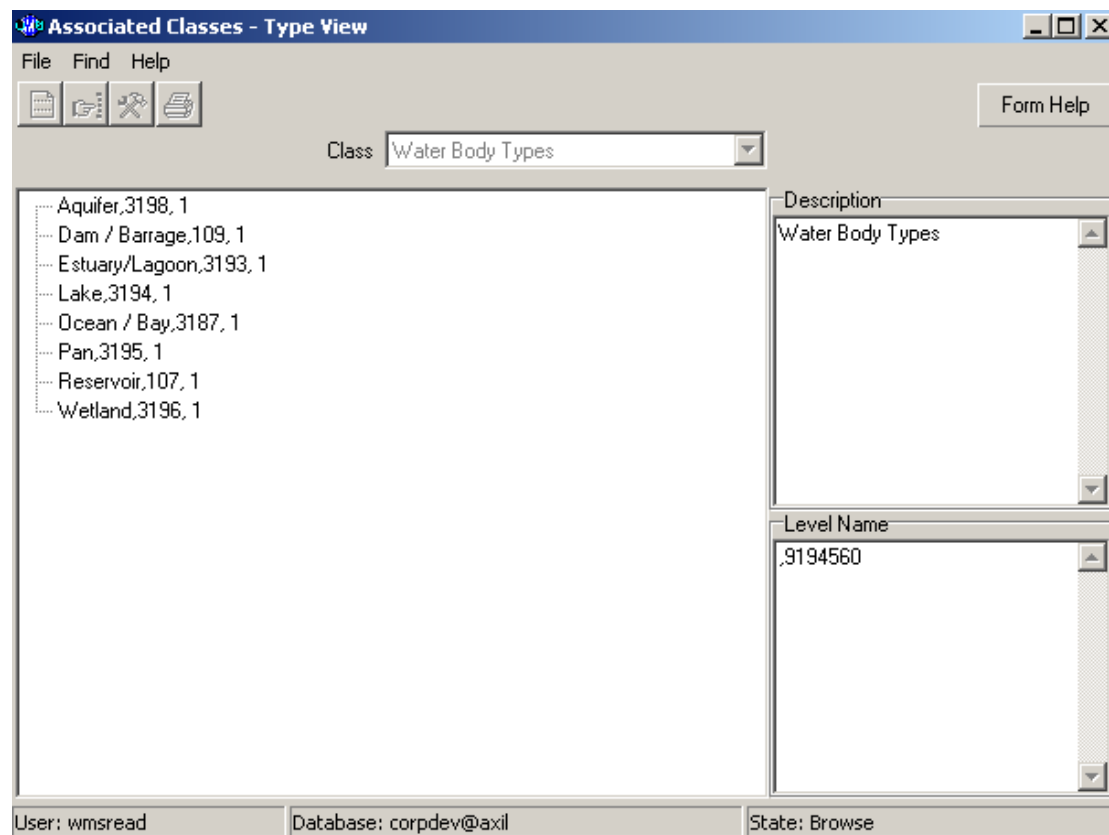
3.7 The **Feature Type** field will be automatically populated as it is linked to the Geographical Feature Type ID

3.8 Enter the Catchment Management Numbering System **Level Code** for a point.

3.9 Enter the Catchment Management Numbering System **Level Number** for a point.

3.10 Enter the **Feature Description** for Geographical Feature Type.

3.11 Select **Source Database Type** from the Source Database Type Dropdown.

3.12 **Source Database Type** will be automatically populated as it is linked to Source Database Type Dropdown.

3.13 Enter the **Source Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Feature Selection** form, select the **Source Feature ID** to be used as filter and click on the Select **Select** button to return the selection.

3.14   The **Source Feature Name** field will be automatically populated as it is linked to the Source Feature ID**.**

3.15   Select **Destination Database Type** from the Destination Database Type Dropdown.

3.16   **Destination Database Type** will be automatically populated as it is linked to Destination Database Type Dropdown.

3.17   Enter the **Destination Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Feature Selection** form, select a **Destination Feature ID** to be used as filter and click on the Select **Select** button to return the selection.

3.18   The **Destination Feature Name** field will be automatically populated as it is linked to the Destination Feature ID.

3.19   Select **Point Located on** description from the Point Located On dropdown.

3.20   **Point Located on** code will be automatically populated as it is linked to Point Located On description.

3.21   Enter the **Transfer Feature ID** or click on the **ZOOM** **Zoom** button to open the **Transfer Feature Selection** form, select a **Destination Feature ID** to be used as filter and click on the **Select** **Select** button to return the selection.

3.22 The **Transfer Feature Name** field will be automatically populated as it is linked to the Transfer Feature ID

3.23 Select **Monitoring Point Role Type Description** from the Monitoring Role Type Dropdown.

3.24 **Monitoring Point Role Type** will be automatically populated as it is linked to Monitoring Role Type Dropdown.

3.25 Enter the **Monitoring Point ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Point Selection** form, select a **Monitoring Feature ID** to be used as filter and click on the **Select** **Select** button to return the selection.

3.26   The **Monitoring Point Name** field will be automatically populated as it is linked to the Monitoring Feature ID.

3.27   Enter the **Downstream Flow Feature ID** or click on the **ZOOM** **Zoom** button to open the **Flow Association Selection** form, select a **Downstream Flow Feature ID** to be used as filter and click on the **Select** **Select** button to return the selection.

3.28 The **Downstream Flow Association Name** field will be automatically populated as it is linked to the Downstream Flow Feature ID.

3.29 Enter **Close Date** on which the feature was set out of use for WMS use.

3.30 Enter the **Association Flow Point ID** or click on the ZOOM **Zoom** button to open the **Monitoring Point Selection** form, select a **Association Flow Point ID** to be used as filter and click on the Select **Select** button to return the selection.

3.31   The **Association Flow Point Name** field will be automatically populated as it is linked to the Association Flow Point ID.

3.32   Enter the **Data Owner ID** or click on the `ZOOM` **Zoom** button to open the **Login Organisation** form, select a **Data Owner** to be used as a filter and click on the `Select` **Select** button to return the selection
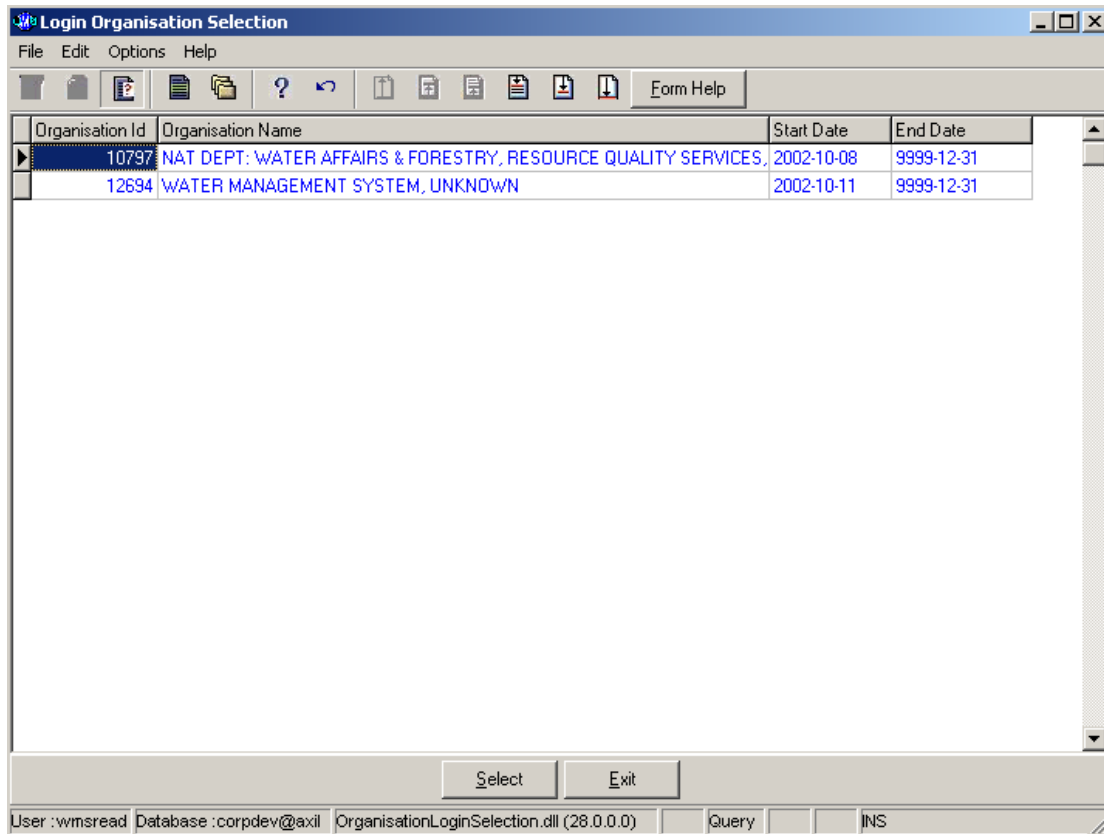
3.33   The **Data Owner Organisation Abbreviation and Name** field will be automatically populated as they are linked to the **Data Owner ID**.

3.34   Activate **Point Location Tab** to fill point related information.

3.35   Enter the **Point Latitude** of the Flow Association Source Feature which must be between 16 and 33 degrees

3.36   Enter the **Point Longitude** of the Flow Association Source Feature which must be between 16 and 33 degrees

3.37   Enter the **Point Altitude** of the Flow Association Source Feature.

3.38   Enter the **Latitude and Longitude Capture Method Code** of the Flow Association Source Feature.

3.39   Enter the **Altitude Capture Method Code** of the Flow Association Source Feature.

3.40   Enter the **Projection Type Code** of the map where the Flow Association Source Feature coordinate is obtained from.

3.41   Enter the **Destination Point Latitude** of the Flow Association Destination Feature which must be between –35 and –22 degrees.

3.42   Enter the **Destination Point Longitude** of the Flow Association Destination Feature which must be between 16 and 33 degrees.

3.43   Enter the **Point Altitude** of the Flow Association Source Feature.

3.44   Enter the **Destination Latitude and Longitude Capture Method Code** of the Flow Association Destination Feature.

3.45   Enter the **Destination Projection Type Code** of the map where the Flow Association Destination Feature coordinate is obtained from.
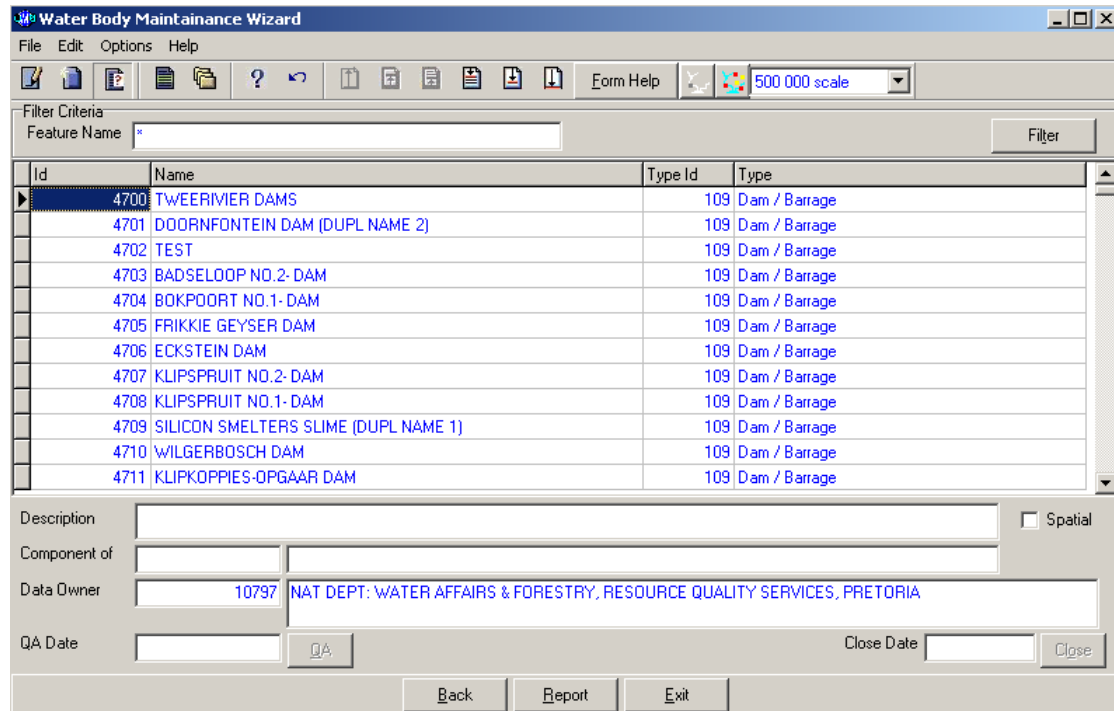
507

Note: *The **Back** button will close the form and return to the Filter Criteria form.*

Note: *The **Exit** button will close the form and return to the main menu.*

Note: *the **Maintain** button will open a Maintain Decision Criteria Form with a list of applicable forms that can be run for the Flow Association Maintenance Form to make a selection.*

Note: *the **Report** button will open a Report Option Decision Form with a list of applicable reports that can be run for the Flow Association Maintenance Form to make a selection.*

Note: *to insert the **Quality Assurance Date** you go into modify mode then back to query mode. The **QA** and **Close buttons** will be activated for you to click, and then date will be inserted automatically.*

How to Edit a Flow Association:

Note: *Data Owners for the different Flow Associations will be implemented to prevent non Data Owners from editing other Organisations' Flow Association information. Only the Data Owner may edit its Flow Association record.*

4.1   On the Maintenance Form click on the record to be edited to   highlight it, and click on

the **Modify Records** button.

4.2   Edit the record as required.

4.3   Click on another record to accept the newly modified record.

How to Delete a Flow Association:

Note: *Only the Data Owner may delete it's Flow Association record and the Central Administrator may delete any record.*

5.1   Click on the record to be deleted, to highlight it under query mode.

5.2   Click on the **Edit** menu and select **Delete Line** option or click F3 on the keyboard.

Note: *When records are referenced else where in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the OK option to confirm the deletion.

Monitor at Feature

Introduction:

The Monitor at Feature module enables the user to maintain Monitoring Feature- Monitoring Point Information.

Business Rules:

xxvi Ensure that the detail added to the system is correct and comprehensive.

xxvii Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

xxviii Data Owners for the different Monitoring Point are implemented to prevent non Data Owners from updating or deleting other Organisations' Monitoring Point Feature information

xxix The Central Administrator may insert, update or delete any type of a Geographical Feature, else the Data Owner may DELETE or UPDATE its Geographical Feature record.

xxx Only the Central Administrator may set the Quality Assurance date and the Close Date to be set to the system date

Path:

1.7 Select **Water Network Management** from the **Water Resource Management** menu bar.

1.8 Select **Monitor at feature** from the sub menu.

1.9 This will open the **Monitor at Feature Decision Criteria Wizard**
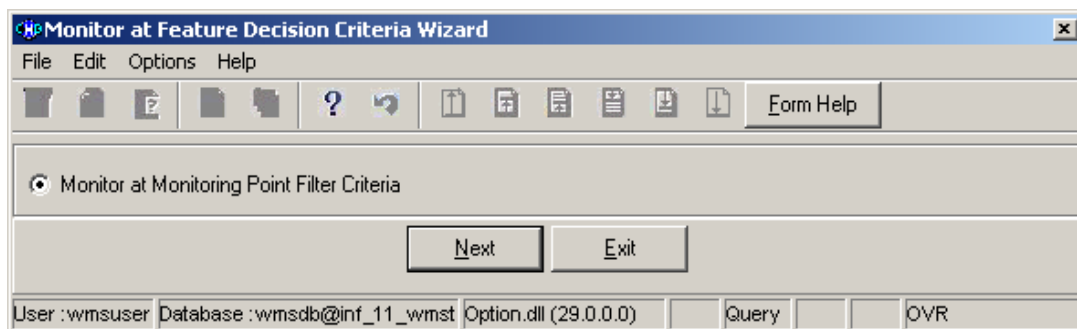
How to Search for a Monitor at Feature

Note: All Filter Criteria forms can be opened from the Decision Criteria form, and can also be used for searching for Monitoring Point Feature.

2.1 Open the **Monitor at Feature Decision Criteria Form**
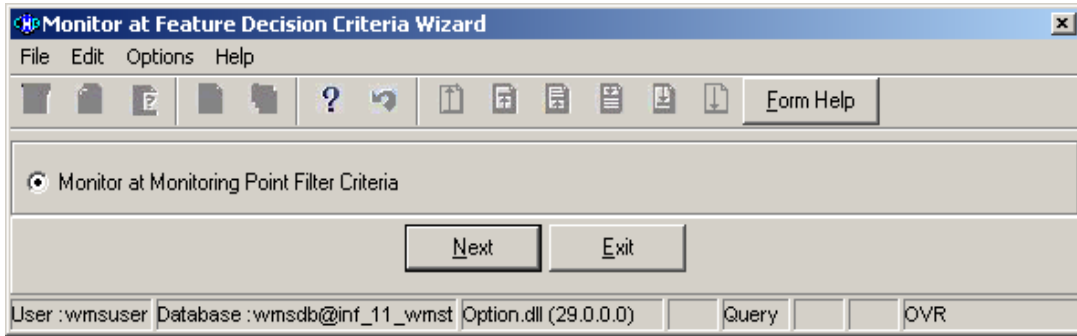
2.2   Choose any of the relevant options to search for a **Monitor at Feature** and click on the **Next** button to open a specific **Filter Criteria Wizard**.
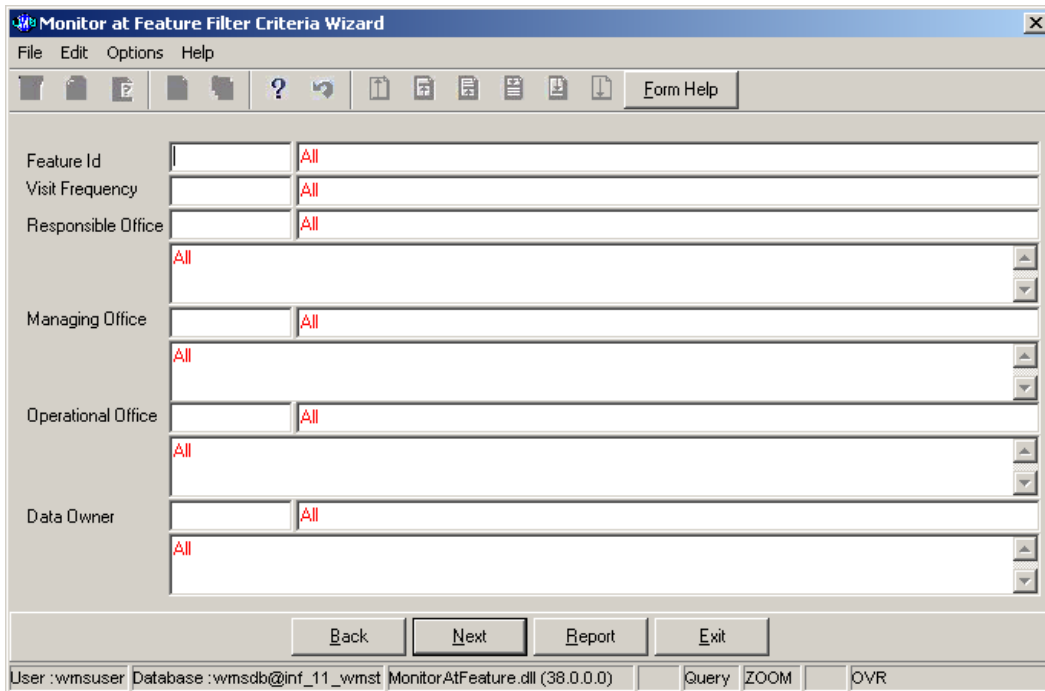
How to search for Monitor at Feature Using Monitor at Feature Filter Criteria Wizard

2.3   Click on the **Monitor at Feature Filter Criteria** radio button, then click the **Next** button.

2.4   The **Monitor at Feature Filter Criteria Wizard** will be opened**.**

2.5 Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Point Selection** form. Select the **Geographical Feature ID** to be used as filter, and click on the **Select** **Select** button to return the selection.

2.6 The **Feature Name** field will automatically be populated as it is linked to the Feature ID

2.7 Enter the **Frequency ID** or click on the ZOOM **Zoom** button to open the **Visit Frequency Selection** form. Select the **Frequency ID** to be used as filter, and click on the Select **Select** button to return the selection
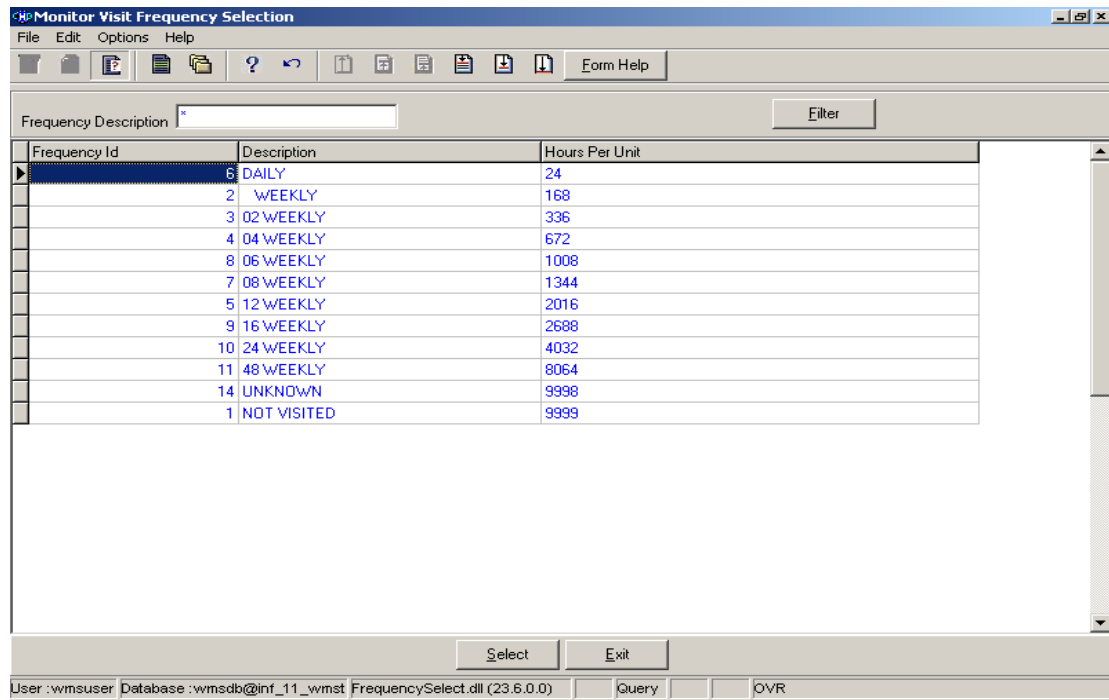
2.8 The **Frequency Description** field will automatically be populated as it is linked to the Frequency ID.

2.9 Enter the **Responsible Office ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form. Select the **Responsible Organisation ID** to be used as filter and click on the Select **Select** button to return the selection.
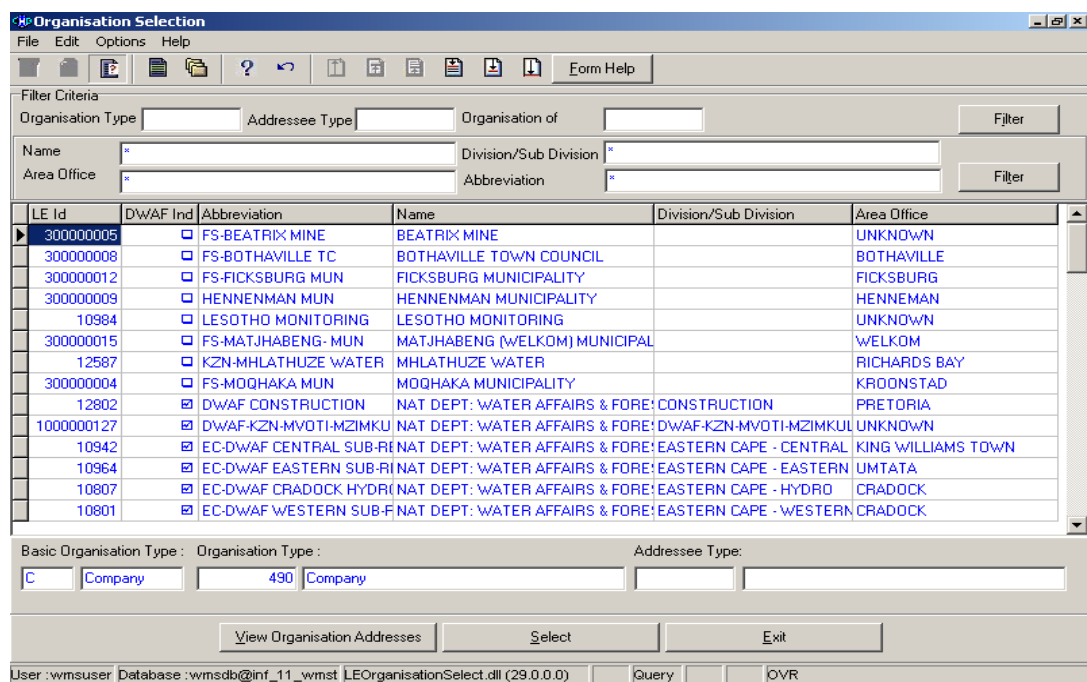
2.10   The **Responsible Office Name** and **Responsible Office Abbreviation** field will automatically be populated as they are linked to the Responsible Office ID**.**

2.11   Enter the **Managing Office ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form. Select the **Managing Office ID** to be used as filter, and click on the ___Select___ **Select** button to return the selection.

2.12   The **Managing Office Name** and **Managing Office Abbreviation** field will automatically be populated as they are linked to the Managing Office ID**.**

2.13   Enter the Monitor **Operational Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form. Select the **Monitor Operational Organisation ID** to be used as filter, and click on the ___Select___ **Select** button to return the selection.

513

2.14 The **Operational Office Abbreviation** and **Operational Office Name** field will automatically be populated as they are linked to the Monitor Operational Organisation ID.

2.15 Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form. Select the **Data Owner Organisation ID** to be used as filter and click on the **Select** **Select** button to return the selection.

2.16 The **Data Owner Organisation Name** field will automatically be populated as it is linked to the Data Owner Organisation ID**.**

*Note: The **Back** button will close the form and return to the Calling Form.*

*Note: The **Exi**t button will close the form and return to the main menu.*

2.17   Click on the **Next** button to open the **Monitor at Feature Maintenance Wizard** with records for the specified Filter criteria.

How to add a new Monitoring Point Feature

3.69   Select **Water Network Management** from the **Water Resource Management** menu bar, Select **Monitor at Feature** from the sub menu, which will open the **Monitor at Feature Decision Criteria Wizard**, Select one of the options from **Decision Criteria** to open the maintenance form.

*Note: if you click on the **Monitor at Feature Filter Criteria** radio button, and click on the **Next** button from the **Decision Criteria**, This will open the **Monitor at Feature Filter Criteria Wizard.** Click the **Next** button to open the **Monitor at Feature Maintenance Wizard***

3.2   Click on the 📋**Create** button to add a new record.

3.3   An empty line is displays allowing the addition of a new record.

3.4   Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **Geographical Feature Selection** form. Select the **Geographical Feature ID** to be used as filter, and click on the Select **Select** button to return the selection.

3.5   The **Feature Name** field will automatically be populated as it is linked to the Feature ID

3.6   Enter the Monitor **Operational Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form. Select the **Monitor Operational Organisation ID** to be used as filter and click on the **Select** **Select** button to return the selection.

3.7   The **Operational Office Abbreviation** and **Operational Office Name** field will automatically be populated as they are linked to the Monitor Operational Organisation ID.

3.8   The **Monitor Route Name** field will automatically be populated as it is linked to the Monitor Route ID.

3.9   **Monitoring Point** Latitude and Longitude will be populated by default.

3.10   **Monitor at Physical address** Latitude and Longitude will be populated by default.

3.11   Enter the **Monitor Explanation** of the Feature

3.12   Select the **Monitoring Type** description from the **drop down** menu

3.13   The **Monitoring Type** code will automatically be displayed from the **drop down** menu

3.14   Click checkbox to select **Default Indicator (Monitor at Feature)** on the form.

3.15   The **Monitor Route Sequence** field will automatically be populated as it is linked to the Monitor Route ID.

3.16   Enter the **Frequency ID** or click on the ZOOM **Zoom** button to open the **Visit Frequency Selection** form. Select the **Frequency ID** to be used as filter, and click on the Select **Select** button to return the selection.
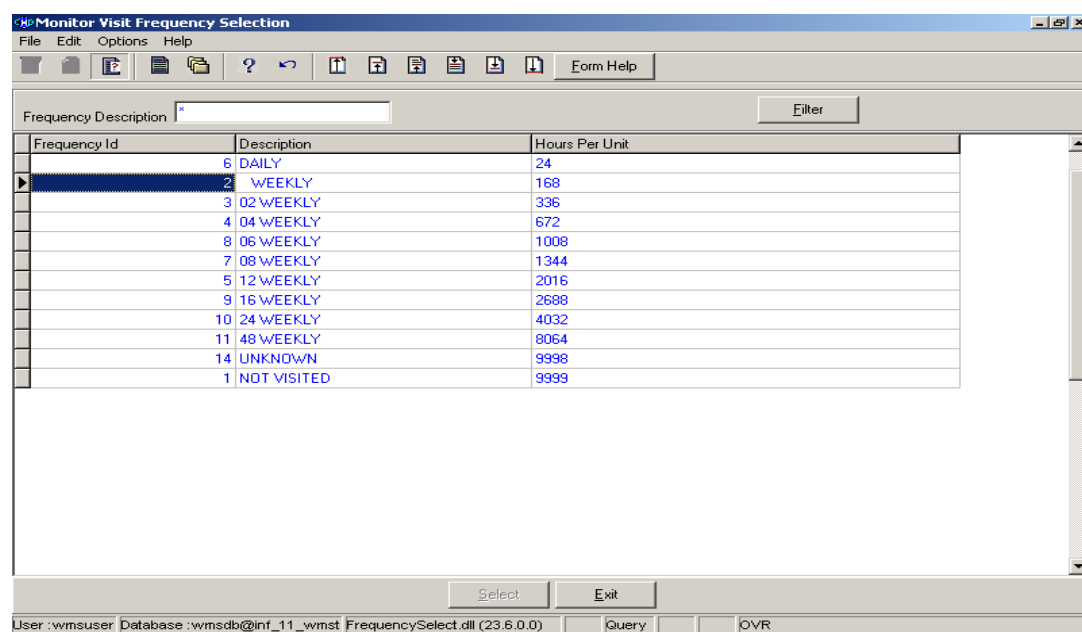
3.17   The **Frequency Description** field will automatically be populated as it is linked to the Frequency ID.

3.18   Enter the **Operational From Date** to define the date from the Office become operational as the Monitor.

3.19   Enter the **Operational To Date** to define the end date that the Office was operational as the Monitor.

3.20 The **Database Type** code field will automatically be populated as it is linked to the Feature ID.

3.21 The **Database Type** description field will automatically be populated as it is linked to the Feature ID.

3.22 The **High Level** code field will automatically be populated as it is linked to the Feature ID.

3.23 The **High Level** description field will automatically be populated as it is linked to the Feature ID.

3.24 Enter the **Managing Office ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form. Select the **Managing Office ID** to be used as filter, and click on the **Select** **Select** button to return the selection.

3.25 The **Managing Office Name** field will be automatically populated as is linked to the Managing Office ID**.**

3.26 Enter the **Responsible Office ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form. Select the **Responsible Organisation ID** to be used as filter, and click on the **Select** **Select** button to return the selection.

519

3.27   The **Responsible Office Name** field will automatically be populated as is linked to the Responsible Office ID**.**

3.28   Enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form. Select the **Data Owner Organisation ID** to be used as filter, and click on the **Select** **Select** button to return the selection.

3.29   The **Data Owner Organisation Name** field will automatically be populated as it is linked to the Data Owner Organisation ID**.**

*Note: The **Back** button will close the form and return to the Calling Form.*

*Note: The **Maintain** button open an Option Decision Criteria where are able to maintain the parent or children records for the record that is selected.*

*Note: The **Report** button will open a Report Option Decision Criteria for the Reports available for Monitor at Feature Maintenance Form.*

*Note: The **GIS View** enables the user to view Monitoring Point and Operational Monitors' address on a map.*

*Note: The **Exi**t button will close the form and return to the main menu.*

*Note: The **GIS Map Scale (Drop Down)** enables the user to select the scale to be used when displaying the feature on the map.*

3.30   **Tab** to accept the record.

How to Edit a Monitor at Feature:

Note: The Central administrator may edit any record, else only the Data Owner may edit it's Monitor at Feature record.

4.1   Click on the record to be edited highlighting it, and click on the **Modify** Records button.

Note: If you want to assign a new Data Owner to edit the record, enter the Data Owner Organisation ID, or click on the Zoom button to open the Login Organisation Selection form, make your selection and click on the Select button to return the selection.

4.2   Edit the record as required.

4.3   Click on another record to accept the newly modified record.

How to Delete a Monitor at Feature:

Note: Only the Data Owner may delete its Monitor at Feature record.

5.1   Click on the record to be deleted, highlighting it.

5.2   Click on the **Edit** menu and select **Delete Line(F3)** option. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the OK option to confirm the deletion.

Monitoring Management Overview

In the management of any business there is an aspect of monitoring. Monitoring is more than likely the most important part of water quality management, because like an air-traffic controller who cannot see the planes he directs, a water quality manager cannot actually see or touch water quality. However, the action of monitoring can be mistakenly seen as a simple task of taking a sample by dipping a bottle into the water. Whereas, in reality in order to accurately and meaningfully monitor, a number of different criteria must be identified and taken into consideration in the accessing of the retrieved data or in the processing of that data into information. This includes the monitoring point, the monitor (sampler), the monitoring action (was it a surface sample, or 1 m below the surface), the laboratory (if one is involved), the determinants (including variables, river health measurements), the preservatives, the method of analysis, the frequency of monitoring and then lastly the result.

All the data must also be linked into a coherent structure, set-up with logical links so that as data is captured a certain amount of quality control is executed. This is followed by the all important aspect of "Consolidation" of a monitoring programme which basically ensures that the monitoring programme integrates with other monitoring programmes around it. For instance to ensure that no two monitors (with exceptions) are sampling at the same point.

The Monitoring Management sub-systems are used to effectively and then efficiently manage resource quality operational monitoring on a national, catchment and individual site basis.

The scope of the Monitoring Management sub-system deals with the following main modules:

➢ Monitoring Programmes (used to register the requirements for recurring monitoring and associated information)

➢ Scheduling (used to schedule sampling and analysis)

➢ Sample and Results Registration (used to capture monitoring samples and results into the WMS system)

➢ Sample and Results Administration (used to ensure the correct monitoring information is gathered through quality control)

➢ Peripheral Information (used to create and maintain standard reference information for monitoring management)

These modules alone play the important and powerful role of assisting a manager in setting up and implementing an effective monitoring programme. In addition, the module helps manage the sampling process that occurs on a regular basis by ensuring that it is executed timeously and accurately, and then finally to ensure that the samples analysed and the results captured are of the highest quality.

Peripheral Information Overview

The **Peripheral Information** component is used to create and maintain reference information for the Monitoring Management sub-system. The Peripheral Information module deals with the following:

➢ Defining the requirements of Monitoring Variables, and associated information necessary for monitoring;

➢ Register and maintain all possible monitoring actions and monitoring frequencies;

➢ Define all calculation methods used to derive certain monitoring variables or quality control methods;

➢ Look up recorded changes to certain tables containing reference data.

Scope

The Peripheral Information module contains the following sub-modules:

➢ Monitoring Variable

➢ Monitor

➢ Monitoring Point

➢ Monitoring Action and Frequency

➢ Calculation Method

➢ Additional Queries

Important: Certain information can only be updated centrally. If all necessary information is not entered, you will not be able to use the rest of the Monitoring Management Sub-System. All new information or changes are first submitted to an Operational User Group for agreement between WMS Stakeholders. Contact your WMS Superuser to submit new or changed information

Monitoring Variable Maintenance

Introduction:

The Monitoring Variable module is used to add and maintain variables obtained through measurement (fundamental variable) in the field (observations) and by laboratories (samples); obtained through surveys in the form of questionnaires and derived by calculating a value from one or more measured variables.

A monitoring variable represents a property which can be measured, determined or simulated through calculations for the purposes of managing the quality of water or impact on the environment, e.g. pH, Habitat, etc.

The results are then used to benchmark whether the quality of that specific water resource is good or not depending on the evaluation thereof. Water that is used and discharged as well as the effect of human impact on the environment must be managed to ensure acceptable quality of the resource as set by objectives, standards and guidelines.

Business Rules:

i. Only the Central Administrator can Add, Edit and Modify records.

Path:

How to access Monitoring Variable Maintenance on the system:

1.1   Select **Peripheral Info** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Monitoring Variable Maintenance** from the sub menu.

1.4   This will open **Monitoring Variable Maintenance Decision Criteria Wizard** with the following options:

- **Monitoring Variable Filter Criteria**

- **Monitoring Variable History Filter Criteria**

- **Variable Group Filter Criteria**

- **Related Variable Filter Criteria**

- **Monitoring Variable External Reference Filter Criteria**

How to Search for Monitoring Variables:

2.1 Open the Monitoring Variable Maintenance Decision Criteria Wizard
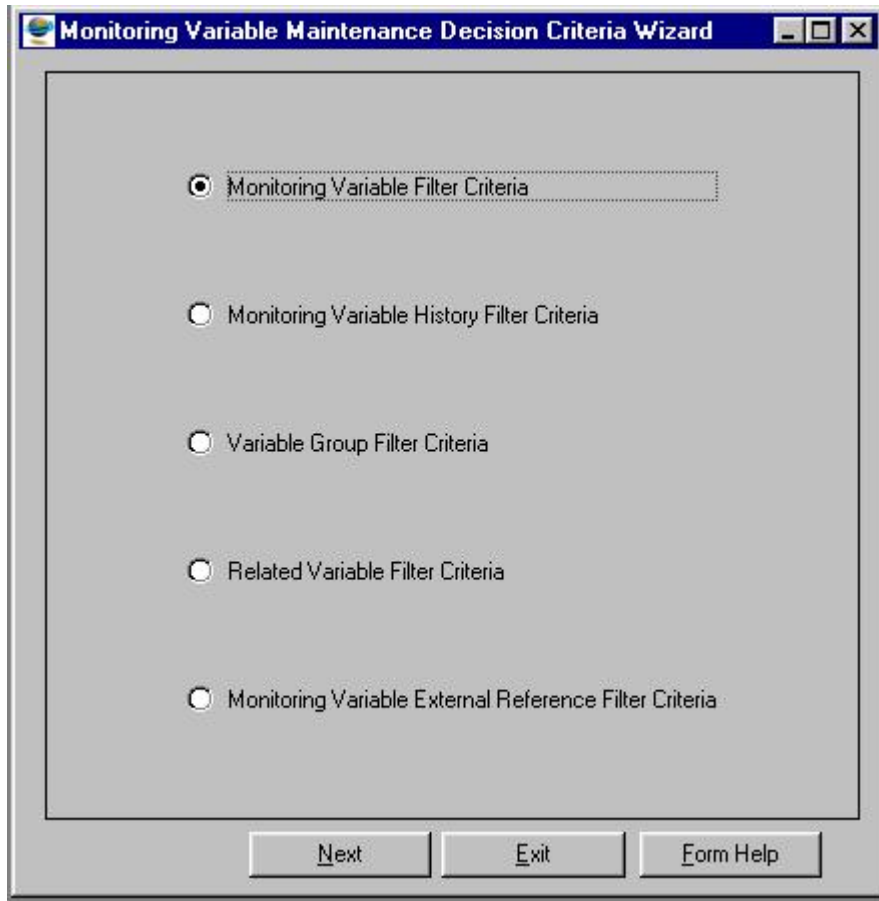
2.2   **Monitoring Variable Maintenance Decision Criteria Wizard** will open with the
        following options:

- **Monitoring Variable Filter Criteria**

- **Monitoring Variable History Filter Criteria**

- **Variable Group Filter Criteria**

- **Related Variable Filter Criteria**

- **Monitoring Variable External Reference Filter Criteria**

*Note: There are five filter criteria options available for searching for a monitoring variable
as shown on the Monitoring Variable Maintenance Decision Criteria Wizard.*

**How to Search for Monitoring Variable using Monitoring Variable Filter
Criteria:**

2.3   Click on the **Monitoring Variable Filter Criteria** radio button on the Monitoring
        Variable Maintenance Decision Criteria Wizard; select the **Next** button to **open the
        Monitoring Variable Filter Criteria Wizard.**

2.4 Enter the **Monitoring Variable ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

2.5 The **Monitoring Variable Abbreviation** and the **Monitoring Variable Name** will be automatically displayed as they are linked to the Monitoring Variable ID.

2.6 Enter the **Monitoring Variable Class ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Class Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

2.7   The **Monitoring Variable Class Name** will be automatically displayed as it is linked to the Monitoring Variable Class ID.

2.8   Enter the **Monitoring Variable Type ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

2.9   The **Variable Type Name** will be automatically displayed as it is linked to the Monitoring Variable Type ID.

2.10   Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Valid Measuring Unit for Monitoring Variable Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection

527

2.11   The **Measuring Unit Abbreviation** and the **Measuring Unit Name** will be
        automatically displayed as they are linked to the Measuring Unit ID

Note: The Standard Monitoring Variable will be implemented with the next release

*Note: The **Exit** button will close the Monitoring Variable Filter Criteria Wizard and return to
the main menu*

*Note: The **Back** button will close the Monitoring Variable Filter Criteria Wizard and return
to the Monitoring Variable Maintenance Decision Criteria Wizard form*

2.12   Click on the **Next** button to close the Monitoring Variable Filter Criteria Wizard and
        open the Monitoring Variable View Wizard form.

![Note icon] *Note:* The **Back** button will close the Monitoring Variable View Wizard and return to the Monitoring Variable Filter Criteria form.

![Note icon] *Note:* The **Next** Button will close the Monitoring Variable View Wizard and open the

Monitoring Variable Maintenance form for the focused Monitoring Variable Type. ![Note icon] *Note:* If a single variable was selected then a Single Monitoring Variable Maintenance form will open.

![Note icon] *Note:* The **Report** button will be implemented with the next release

![Note icon] *Note:* The **Maintenance** button will open the Maintenance Decision Criteria Wizard for Monitoring Variable Maintenance form where the Monitoring Variable Group Maintenance and Monitoring Variable External Reference are maintained

![Note icon] *Note:* The **Add** button will close the Monitoring Variable View Wizard and open **Add Decision Criteria Wizard** form, where you can choose the variable subset type to be added. E.g. Single, Multiple, Derived, or Survey Monitoring Variable Maintenance.

2.13   Click the **Exit** button to close the Monitoring Variable View Wizard and return to the main menu

How to Search for Monitoring Variable using Monitoring Variable History Filter Criteria:

2.3   Click on the **Monitoring Variable History Filter Criteria** radio button on the **Monitoring Variable Maintenance Decision Wizard**, select **Next** button to open the **Monitoring Variable History Filter Criteria** form.

2.4 Enter the **Monitoring Variable ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable History Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

2.5 The **Monitoring Variable Abbreviation** and the **Monitoring Variable Name** will be automatically displayed as they are linked to the Monitoring Variable ID.

2.6 Enter the **Monitoring Variable Class ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Class Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

2.7   The **Monitoring Variable Class Name** will be automatically displayed as it is linked
         to the Monitoring Variable Class ID.

2.8   Enter the **Monitoring Variable Type ID** or click on the **ZOOM** **Zoom** button to open
         the **Monitoring Variable Type Selection** form, select the applicable record then click

         on the [Select] **Select** button to return the selection.

2.9   The **Variable Type Name** will be automatically displayed as it is linked to the
         Monitoring Variable Type ID.

2.10   Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Valid
         Measuring Units for Monitoring Variable Selection** form, select the applicable

         record then click on the [Select] **Select** button to return the selection.

2.11   The **Measuring Unit Abbreviation** and the **Measuring Unit Name** will be
        automatically displayed as they are linked to the Measuring Unit ID.

Note: The Standard Monitoring Variable will be implemented in the next release

2.12   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open
        the **Login Organisation Selection** form, select the applicable record then click on
        the **Select** **Select** button to return the selection.

2.13   The **Change User Organisation Abbreviation** and **Change User Organisation Name** will be automatically displayed as they are linked to the Change User Organisation ID.

2.14   Click on the **Next** button to close the **Monitoring Variable History Filter Criteria Wizard** and open the **Monitoring Variable History View Wizard** form with the specified criteria.

*Note: The **Back** button will close the* **Monitoring Variable History Filter Criteria Wizard** *and move back to the* **Monitoring Variable Maintenance Decision Criteria Wizard** *form.*

*Note: The **Exit** button will close the* **Monitoring Variable History Filter Criteria Wizard** *and return to the menu*

2.15   The **Monitoring Variable Abbreviation, Monitoring Variable Name, Change User Login, Change User Name, Change Organisation Abbreviation** Local Filter Criteria gives the user the ability to filter out record according to the defined value

*Note: The **Back** button will close the **Monitoring Variable History View Wizard** and return to the **Monitoring Variable History Filter Criteria** form*

2.16   Click the **Next** Button to close the **Monitoring Variable History View Wizard** and open the **Monitoring Variable Maintenance** form for the focused Monitoring Variable

Type *Note: If a Derived variable was selected then a Derived Monitoring Variable Maintenance form will open*

2.17   Click on the **Exit** button to close the **Monitoring Variable Maintenance** form and return to the menu.

How to Search for Monitoring Variable using Variable Group Filter Criteria:

2.3   Click on the **Variable Group Filter Criteria** radio button on the **Monitoring Variable Maintenance Decision Criteria Wizard**; select the **Next** button to open the **Monitoring Variable Group Filter Criteria Wizard**.

2.4   Enter the **Variable Group ID** or click on the ZOOM **Zoom** button to open the **Variable Group Selection** form, select the applicable record then click on the

Select **Select** button to return the selection.

534

2.5   The **Variable Group Name** will be automatically displayed as it is linked to the
       Variable Group ID.

2.6   Enter the **Monitoring Variable ID** or click on the **ZOOM** **Zoom** button to open a
       Monitoring Variable Selection form, select the applicable record then click on the
       Select button to return the selection.

2.7   The **Monitoring Variable Abbreviation** and the **Monitoring Variable Name** will be
       automatically displayed they are linked to the Monitoring Variable ID.

Note: *The **Back** button will close the **Monitoring Variable Group Filter Criteria Wizard**
and return to the **Monitoring Variable Maintenance Decision Criteria Wizard** form.*

2.8 Click on the **Next** button to close the **Monitoring Variable Group Filter Criteria Wizard** and open the **Monitoring Variable Group View Wizard** form with the specified filter criteria.
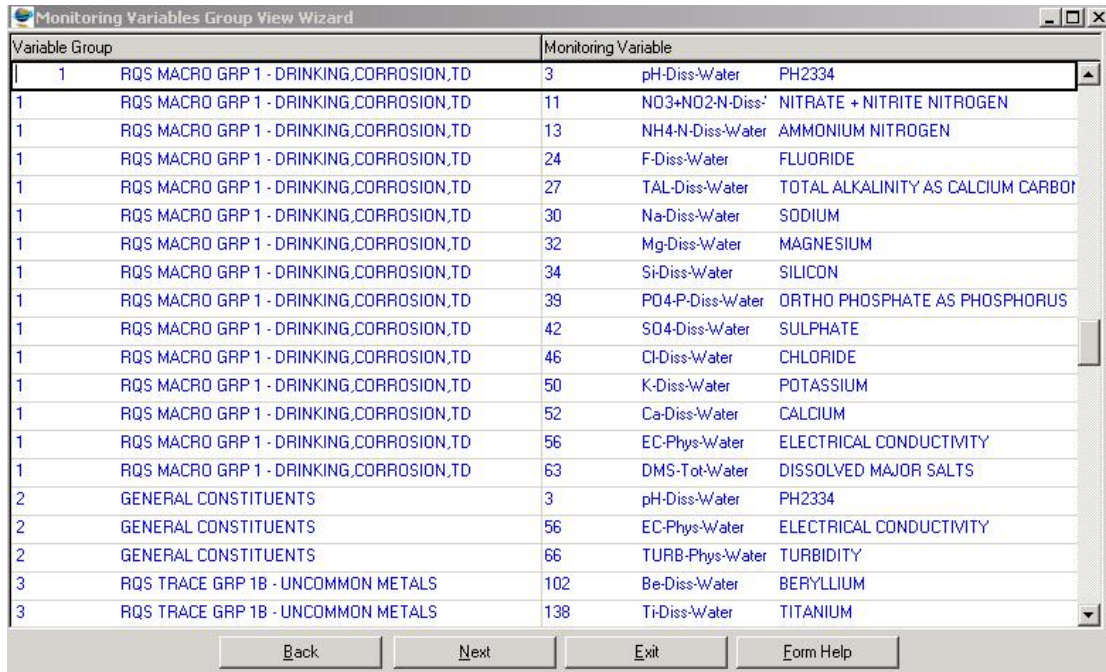
2.9 The **Variable Group id, Variable Group Name, Monitoring Variable Id, Monitoring Variable Abbreviation, Monitoring Variable Name,** will be automatically displayed.

Note: Back button will close the Monitoring Variable Group View Wizard and return to the Monitoring Variable Group Filter Criteria Wizard form.

2.10 Click the **Next** button will open **Monitoring Variable View Wizard** displaying the details of a selected Monitoring variable.
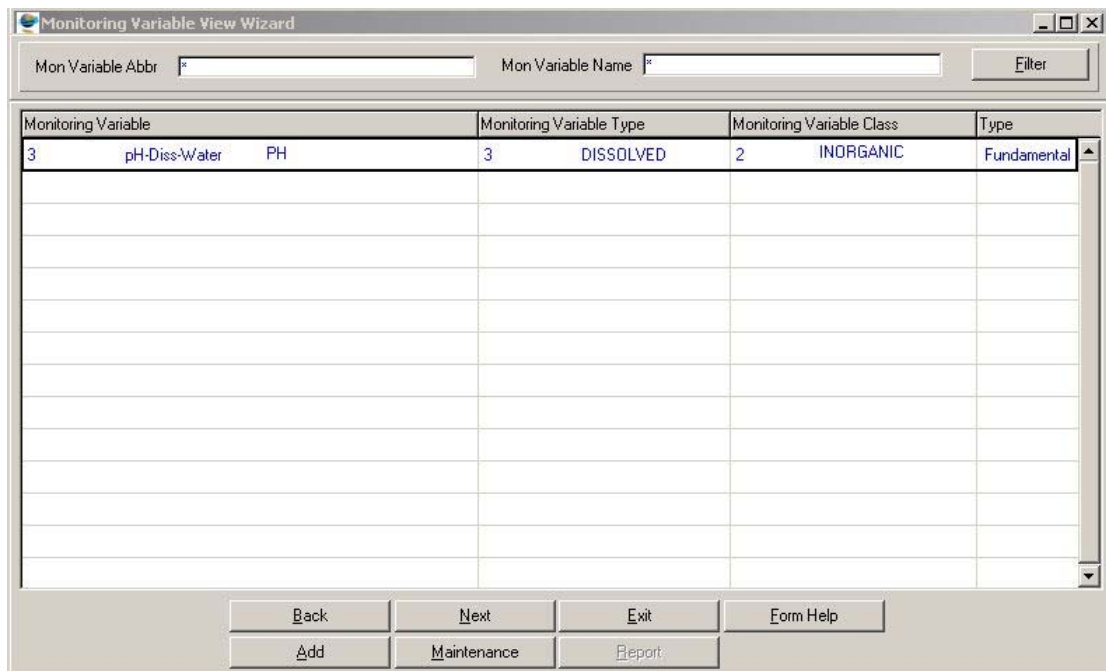
Note: The **Back** button will close the Monitoring Variable View Wizard and return to the Monitoring Variable Group View Wizard form.

Note: The **Next** Button will close the Monitoring Variable View Wizard and open the

Monitoring Variable Maintenance form for the focused Monitoring Variable Type. **Note:** If a single variable was selected then a Single Monitoring Variable Maintenance form will open.

Note: The **Maintenanc**e button will open the Maintenance Decision Criteria Wizard for Monitoring Variable Maintenance form where the Monitoring Variable Group Ma and Monitoring Variable External Reference are maintained

Note: The **Add** button will close the Monitoring Variable View Wizard and open Add Decision Criteria Wizard form, where you can choose the variable subset type to be added. E.g. Single, Multiple, Derived, or Survey Monitoring Variable Maintenance.

2.11 Click the **Exit** button to close the **Monitoring Variable View Wizard** and return to the main menu.

How to Search for Monitoring Variable using Related Variable Filter Criteria:

2.3 Click on the **Related Variable Filter Criteria** radio button on the **Monitoring Variable Maintenance Decision Criteria Wizard** to open the **Related Variable Filter Criteria** form.

2.4 Enter the **Derived Variable ID** or click on the ZOOM **Zoom** button to open a **Monitoring Variable Selection** form, select the applicable record then click on the

    Select   **Select** button to return the selection. *Note: This field allows you to enter or select a Derived Variable Id.*

2.5 The **Derived Variable Abbreviation** and the **Derived Variable Name** will be automatically displayed as they are linked to the Derived Variable ID.

2.6 Enter a valid **Single Fundamental Variable Id** in the **Monitoring Variable ID field** or click on the **ZOOM** **Zoom** button to open a **Monitoring Variable Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection. *Note: This field allows you to enter or select a Single Fundamental Variable ID*

3.7 The **Monitoring Variable Abbreviation** and the **Monitoring Variable Name** will be automatically displayed as they are linked to the Monitoring Variable ID

*Note: The **Back** button will close the **Related Variable Filter Criteria** and return to the **Monitoring Variable Maintenance Decision Criteria Wizard** form.*

*Note: The **Exit** button will close the **Related Variable Filter Criteria** and return to the main menu*

3.8   Click on the **Next** button to close the **Related Variable Filter Criteria** and open the **Related Variable View Wizard** form with the specified filter criteria.

Related Variable Selection Wizard				
Derived Variable ID	0	Monitoring Variable Id	0	Filter

DERIVED VARIABLE		**FUNDAMENTAL VARIABLE**	
ID	Abbreviation	ID	Abbreviation
410	CORR-Diss-Water	13	NH4-N-Diss-Water

Derived Variable Name: CORROSIVITY INDEX
Fundamental Variable Name: AMMONIUM NITROGEN
Related Reason: 4 u and Sample on the 1800,0

Back   Next   Exit   Form Help

3.9   The **Derived Variable Id, Derived variable Abbreviation, Monitoring Variable Id, Monitoring Abbreviation, Derived Variable Name, Monitoring Variable Name, and Related Reason** will be automatically displayed.

*Note: The **Back** button will close the **Related Variable View Wizard** and return to the Related Variable Filter Criteria form.*

*Note: The **Exit** button will close the **Related Variable View Wizard** and return to the main menu.*

3.10   Select the applicable record from the **Related Variable View Wizard** then click on the **Next** button to open the **Monitoring Variable View Wizard** with the details of the specified variable.

3.11   The **Monitoring Variable View Wizard** will open displaying the details for the variable selected.

3.12   The **Exit** button will close the **Monitoring Variable View Wizard** and return to the main menu.

How to search Monitoring Variable Monitoring Variable Reference Filter Criteria:

3.3   Click on the Monitoring Variable External Reference Filter Criteria radio button on the Monitoring Variable Maintenance Decision Criteria Wizard; select the Next button to open the Monitoring Variable Reference Filter Criteria Wizard.

3.4   Enter the Datasource ID or click on the **ZOOM** Zoom button to open the System
       Datasource Selection form, select the applicable record then click on the
       Select Select button to return the selection.

3.5   The Source Providing Data will be automatically displayed, displaying the System
       Datasource Name as it is linked to the Datasource ID.

3.6   Enter the Monitoring Variable ID or click on the **ZOOM** Zoom button to open the
       Monitoring Variable Selection form, select the applicable record then click on the
       Select Select button to return the selection.

3.7 The **Monitoring Variable Abbreviation** will be automatically displayed as it is linked to the Monitoring Variable ID.

3.8 Enter the **Data Owner LE ID** or click on the ZOOM Zoom button to open the **Login Organisation Selection** form, select the applicable record then click on the Select **Select** button to return the selection.

3.9   The **Data Owner Name** will be automatically displayed as it is linked to the Data Owner LE ID.

3.10   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

3.11   The **Change User Organisation Abbreviation** will be automatically displayed as it is linked to the Create User Organisation ID.

Note: *The **Back** button will close the Monitoring Variable Reference Filter Criteria Wizard and return to the **Monitoring Variable Maintenance Decision Criteria Wizard**.*

Note: *The **Exit** button will close the Monitoring Variable Reference Filter Criteria Wizard and return to the main menu.*

3.12   Click on the **Next** button to close the Monitoring Variable Reference Filter Criteria Wizard and open the **Monitoring Variable Reference View Wizard** with the specified filter criteria.

3.13   The **Monitoring Variable Reference, Create User Name, Create User Login, Create User Organisation Abbreviation Local Filter Criteria** gives the user the ability to filter out record according to the defined value

 Note: The Datasource Id, Monitoring Variable ID, Monitoring Variable Abbreviation, Monitoring Variable Name, Monitoring Variable Reference Code, Create User Organisation Id, Create User Organisation Abbreviation, Create User Login, Create User Name, Data Owner LE Id, Data Owner Abbreviation, Current Indicator, will be automatically displayed.

 *Note: The **Back** button will close the Monitoring Variable Reference View Wizard and return to the **Monitoring Variable Reference Filter Criteria Wizard***

3.14   Click the **Next** Button to close Monitoring Variable Reference View Wizard and open the **Monitoring Variable View Wizard** displaying details of focused Monitoring Variable Type.

[?] *Note: The **Maintenance** button will open the Maintenance Decision Criteria Wizard for Monitoring Variable Maintenance form where the Monitoring Variable Group Ma and Monitoring Variable External Reference are maintained*

[?] *Note: The **Add** button will close the Monitoring Variable Reference View Wizard and open Add Decision Criteria Wizard, where you can choose the variable subset type to be added. E.g. Single; Multiple; Derived; or Survey Monitoring Variable Maintenance.*

3.15   Click the **Exit** button to close the Monitoring Variable View Wizard and return to the main menu

How to Create New Monitoring Variables:

3.1   Select **Peripheral Info** from the Monitoring Management menu bar.

3.2   Select **Monitoring Variable** from the drop down menu.

3.3   Select **Monitoring Variable Maintenance** from the sub menu.

3.4   This will open **Monitoring Variable Maintenance Decision Criteria Wizard** with the following options:

3.5   Click on the **Monitoring Variable Filter Criteria** radio button on the **Monitoring Variable Maintenance Decision Criteria Wizard** to open the **Monitoring Variable Filter Criteria Wizard**

3.6   Click on the **Next** button to close the **Monitoring Variable Filter Criteria Wizard** and
        open the **Monitoring Variable View Wizard**

3.7   Click on the **Add** button to open the **Add Decision Criteria Wizard Criteria** form.
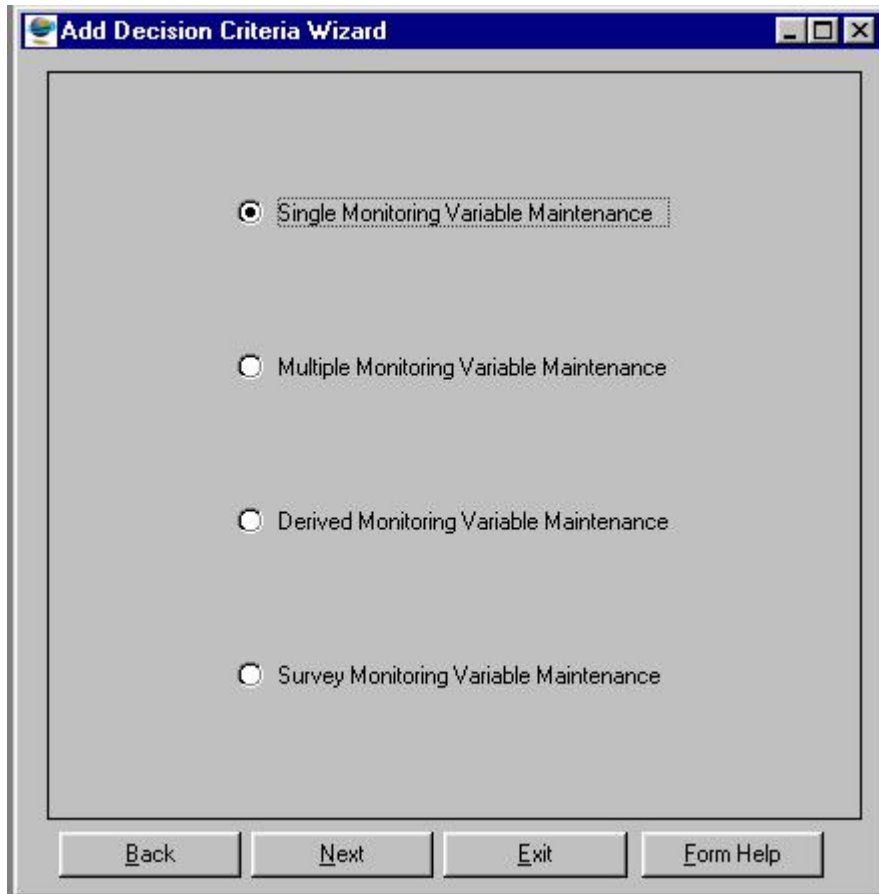
3.8   The **Add Decision Criteria Wizard Criteria** form will open with the following
        Monitoring Variable options

- **Single Monitoring Variable Maintenance**

- **Multiple Monitoring Variable Maintenance**

- **Derived Monitoring Variable Maintenance** and

- **Survey Monitoring Variable Maintenance**

3.9   Select an applicable option from the list, and then click on the **Next** button to open the
        applicable **Monitoring Variable Maintenance** form.

*Note: If the **Single Monitoring Variable Maintenance** option was selected, then the
Single Monitoring Variable Maintenance form will be opened in create mode.*

How to Add a Single Monitoring Variable:
3.10   Open the Single Monitoring Variable Maintenance form.

3.11 **Monitoring Variable ID** will be automatically displayed, as it is a system-generated serial number.

 Note: Monitoring Variable ID will only be generated once the record has been accepted.

3.12 Enter the **Monitoring Variable Abbreviation** and the **Monitoring Variable Name** and tab.

3.13 Enter the **Variable type ID** or click on the **ZOOM** Zoom button to open the **Monitoring Variable Type Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

3.14 The **Variable Type Name, Ecological Compartment ID and Ecological Compartment Name** will be automatically displayed as they are linked to the Variable Type ID.

3.15 Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Measuring Unit Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

ID	Abbreviation	Name
1	Score	SCORE
3	pH units	UNITS OF PH
20	%	PERCENTAGE
54	°C	DEGREE CELCIUS
56	mS/cm	MILLISIEMENS PER CENTIMETRE
69	mV	MILLIVOLTS
72	cfu/100mL	COLONY FORMING UNIT PER 100 ML
76	cfu/mL	COLONY FORMING UNIT PER 1 ML
79	Cells/mL	CELLS PER MILLILITRE
80	n/cubic metre	NUMBER PER CUBIC METRE
81	ug/L	MICROGRAM PER LITRE
84	Estimate	QUALITATIVE ESTIMATE

3.16   The **Measuring Unit Abbreviation and Measuring Unit Name** will be automatically displayed as they are linked to the Measuring Unit ID.

3.17   Enter the **Monitoring Variable Class ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Class Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection

ID	Name
2	INORGANIC
53	PHYSICAL
61	CALCULATED
63	INDEX
71	MICROBIOLOGICAL
77	HYDROBIOLOGICAL
86	ORGANIC-TRIHOLOMETHANES
95	AQUATIC ENVIRONMENTAL PARAMETER
96	RADIO-ACTIVITY
97	ORGANIC
98	TOXICITY

3.18   The **Monitoring Variable Class Name** will be automatically displayed as it is linked to the Monitoring Variable Class ID.

549

3.19   Select the applicable **Analysis Method Choice** option from a ▼Drop-down list. The options to select from are Sample, Observation or Both

3.20   The **Fundamental Comp Type** field will be automatically displayed as Fundamental.

3.21   Select the applicable **Anion Cation Choice** option from a ▼Drop-down list. The options to select from are Anion, Cation or None.

3.22   In the **Non Standard Type** field, indicate whether a variable is a standard variable or a non-standard variable by selecting the applicable option from a ▼Drop-down list. The options are: Standard or Non-Standard.

Note: If the variable is Standard, then the Conversion Factor, Conversion Exponent & Standard Monitoring Variable fields will be disabled. If the variable is non-standard then enter the Conversion Factor and the Conversion Exponent.

3.23   If the **Non Standard Type** is **Non-Standard** enter the **Conversion Factor** that will be used with the Exponent to convert the Non Standard Variable to its Associated Standard Variable. *Note: The product of this field and the Conversion Exponent must be greater the zero and can not be equal to one*

3.24   If the **Non Standard Type** is **Non-Standard** then enter the **Conversion Exponent** that will be used with the Conversion Factor in order to convert the Non Standard Variable to its linked Standard Variable. *Note: The product of this field and the Conversion Factor must be greater the zero.*

*Note: This **Standard Monitoring Variable** will only be implemented in the next release.*

3.25   The **Standard Monitoring Variable Abbreviation** will be automatically displayed as it linked to the Standard Monitoring Variable ID.

3.26   Press the Tab key on the keyboard to accept the newly created record. *Note: Once the Tab key has been pressed then the Monitoring variable Id will be automatically populated*

*Note: The **Back** button will close the Single Monitoring Variable Maintenance form and return to the Add Decision Criteria Wizard.*

*Note: The **Next** button will close the Single Monitoring Variable Maintenance form and open the Analysis Method Maintenance form.*

*Note: The **Maintenance** button will open the Maintenance Decision Criteria Wizard from where the Analysis Method, Variable Type, Variable Class and Measuring Unit are maintained. Note: This button should always be enabled when focusing on a successfully created record.*

*Note: The **History View** button from the Single Variable History View form to will view the selected monitoring variable records history information*

3.27   Click the **Exit** button to close the Single Monitoring Variable Maintenance form and return to the main menu

How to Add a Multiple Monitoring Variable:

3.10   Open the **Multiple Monitoring Variable Maintenance** form.

3.11   **Monitoring Variable ID** will be automatically displayed, as it is a system-generated serial number. *Note: It will only be generated once the record has been accepted.*

3.12   Enter the **Monitoring Variable Abbreviation** and **Monitoring Variable Name**.

3.13   Enter the Variable Type ID or click on the **ZOOM** Zoom button to open the Monitoring Variable Type Selection form, select the applicable record then click on the **Select** Select button to return the selection.

3.14   The **Variable Type Name, Ecological Compartment ID and Ecological Compartment Name** will be automatically displayed as they are linked to the Variable Type ID.

3.15   Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Measuring Unit Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

551

3.16   The **Measuring Unit Abbreviation** and **Measuring Unit Name** will be automatically displayed as they are linked to the Measuring Unit ID.

3.17   Enter the **Monitoring Variable Class ID** or click on the **ZOOM** **Zoom** button to open the Monitoring Variable Class Selection form, select the applicable record then click on the **Select** **Select** button to return the selection.

3.18   The **Monitoring Variable Class Name** will be automatically displayed as it is linked to the Monitoring Variable Class ID.

3.19   The **Fundamental Comp Type** field will be automatically displayed as Fundamental.

552

3.20   Select the applicable **Analysis Method Choice** option from a ⏷**Drop-down** list. The options to select from are Derived, Observation, Questionaire, Sampling or Both

3.21   Enter the **Class Structure ID** or click on the `ZOOM` **Zoom** button to open a Parameter Class List Selection form, select the applicable record then click on the `Select` **Select** button to return the selection.

3.22   The **Parameter Class Name** will be automatically display the parameter class that a Multiple Monitoring variable belongs to.

3.23   Select the applicable Value **Input Choice** option from the ⏷Drop-down list. You can either select the Alpha, Numeric, Either one or Both option.

3.24   If the **Value Input Choice** is Numeric then the Maximum Total Value field displays the maximum of sum of all the values for the parameters of the variable results.

3.25   The **Multiple Single Type** will be automatically displaying as Multiple

3.26   Select the applicable Values Required Choice option from the ⏷Drop-down list. You can either select the Partial or the All option.

3.27   If the **Value Input Choice** is Alpha then enter the Valid Alpha Values.

3.28   Press the Tab key on the keyboard to accept the newly created record. 🔲*Note: Once the Tab key has been pressed then the Monitoring variable Id will be automatically populated*

🔲*Note: The **Back** button will close the Multiple Monitoring Variable Maintenance form and return to the Add Decision Criteria Wizard.*
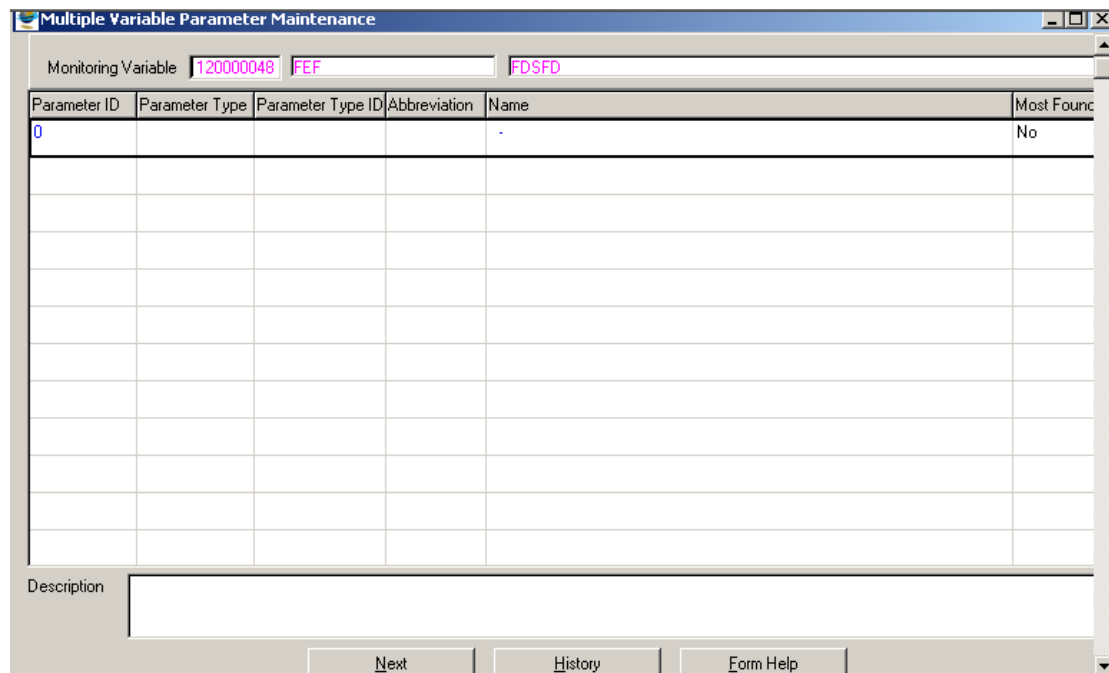
? *Note: The **Maintenance** button will open the Maintain Decision Criteria Wizard Criteria form from where the Analysis Method, Variable Type, Variable Class, Measuring Unit and Multiple Variable Parameters are maintained.* **?** *Note: This button should always be enabled when focusing on a successfully created record.*

? *Note: The **History View** button from the Single Variable History View form will view the selected monitoring variable records history information*

3.29   Click on the **Next** button to open the Multiple Variable Parameter Maintenance form

How to Add the Multiple Monitoring Variable Parameters

3.30   Open the **Multiple Variable Parameter Maintenance** form

3.31   **Multiple Monitoring Variable Parameter ID** will be automatically displayed, as it is a system-generated serial number. **?** *Note: It will only be generated once the record has been accepted*

3.32   Select the applicable **Parameter Type** option from the ▼ **Drop-down** list. You can either select the **Classified** or the **Unclassified** option.
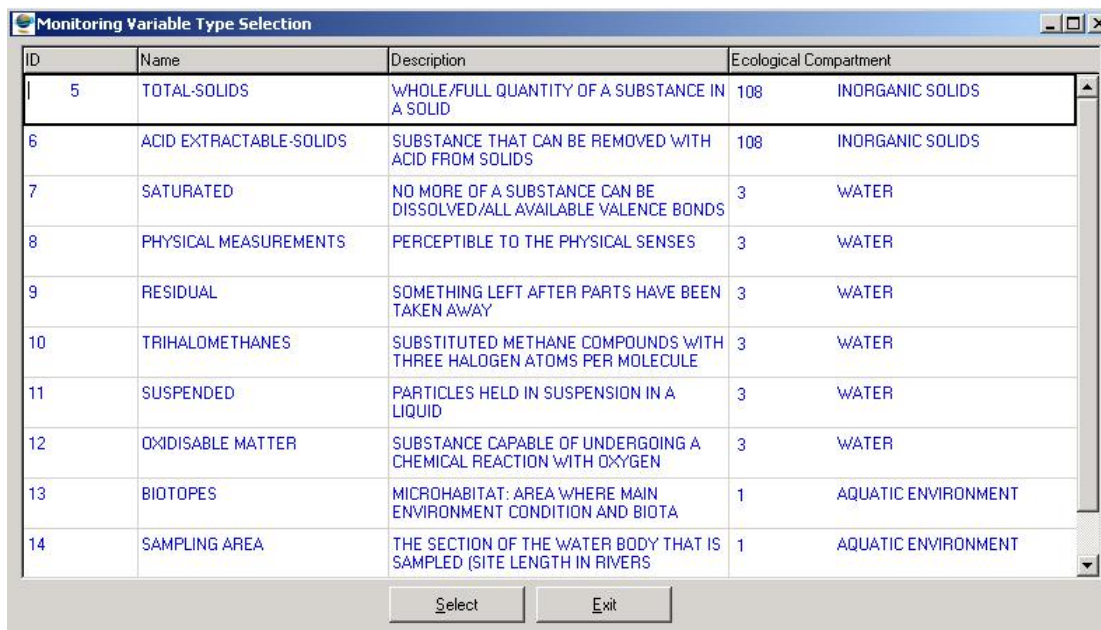
3.33   Enter the **Parameter Type ID** or click on the **ZOOM** **Zoom** button to open a **Select Classified Parameters** form, select the applicable record then click on the **OK** button to return the selection.

3.34   The **Parameter Abbreviation** and **Parameter Name** will be automatically displayed as they are linked to the **Parameter Type ID**.

3.35   Enter the description of the Multiple Monitoring parameter record in the **Parameter Description** field.

3.36   Select the applicable **Most found** option from the ▼**Drop-down** list to define whether a Multiple Monitoring variable is defined as most found or not. You can either select the **Yes** or the **No** option.

3.37   Click the **Next** button to close the Multiple Variable Parameter Maintenance and go back to the **Multiple Variable Maintenance**

3.38   Click the **Exit** button to close the **Multiple Variable Parameter Maintenance** form and return to the main menu.
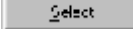
How to Add a Derived Monitoring Variable:
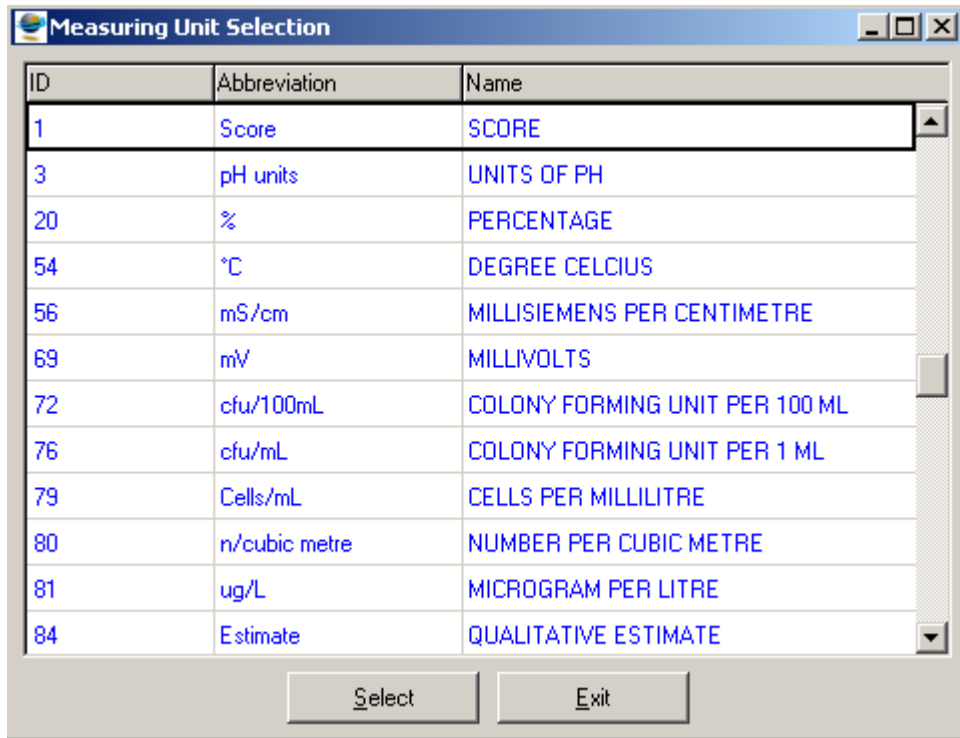
3.10   Open the Derived Monitoring Variable Maintenance form.

3.11   **Derived Monitoring Variable ID** will be automatically displayed, as it is a system-generated serial number.

3.12   **?** *Note: Monitoring Variable ID will only be generated once the record has been accepted.*

3.13   Enter the **Monitoring Variable Abbreviation** and the **Monitoring Variable Name**.

3.14   Enter the **Variable type ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.

ID	Name	Description	Ecological Compartment	
5	TOTAL-SOLIDS	WHOLE/FULL QUANTITY OF A SUBSTANCE IN A SOLID	108	INORGANIC SOLIDS
6	ACID EXTRACTABLE-SOLIDS	SUBSTANCE THAT CAN BE REMOVED WITH ACID FROM SOLIDS	108	INORGANIC SOLIDS
7	SATURATED	NO MORE OF A SUBSTANCE CAN BE DISSOLVED/ALL AVAILABLE VALENCE BONDS	3	WATER
8	PHYSICAL MEASUREMENTS	PERCEPTIBLE TO THE PHYSICAL SENSES	3	WATER
9	RESIDUAL	SOMETHING LEFT AFTER PARTS HAVE BEEN TAKEN AWAY	3	WATER
10	TRIHALOMETHANES	SUBSTITUTED METHANE COMPOUNDS WITH THREE HALOGEN ATOMS PER MOLECULE	3	WATER
11	SUSPENDED	PARTICLES HELD IN SUSPENSION IN A LIQUID	3	WATER
12	OXIDISABLE MATTER	SUBSTANCE CAPABLE OF UNDERGOING A CHEMICAL REACTION WITH OXYGEN	3	WATER
13	BIOTOPES	MICROHABITAT: AREA WHERE MAIN ENVIRONMENT CONDITION AND BIOTA	1	AQUATIC ENVIRONMENT
14	SAMPLING AREA	THE SECTION OF THE WATER BODY THAT IS SAMPLED (SITE LENGTH IN RIVERS	1	AQUATIC ENVIRONMENT

Select   Exit

3.15   The **Variable Type Name**, **Ecological Compartment ID** and **Ecological Compartment Name** will be automatically displayed as they are linked to the Variable Type ID.

3.16   Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Measuring Unit Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.

3.17 The **Measuring Unit Abbreviation** & **Measuring Unit Name** will be automatically displayed as they are linked to the **Measuring Unit ID**.

3.18 Enter the **Monitoring Variable Class ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Class Selection** form, then select the applicable record then click on the **Select** **Select** button to return your selection.

3.19 The **Monitoring Variable Class Name** will be automatically displayed as it is linked to the **Monitoring Variable Class ID**.

3.20   The **Fundamental Comp Type** field will be automatically populated. *Note: It defines whether the variable defined is Fundamental, Derived or Survey*

3.21   Select the applicable **Derived Variable Sub Type** option from a **Drop-down** list. The options to select from are Multiple; Single Derived or Survey.

3.22   The **Analysis Method Choice** will be automatically populated from a **Drop-down** list. The options are Sample, Observation or Both (Sample and Observation), Questionnaire. *This field is not optional in case of derived variable.*

3.23   Enter the **Calculation Method ID** or click on the ZOOM **Zoom** button to open a Calculation Method Type Selection form, select the applicable record then click on the **Select** button to return your selection. *Note: A calculation method may not be selected if it has been used as the calculation method of another Derived Variable.*

Type ID	Item ID	Description
2386	2302	Group QC
2387	2301	Derived Variable
3975	3661	Environmental Characteristic

Calculation Method Type Selection

Select   Exit   Form Help

3.24   The Process Name and Calculation Method Description will be automatically displayed they linked to the Calculation Method ID.

3.25   The Date Created field will be automatically updated with the system-generated date when the derived variable's calculation method was created.

3.26   The Date Terminated field will be automatically updated with the termination date for the derived variable calculation method.

*Note: The **Maintenance** button to open the Options Decision Criteria form for Derived Monitoring Variable Maintenance form from where the Calculation Method, Derived Variables, Variable Types, Variable Class and Measuring Unit are maintained. Note: This button should always be enabled when focusing on a successfully created record*

*Note: The **Exit** button will close the Derived Monitoring Variable Maintenance form and return to the main menu*

3.27   Click the **Next** button will open the **Variable for Derived Variable Maintenance** form for the specified derived variable.

How to Add Variables for Derived Variable

3.28   Open the **Variable for Derived Variable Maintenance** form.

3.29   The **Derived Variable ID** will be automatically displayed, as it is a system-generated serial number.

3.30   The **Derived Variable Abbreviation** and **Derived Variable Name** will be automatically displayed as it is linked to the **Derived Variable ID**.

3.31   Enter the **Monitoring Variable ID** or click on the ZOOM **Zoom** button to open the **Monitoring Variable Selection** form, select the applicable record then click on the Select **Select** button to return your selection.

3.32   The **Monitoring Variable Abbreviation** and **Monitoring Variable Name** will be automatically displayed as they are linked to the **Monitoring Variable ID**.

3.33   Enter the **Derived Variable Factor / Mantissa** to be used to calculate the derived variable.

3.34   Enter the **Derived Variable Exponent** to be used to calculate the derived variable.

3.35   The **Start date** will be automatically displayed, displaying the date on which the specified period begins.

3.36   The **End date** will be automatically displayed, displaying the date on which the specified period ends

*Note: The **Back** button will close the Variables for Derived Variable Maintenance form and return to the Derived Monitoring Variable Maintenance*
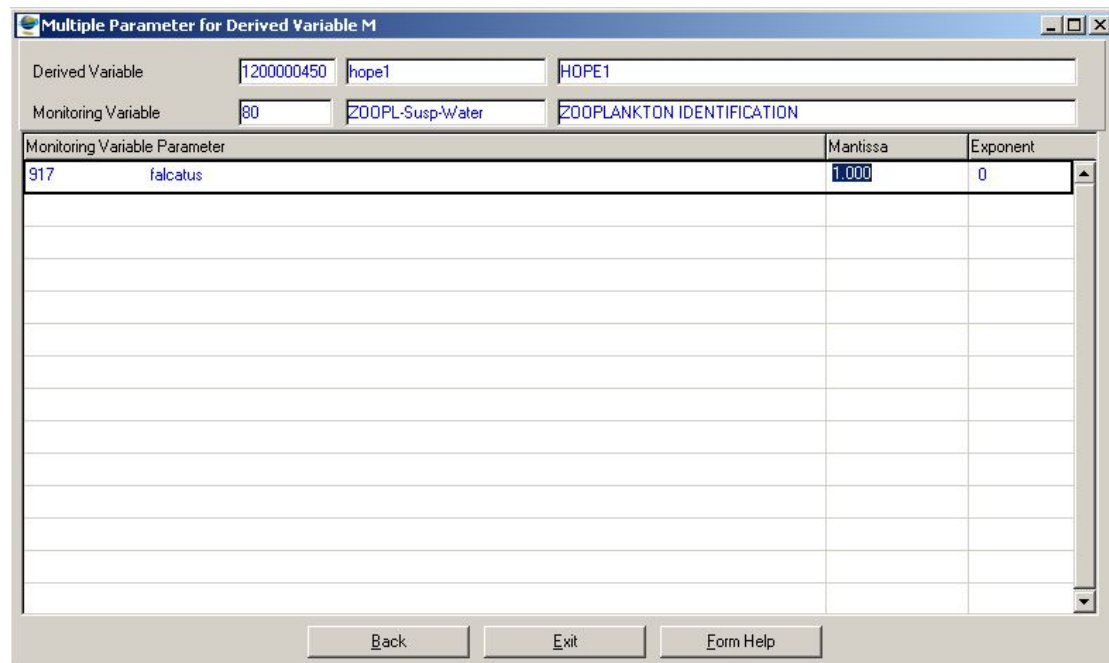
*Note: The **Exit** button will close the Variables for Derived Variable Maintenance form and return to the main menu*

3.37   Click the **Next** button to open either the **Multiple Parameters for Derived Variable Maintenance** or **Survey Parameter for Derived Variable Maintenance** form depending on whether a derived variable is Multiple or Survey Variable

*Note: If derived variable is **Multiple** then **Multiple Parameters for Derived Variable Maintenance** will open*

How to Add Multiple Parameter for Derived Variable:

3.37.1 Open the **Multiple Parameters for Derived Variable Maintenance** form

3.37.2 The **Derived Variable ID** will be automatically displayed as is a system generated serial key

3.37.3 The **Derived Variable Abbreviation** and the **Derived Variable Name** will be automatically displayed as they are linked to the **Derived Variable ID**

3.37.4   Enter the **Monitoring Variable ID** will be automatically displayed as is a system generated serial key

3.37.5   The **Monitoring Variable Abbreviation** and **Monitoring Variable Name** will be automatically displayed as they are linked to the **Monitoring Variable ID**

3.37.6   Enter the **Multiple Monitoring Parameter Variable ID** or click on the **ZOOM** **Zoom** button to open the **Multiple Monitoring Parameter Variable Selection** form, select the applicable record then click on the ⌞ _Select_ ⌟**Select** button to return your selection.

Multiple Monitoring Parameter Selection			
Monitoring Variable	80	ZOOPL-Susp-Water	
Parameter	**Abbreviation**	**Name**	
917	BFAL	falcatus	
918	BCAU	caudatus	
919	BURC	urceolaris	
920	BANG	angularis	
921	PLIC	plicatilis	
922	BQUA	quadridentatus	
926	PATU	patulus	
947	EPIP	Epiphanes	
949	EUCH	Euchlanis	
950	EDIL	dilitata	
951	ASCO	Ascomorpha	
956	LLUN	luna	
958	NOTO	Notommata	
Select	Exit	Not Found	Form Help

3.37.7   The **Multiple Monitoring Parameter Variable Name** will be automatically displayed as they are linked to the **Multiple Monitoring Parameter Variable ID**

3.37.8   Enter the **Derived Parameter Factor** to be used to calculate the Derived Monitoring Variable.

3.37.9   Enter the **Derived Parameter Exponent** to be used to calculate the Derived Monitoring Variable.

Note: *the **Back** button will go to the previous form*.

3.37.10   Click on the **Exit** button to close the form

Note: *If derived variable is Survey then Derived Survey Monitoring Variable Maintenance form will open*

How to Add a Survey Parameter for Derived Variable:

3.37.11   Open the **Survey Parameters for Derived Variable Maintenance** form

3.37.12   The **Derived Variable ID** will be automatically displayed as is a system generated serial key

3.37.13   The **Derived Variable Abbreviation** and the **Derived Variable Name** will be automatically displayed as they are linked to the **Derived Variable ID**

3.37.14   Enter the **Monitoring Variable ID** will be automatically displayed as is a system generated serial key.

3.37.15   The **Monitoring Variable Abbreviation** and **Monitoring Variable Name** will be automatically displayed as they are linked to the **Monitoring Variable ID**

3.37.16   Enter the **Survey Monitoring Parameter Variable ID** or click on the ZOOM **Zoom** button to open the **Survey Monitoring Parameter Variable Selection** form, select the applicable record then click on the Select **Select** button to return your selection.

3.37.17   The **Concatinated Variable + Level 1 + Level 2** will be automatically displayed

3.37.18   Enter the **Derived Parameter Factor** to be used to calculate the Derived Monitoring Variable.

3.37.19   Enter the **Derived Parameter Exponent** to be used to calculate the Derived Monitoring Variable

*Note: The **Back** button will close the form and return to the Variables for Derived Variable Maintenance*

3.37.20   Click the **Exit** button will close the form and return to the main menu

How to Add a Survey Monitoring Variable:

3.10   Open the Survey Monitoring Variable Maintenance form.

3.11   **Monitoring Variable ID** will be automatically displayed, as it is a system-generated serial number. *Note: It will only be generated once the record has been accepted.*

563

3.12   Enter the **Monitoring Variable Abbreviation** and the **Monitoring Variable Name**.

3.13   Enter the **Variable type ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection

3.14   The **Variable Type Name**, **Ecological Compartment ID** and **Ecological Compartment Name** will be automatically displayed as they are linked to the Variable Type ID.

3.15   Enter the **Survey Variable Class ID** or click on the **ZOOM** **Zoom** button to open the **Survey Variable Class Selection** form, then select the applicable record then click on the **Select** **Select** button to return the selection.
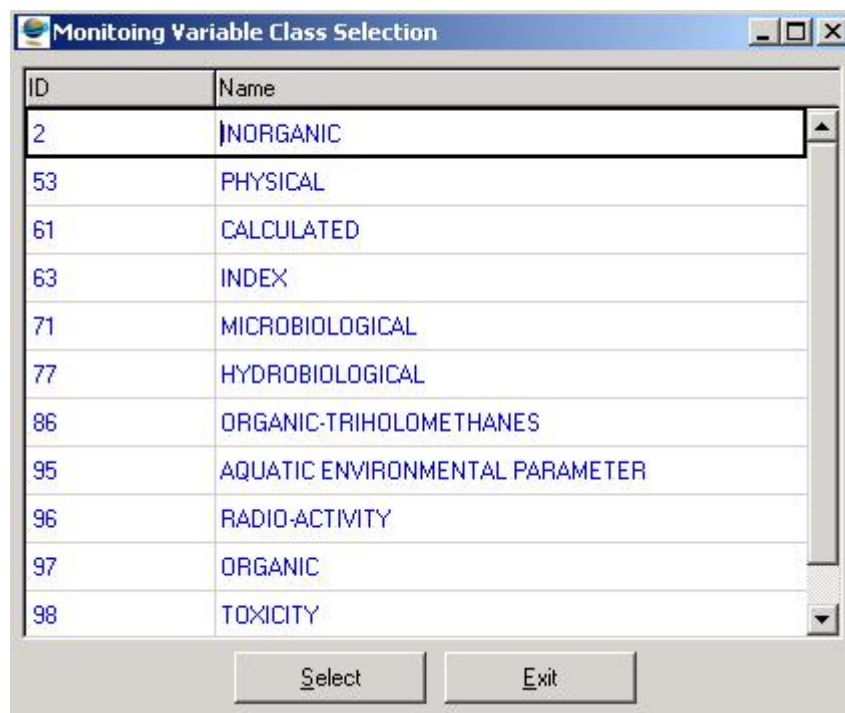
3.16   The **Survey Variable Class Name** will be automatically displayed as it is linked to the **Monitoring Variable Class ID**.

3.17   The **Fundamental Comp Type** will be automatically displayed.

3.18   The **Analysis Method Choice**   will automatically displayed.

3.19   Enter the **Parameter Class Structure ID** or click on the **ZOOM** **Zoom** button to open a **Class Structure Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

3.20   The **Parameter Class Name** field will automatically display the name of the structure that the Survey belongs to.

3.21   Select the applicable **Multiple Survey Type** option from a ▼**drop-down** list. The options to select from are Single or Multiple.

3.22   Select the applicable **Class Parameter Level** option from a ▼**drop-down** list. The options to select from are None, First Level or Second Level

3.23   Press the **Tab** key on the keyboard to accept the newly created record.

*Note: The **Maintenance** button will open the Maintain Decision Criteria Wizard from where the Variable Class, Measuring Unit, Variable Type, Survey Variable Parameter and Survey Method are maintained. Note: This button should always be enabled.*
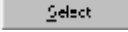
3.24   Click on the **Next** button to close the Survey Monitoring Variable Maintenance form and open the **Survey Variable Parameters Maintenance** form. [?] *Note: This form allows you to insert at least one parameter record that is compulsory for the Survey Monitoring Variable record.*

How to Add Survey Variable Parameters:

3.25   Open the **Survey Variable Parameters Maintenance** form.

3.26   The system-generated **Monitoring Variable ID**, **Abbreviation** and **Name** will be automatically displayed, as they are passed form the Survey Variable Maintenance form.

3.27   The **Class Structure Name** will be automatically display the name of the Class Structure that the Survey Variable belongs to

3.28   **Class Parameter Level** will be automatically display the level on which the user will be allowed to create classified parameters of the specified class structure for the Survey Monitoring Variable. E.g. None, First Level and Second Level.

3.29   The system-generated **Survey Variable Parameter ID** will be automatically displayed. [?] *Note: It will only be generated once the record has accepted*

Level1 Survey Parameter Details:

3.30   If **Class Parameter Level** is "Second" or "None" Enter the Unclassified Survey Parameter ID on the Level1 Survey Parameter ID field, or click on the `ZOOM` **Zoom** button to open the Unclassified Survey Parameter Selection form, select the applicable record then click on the `Select` **Select** button to return the selection.

3.31   If **Class Parameter Level** is "First" Enter the **Classified Survey Parameter ID** on the Level1 Survey Parameter ID field, or click on the **ZOOM** **Zoom** button to open the **Associate Classes Type Selection** form, select the applicable record then click on the **Select** **Select** button to return the selection.

3.32   The **Level1 Survey Parameter Abbreviation** and the **Level1 Survey Parameter Name** will be automatically displayed as they are linked to the Level1 Survey. The **Survey Parameter Abbreviation** displays the Item_Dwaf_Code or the Level 1 Unclassified Parameter.

? *Note: The Parameter ID is the Serial Key generated automatically by the system for the unclassified parameter.*

Level 2 Survey Parameter Details:

3.33   If **Class Parameter Level** is "None" or "First" Enter the **Unclassified Survey Parameter ID** on the Level2 Survey Parameter ID field, or click on the `ZOOM` **Zoom** button to open the **Unclassified Survey Parameter Selection** form, select the applicable record then click on the `Select` **Select** button to return the selection.
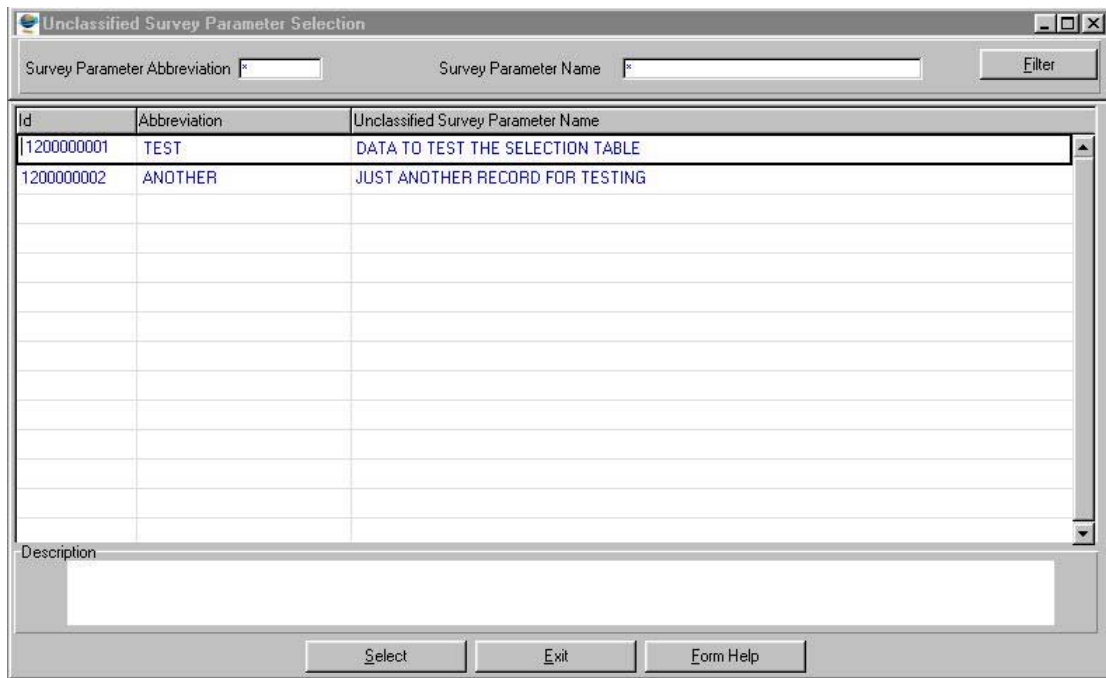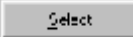
3.34   If **Class Parameter Level** is "Second" Enter the Classified Survey Parameter ID on the Level2 Survey Parameter ID field, or click on the `ZOOM` **Zoom** button to open the Associated Class Type Selection form, select the applicable record then click on the `Select` **Select** button to return the selection.
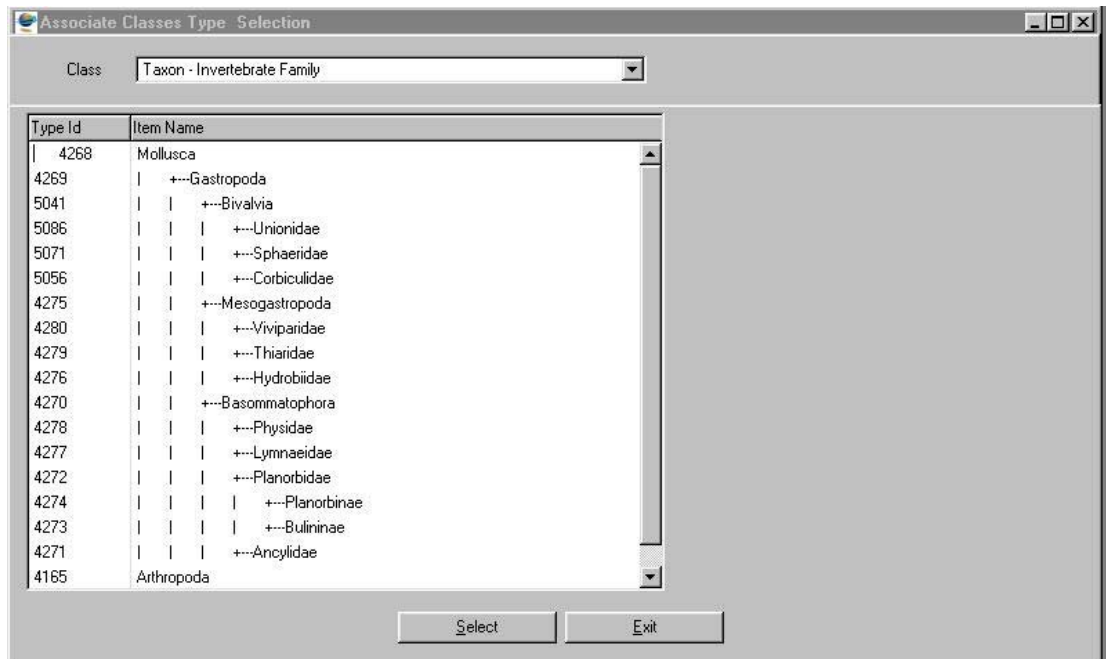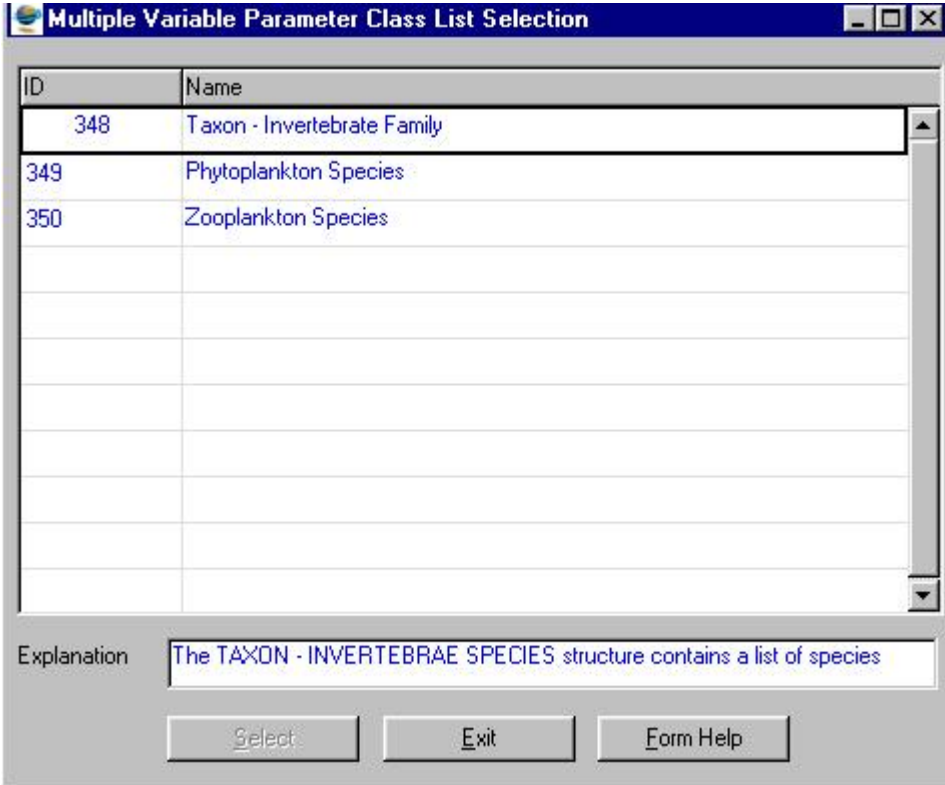
3.35   The **Level2 Survey Parameter Abbreviation** and the **Level2 Survey Parameter Name** will be automatically displayed as they are linked to the Level 2 Survey. The **Survey Parameter Abbreviation** displays the Item_Dwaf_Code or the Level 2 Unclassified Parameter.
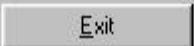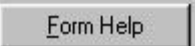
Note: The Parameter ID is the Serial Key generated automatically by the system for the unclassified parameter.

3.36   Click on the **Answer Type** field ▼ Drop Down button and select either Numeric, Varchar, Coordinates, Date Time, Boolean or Lookup

3.37   If **Answer Type** is **Lookup**, Enter the **Lookup Class ID**, or click on the
        ZOOM **Zoom** button to open the **Multiple Classified Parameter** Selection form,
        select the applicable record then click on the [Select] **Select** button to return the selection.

ID	Name
348	Taxon - Invertebrate Family
349	Phytoplankton Species
350	Zooplankton Species

Explanation: The TAXON - INVERTEBRAE SPECIES structure contains a list of species

[Select]   [Exit]   [Form Help]

3.38   The **Lookup Class Name** will be automatically displayed as it is linked to the Lookup Class ID

3.39   If **Answer Type** is **Numeric**, Enter the **Measuring Unit ID**, or click on the
        ZOOM **Zoom** button to open the **Measuring Unit Selection** form, select the
        applicable record then click on the [Select] **Select** button to return the selection.
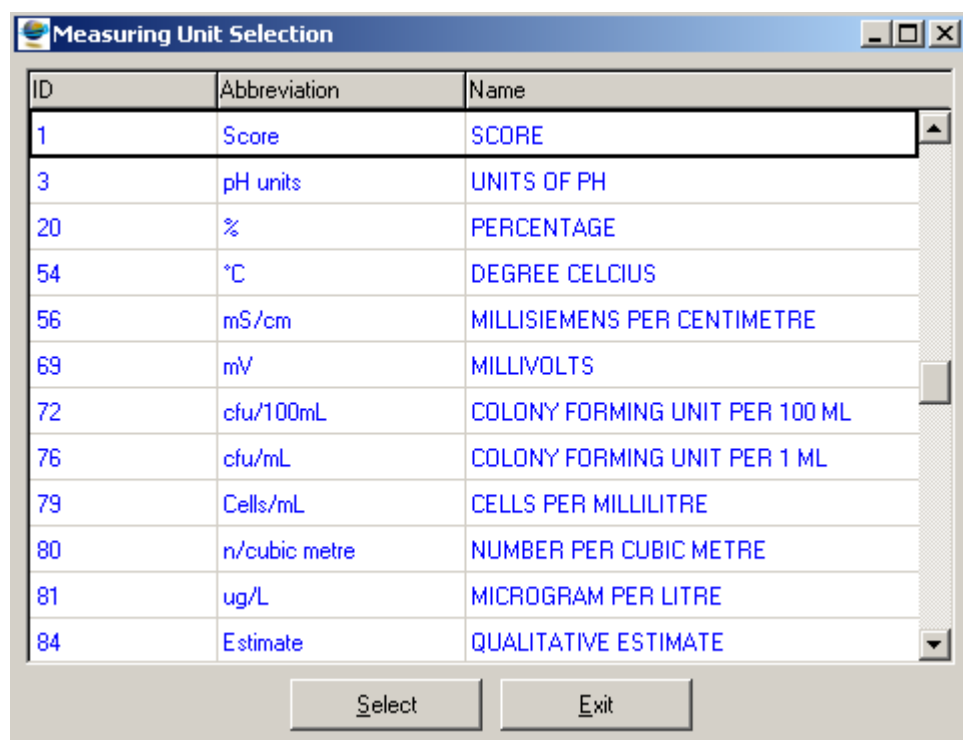
3.40　The **Measuring Unit Abbreviation** and **Measuring Unit Name** will be automatically displayed as they are linked to the **Measuring Unit ID**

3.41　Click on the **Active Indicator** check box to indicate if the Survey Parameter Id is an active parameter for Survey Monitoring Variable.

*Note: The **Maintenance** button will open the **Maintain Decision Criteria Wizard** from where the Unclassified Survey Parameter and Measuring Unit are maintained*.

3.42　Click on the **Exit** button to close the Survey Variable Parameter Maintenance form and return to the main menu.

How to Edit a Monitoring Variable:

Note: Only the Central Database Administrator can EDIT the records. These records are edited from the various Monitoring Variable Maintenance subset forms, e.g. Single Monitoring Variable Maintenance form.

4.1　Click on the record to be edited to highlight it, and then click on the ☑ Modify Records button.

4.2　Edit the record as required.

4.3　Click on another record to accept the newly modified record
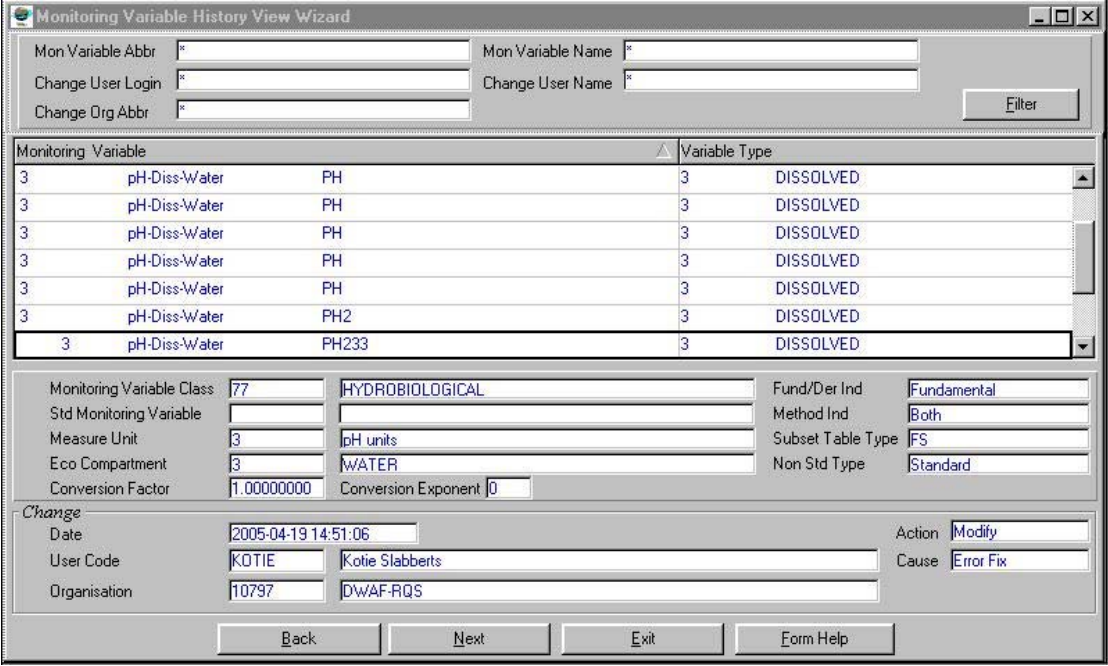
How To Delete A Monitoring Variable:

Note: Only the Central Database Administrator can DELETE the records. The records are deleted from the various Monitoring Variable Maintenance subset forms, e.g. Single Monitoring Variable Maintenance form.

5.1   Click on the record to be deleted, to highlight it

5.2   Click on the ✂ Delete button. [?]**Note:** When records are referenced elsewhere in the system, the delete option will be disabled

5.3   A confirmation message will be displayed asking if you would like to delete the record

5.4   Click on the OK option to confirm the deletion.

How to View the Monitoring Variable History Information:

6.1   Select **Peripheral Info** from the Monitoring Management menu bar

6.2   Select **Monitoring Variable** from the drop down menu

6.3   Select **Monitoring Variable Maintenance** from the sub menu

6.4   This will open **Monitoring Variable Maintenance Decision Criteria Wizard**

6.5   Click on the **Monitoring Variable History Filter Criteria** radio button then click on the **Next** button to open the **Monitoring Variable History Filter Criteria Wizard**

6.6   Click the **Next** button to open the **Monitoring Variable History View Wizard.**

6.7   To search for existing records, enter the **Monitoring Variable Abbreviation** and/or the **Monitoring Variable Name** and/or **Change User Login and/or Change User Name** and/or **Change Organisation Abbreviation** then click on the **Filter** button to filter records according to your specified criteria.

6.8   The filtered records' information will be displayed.

[?] *Note: The **Back** button to close the Monitoring Variable History View Wizard and go back to the Monitoring Variable History Filter Criteria form.*

*Note: The **Exit** button will close the Monitoring Variable History View Wizard and return to the calling menu.*

6.9   Click the **Next** button to open a **Monitoring Variable Maintenance** form of the focused Monitoring Variable. *Note: If the focused monitoring variable is of type 'Single' then the Single Variable Maintenance form will open in Modify mode*

6.10   Click the **Exit** button to close the form and return to the main menu

Monitor at Feature Route Maintenance

Introduction:

The Monitor at Feature Route Maintenance module enables the user to maintain Monitoring Feature- Monitoring Point route Information.

Business Rules:

ii.   Only the Central Administrator can Edit and Modify records.

Path:

1.1   Select **Monitoring Programmes** from the **Monitoring Management** menu bar.

1.2   Select **Schedule Sample And Analysis** from the drop down menu.

1.3   Select **Print Monitoring Schedules and Tags** from the sub menu options.

1.4   This will open the **Monitor at Feature Route Filter Criteria Wizard**

How to search for Monitor at Feature's Route Using Monitor at Feature Route Filter Criteria Wizard

2.1   Enter the **Feature ID** or click on the ZOOM **Zoom** button to open the **Monitoring Point Selection** form. Select the **Geographical Feature ID** to be used as filter and click on the Select **Select** button to return the selection.

2.2 The **Feature Name** field will automatically be populated as it is linked to the Feature ID

2.3 Enter the Monitor **Operational Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form Select the **Monitor Operational Organisation ID** to be used as filter and click on the **Select** **Select** button to return the selection.

2.4 The **Operational Caption Name** field will automatically be populated as it is linked to the Monitor Operational Organisation ID.

574

2.5   Enter the **Organisation Responsible ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form. Select the **Responsible Organisation ID** to be used as filter and click on the **Select** **Select** button to return the selection.

2.6   The **Responsible Organisation Name** field will automatically be populated as it is linked to the Responsible Office ID**.**

2.7   Enter the **Managing Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form. Select the **Managing Office ID** to be used as filter and click on the **Select** **Select** button to return the selection.

2.8   The **Managing Organisation Name** field will automatically be populated as it is linked to the Managing Office ID**.**

2.9   Enter the **Frequency ID** or click on the ZOOM **Zoom** button to open the **Visit Frequency Selection** form. Select the **Frequency ID** to be used as filter and click on the ___Select___ **Select** button to return the selection

ID	Name	Type
1	WEEKLY ACTION FREQUENCY	Period
2	4 WEEKLY ACTION FREQUENCY	Period
3	12 WEEKLY ACTION FREQUENCY	Period
4	2 WEEKLY ACTION FREQUENCY	Period
5	DAILY ACTION FREQUENCY	Period
6	24 WEEKLY ACTION FREQUENCY	Period
7	8 WEEKLY ACTION FREQUENCY	Period
8	DURATION OF THE PROGRAMME	Variable
9	6 WEEKLY ACTION FREQUENCY	Period
10	16 WEEKLY ACTION FREQUENCY	Period
11	48 WEEKLY ACTION FREQUENCY	Period
12	NON-SCHEDULED VISITS	Variable
13	DAILY SAMPLING DURING FLOODS	Variable
14	3 WEEKLY ACTION FREQUENCY	Period
16	NOT VISITED (STATION CLOSED)	Period

Frequency Specification Selection

Frequency Specification Name |* | Filter

Select   Exit   Form Help

2.10   The **Frequency Description** field will automatically be populated as it is linked to the Frequency ID.

2.11   Enter the **Data Owner Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form. Select the **Data Owner Organisation ID** to be used as filter and click on the ___Select___ **Select** button to return the selection.

2.12   The **Data Owner Organisation Name** field will automatically be populated as it is linked to the Data Owner Organisation ID**.**

*Note: The **Back** button will close the form and return to the Calling Form.*

*Note: The **Report** button will open a Report Option Decision Criteria Wizard for the Reports available for Monitor at Feature Maintenance Form.*

*Note: **View Schedule** button display the information on **Monitoring Schedule Report View** form.*

*Note: To print tags click on the **Print Tags** button from this form. After viewing the information close the form to return to the previous form.*

*Note: The **Exi**t button will close the form and return to the main menu*.

2.13   Click on the **Next** button to open the **Monitor at Feature Route Maintenance** form with records for the specified Filter criteria.

How to Edit a Monitor at Feature Route:

? *Note: The Central administrator may edit any record, else only the Data Owner may edit it's Monitor at Feature records.*

3.1   Click on the record to be edited to highlight it, and click on the **Modify** Records button.

? *Note: Only Monitor Route Name and Monitor Route Sequence fields can be edited. On the Monitor at Feature Route Maintenance you can't Create or Maintain the records.*

3.2   Edit the **Monitor Route Name** or **Monitor Route Sequence** as required.

3.3   Click on another or tab record to accept the newly modified record.

Analyst Method Maintenance

Introduction:

The **Analyst Method Maintenance** module is used to define or maintain analysis method information used to analyse samples and/or field readings. The forms are used to define properties for the analysis methods as used by laboratories/monitors.

It is important to identify the Analysis Method in order to:

- Distinguish between trends in the time series data that result from changes in management procedures and,

- Differentiate between the different types of measured constituents to evaluate interferences that occur in specific measurement techniques.

Business Rules:

i.   Analyst, monitoring variable, analysis method and measuring unit must exist.

Sample type, preservative and container must exist.

1.   Path:

1.1   Click on **Peripheral Info** menu.

1.2   Select the **Monitoring Variable** submenu.

1.3   Click on the **Analyst Method Maintenance** submenu.

1.4   This will open the **Analyst Method Maintenance Filter Criteria** form.

2.   How to Search for an Analyst Method:

2.1   Select the **Action Type** from the drop-down button.

2.2   Enter the **Analyst ID** or click on the `ZOOM` **Zoom** button to open the **Laboratory or Monitor Selection** forms. Click on the required record and click on the `Select` **Select** button to return the record.

2.3   Enter the **Monitoring Variable ID** or click on the `ZOOM` **Zoom** button to open the **Monitoring Variable Selection** form. Click on the required record and click on the `Select` **Select** button to return the record.

2.4   Click on the **Analysis Method** button to open the Analysis Method form. *Note: If the Action Type is "Sample", then the Analysis Method for Laboratory form will open, and if the Action Type is "Observation" then the Observation Method for Monitor form will open.*

*Tip: To view the history of selected variables, click on the **History** button.*

Analysis Method for a Laboratory

Description

The **Analysis Method for Laboratory** is used to define or maintain analysis method information used to analyse samples and/or field readings. The form is also used to define properties for the analysis methods as used by laboratories.

3.   How to Add a new Analysis Method for a Laboratory:

*This form will only be displayed if the **Action Type** is **Sample**. It also has a **History** button that can be clicked to view the history of the selected variables.*

3.1   Click on the **Create Records** button to create a new Analysis Method. A blank **Analysis Method for Laboratory** form displays.

3.2   Enter the **Analysis Method ID** in the **Analysis Method** field or click on the `ZOOM` **Zoom** button to open the **Analysis Method Selection** form, and select the required record.

3.3   Enter the **Variable Reference** in the Variable Reference field and tab.

3.4   Enter the **Analysis Method Reference** in the Analysis Method Reference field and tab. *This ode indicates how the analysed variable is identified at the specific laboratory.* Note: *If LIMS is active and there is a valid analysis method on LIMS, you can zoom to open the Analysis Method Reference Selection form.*

3.5   Click on the **Result Value Type** field ▼ **Drop-down** button and select the **True Value** or **Detection Limit** option and tab.

3.6   Click on the **Result Detection Limit** type field ▼ **Drop-down** button and select the **Fixed, Questionnaire, Countstat or Zero** option and tab. Note: *If Result Value Type field is "Detection Limit" then* **"Fixed"** *is the only option.*

3.7   Enter the **Detection Limit** value and tab. *If the Result Value Type field is "Detection Limit", then the Detection Limit value must be greater than 1.*

3.8   Check the **Greater Than Allowed** indicator, if applicable. *This field is checked if an analyst can report result "Greater Than" a value.*

3.9   Enter the **Valid Decimal** number and tab. (Optional)

3.10   Enter the **Relative Standard Deviation** number and tab. (Optional)

3.11   Enter the **Start Date** and tab.

3.12   Enter the **End Date,** if applicable, and tab.

581

3.13   Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Valid Measuring Unit for Monitoring Variable Selection** form. Click on the required record and click on the [_Select_] **Select** button to return the record and tab.

3.14   The **Default Measuring Unit Indicator:** *Set this indicator to "True" when the results template should be updated with the measuring unit specified. If the indicator is set to "False", the results template will NOT be updated with any measuring unit. The data capturer must select the measuring unit for every result entered.*

*For Electrical Conductivity (EC) measurements, the **Default Measuring Unit Indicator** is usually set to "False" because the instrument unit (measuring range) can vary with every value measured. (e.g.: mS/m*; mS/cm; or uS/cm)*

*The **Default Measuring Unit** must not be confused with the **Standard Measuring Unit** (mS/m* for EC) that is used for reporting released results. (The Standard Measuring Unit has a red asterix, *, in the unit look-up table – Valid Measuring Units for Monitoring Variable Selection).*

3.15   Enter the **Multimedia ID** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form and select a record. (Optional)

3.16   Enter the **Grading Number.** (Optional)

3.17   Click on the **Pay Indicator**, if the monitor is paid for observations, and tab.

3.18   Enter the **Observation Cost**, if relevant.

3.19   Enter the **Contract Number**, if relevant.

3.20   Enter the **Contract Expiry Date**, if relevant.

3.21   Tab to accept the new record.

3.22   Click on the **Sample Type, Container, Preservative Maintenance** button in order to maintain information in this form. A **Sample Type, Container, Preservative Maintenance** Form displays.

3.23 Enter the relevant information or click on the **ZOOM** **Zoom** button to open the **Sample Type, Container and Preservative** selection forms. Click on the required record and click on the **Select** **Select** button to return the record and tab.

3.24 Enter the **Shelf Life** number.

3.25 Indicate whether the container will be supplied by the laboratory by clicking on the **Lab Supply Container** checkbox.

3.26 Indicate whether the record is no longer in use by clicking on the **Out of Use** checkbox.

4. How to Edit an Analysis Method

4.1 Click on the **Modify Records** button.

4.2 Click on the field to be edited to highlight it.

4.3 Edit the record as required. A **Warning** screen is displayed. Click **OK** to confirm the change.
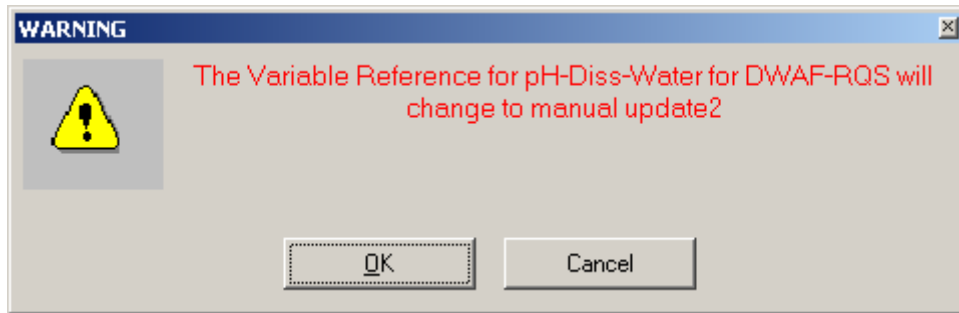
4.4   Click on the **Next Row** button to accept the record. A **Change Cause** screen is
        displayed. Select the **Error Fix** or **Business Event** and click on the **Continue** tab.

5.   How to Delete an Analysis Method

5.1   Click on the record to be deleted.

5.2   Click on the 🗐 **Modify Records** button to enable the Delete Line button.

5.3   Click on the ✂ **Delete Line** button.

5.4   A message will be displayed asking you to confirm the deletion. Deletion is possible
        ONLY if the method is not used in a monitoring programme. Click on the **Yes** option.

5.5   A **Change Cause** screen displays. Select **Error Fix** or **Business Event** and click on
        the **Continue** button.

Observation Method for a Monitor

Description

The **Observation Method** for Monitor form is used to define or maintain analysis method information used to analyse samples and/or field readings. The form is also used to define properties for the analysis methods as used by monitors.

3.   How to Add a new Observation Method for Monitors

*This form will be displayed if the **Action Type** is **"Observation".** The Monitor's details will be displayed. It also has a **History** button that can be clicked to view the history of the selected variables.*

3.1   Click on the **Create Records** button. A blank **Observation Method for Monitor** form displays.
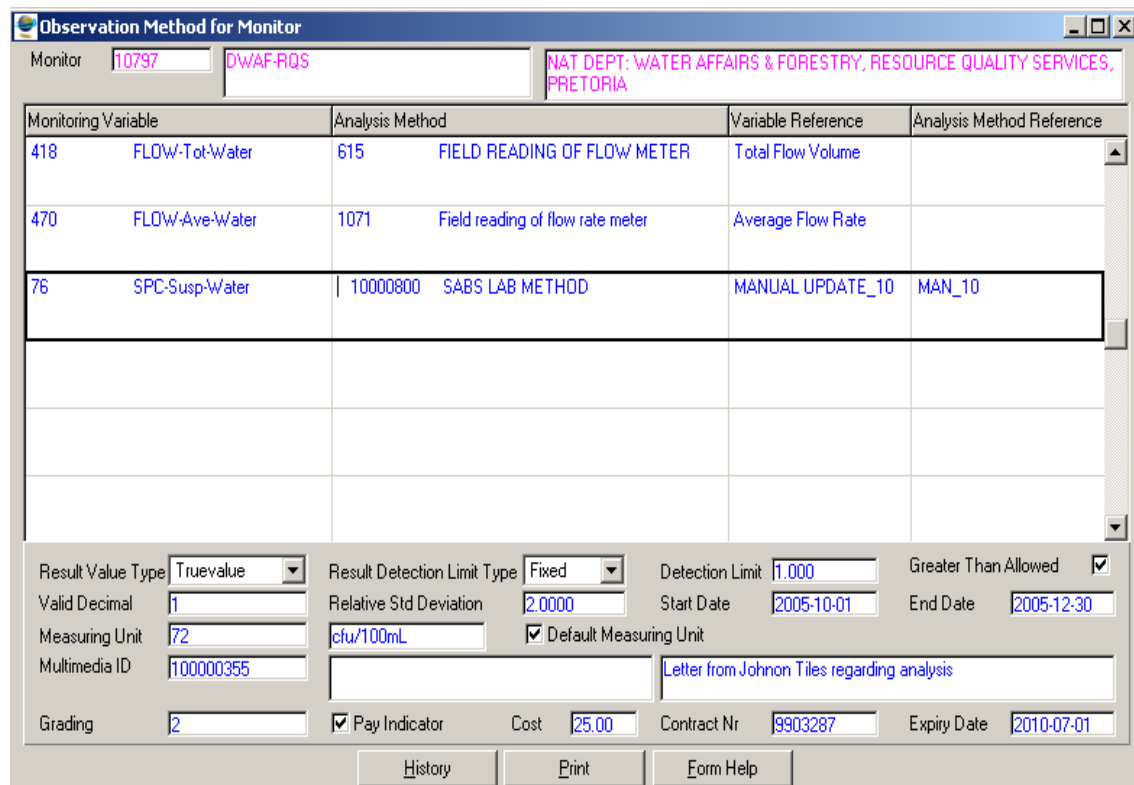
3.2   In the **Analysis Method field,** enter an **Analysis Method ID**, or click on the
        ZOOM **Zoom** button to open the **Analysis Method Selection** form, and select the
        required record.

3.3   In the **Variable Reference** field, enter the **Variable Reference**. This code indicates
        how the analysed variable is identified at the specific laboratory. (Optional)

3.4   In the **Analysis Method Reference** field, enter the Analysis Method Reference. This
        code indicates how the analysed variable is identified at the specific laboratory.
        (Optional)

3.5   Click on the **Result Value Type** field ▼**Drop Down** button and select the **True Value**
        or **Detection Limit** option and tab. This field is True Value if the Detection Limit Type
        is **Countstat** or **Zero**.

3.6   Click on the **Result Detection Limit Type** field ▼**Drop Down** button and select the
        Fixed, Countstat, or **Zero** option and tab.

3.7   Enter the **Detection Limit Value** and tab.

3.8   Check the **Greater Than Allowed** indicator, if applicable.

3.9   Enter the **Valid Decimal** number and tab. (Optional)

3.10   Enter the **Relative Standard Deviation** number and tab. (Optional)

3.11   Enter the **Start Date** and tab.

3.12   Enter the **End Date,** if applicable, and tab. The default date for ongoing methods is
        9999-12-31.

3.13   Enter the **Measuring Unit ID** or click on the `ZOOM` **Zoom** button to open the **Valid Measuring Unit Selection** form. Click on the required record and click on the `Select` **Select** button to return the record and tab.

3.14   Check the **Default Measuring Unit** Indicator. This indicator specifies if the measuring unit for an analysis method at a laboratory is used as a default when results are entered for the relevant variable.

3.15   Enter the **Multimedia ID** or click on the `ZOOM` **Zoom** button to open the **Multimedia Selection** form, and select a record. (Optional)

3.16   Enter the **Grading** number. A grading, 0-9, indicates the effectiveness of the Laboratory to execute a Sample Analysis method. The best grading = 0, the worst =9. (Optional)

3.17   Click on the **Pay** Indicator if the monitor is paid for observations, and tab.

3.18   Enter the **Observation Cost** if relevant.

3.19   Enter the **Contract Number** if relevant.

3.20   Enter the Contract **Expiry Date,** if relevant.

3.21   Tab to accept the new record.

4.   How to Edit an Observation Method for Monitors

4.1   Click on the Modify Records button.

4.2   Click on the field to be edited to highlight it.

4.3   Edit the record as required. A **Warning** screen is displayed. Click **OK** to confirm the change.

4.4   Click on the **Next Row** button to accept the record. A **Change Cause** screen is displayed. Select the **Error Fix** or **Business Event** and click on the **Continue** tab.

5.   How to Delete an Observation Method

5.1   Click on the record to be deleted, to highlight it.

5.2   Click on the 🗔 **Modify Records** button to enable the Delete Line button.

5.3   Click on the ✂ **Delete Line** button.

5.4   A message will be displayed asking you to confirm the deletion. Deletion is possible **ONLY** if the method is not used in a monitoring programme. Click on the **Yes** option to confirm the deletion.

5.5   A **Change Cause** screen displays. Select **Error Fix** or **Business Event** and click on the **Continue** button.

Survey Method Maintenance

Introduction:

A Survey Method specifies the information that should be gathered at a Spatial Feature e.g. a mine, when conducting a specific type of survey.

A Survey Method name normally includes a version number, since more than one version of the same type of Survey Method may exist over time for the same variable type.

An example of such an Environmental Survey Method might be the first version of a Treatment Works Classification method. This would be used in conducting surveys at treatment plants for the purpose of classifying the treatment plant.

Business Rules:

i.   Survey Method cannot have To Date unless it is super-ceeded by another Survey Method that is not a historical method

ii.   Once a Survey Method is confirmed and complete, such a record cannot be deleted or modified

iii.   Only the Central Administrator can Add, Edit and Modify records.

Path:

How to access Survey Method Maintenance on the system:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Survey Method Maintenance** from the sub menu.

1.4   This will open **Environmental Survey Method Maintenance Decision Criteria Wizard** form with the following option:

- **Survey Method Filter Criteria**
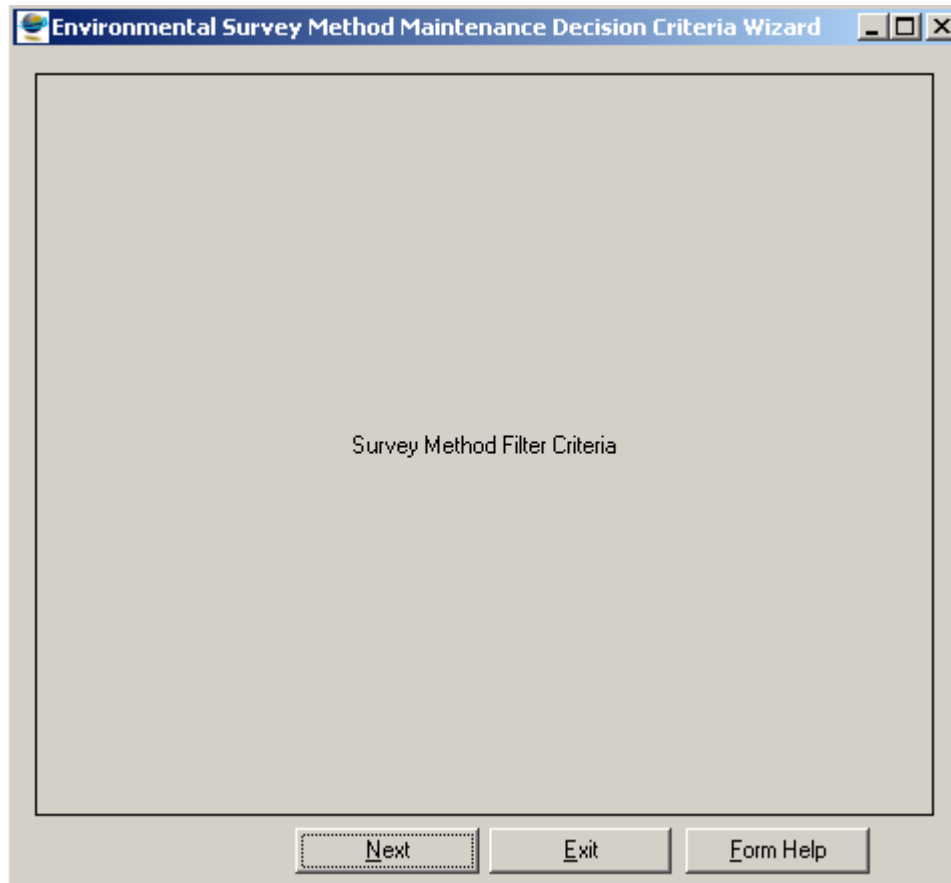
How to Search for Survey Method:

2.1   Select **Peripheral Information** from the Monitoring Management menu bar

2.2   Select **Monitoring Variable** from the drop down menu

2.3   Select **Survey Method Maintenance** from the sub menu

2.4   This will open **Environmental Survey Method Maintenance Decision Criteria Wizard** form.

How to Search for Survey Method using Survey Method Filter Criteria:

2.5.   Open the **Survey Method Filter Criteria Wizard** form.

2.6.   Enter the **Survey Method ID** or click on the ZOOM **Zoom** button to open the **Survey Method Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.

2.7.   The **Survey Method Name** will be automatically displayed as it is linked to the Survey Method ID.

2.8.   Enter the **Monitoring Variable Type ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.9.   The **Monitoring Variable Type Name** will be automatically displayed as it is linked to the Variable Type ID.

2.10.   Enter the **Preceding Survey Method ID** or click on the **ZOOM** **Zoom** button to open the **Survey Method Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.11. The **Preceding Method Name** will be automatically displayed as it is linked to the Preceding Survey Method ID

*Note: The **Back** button will close the Survey Method Filter Criteria Wizard and return to the Environmental Survey Method Maintenance Decision Criteria Wizard form.*

*Note: The **Exit** button will close the Survey Method Filter Criteria Wizard form and return to the main menu.*

2.12. Click on the **Next** button to close the Survey Method Filter Criteria Wizard and open the **Survey Method Maintenance** form displaying the variables for a survey method or an empty Survey Method Maintenance in create mode to allow the user to create a new Survey Method.

2.13. Click **Exit** button to close the Survey Method Maintenance form and return to the main menu.

How to Add Survey Method:

3.1. Select **Peripheral Information** from the Monitoring Management menu bar.

3.2. Select **Monitoring Variable** from the drop down menu.

3.3. Select **Survey Method Maintenance** from the sub menu.

3.4. This will open **Environmental Survey Method Maintenance Decision Criteria** form.

3.5. Select the **Survey Method Filter Criteria** and click on **Next** button to open the **Survey Method Filter Criteria** form

3.6. Select the **Next** button to open the **Survey Method Maintenance** form.

3.7. To search for existing records, enter the **Survey Method Name** and click on the **Filter** button to filter the records accordingly.

3.8. If the Record is not available, click on the **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record. **Survey Method ID** will be automatically displayed, as it is a system-generated serial number. *Note:* **Survey Method** *ID will only be generated once the record has been accepted.*

3.9. Enter the **Survey Method Name**

3.10. Enter the **Variable type ID** or click on the **ZOOM Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record and click on the **Select** button to return your selection.

594

3.11.   The **Variable Type Name** will be automatically displayed as it is linked to the Variable Type ID.

Note: *If the* **Survey Method From Date** *field has no value. Tick the* **Survey Method Historical Indicator** *check box to indicate that Survey Method is historical.*

3.12.   Click the **Next** button to open the Survey Method Parameters Maintenance form.

How to Add Parameters for Survey method

3.12.1.   Open the **Survey Method Parameters Maintenance** form

3.12.2.   The **Survey Method Id**, **Method Name** will automatically be displayed

595

3.12.3. Enter the **Survey Variable Parameter ID** or click on the `ZOOM` **Zoom** button to open the **Survey Variable Parameter Selection** form, select the applicable record and click on the `Select` **Select** button to return your selection
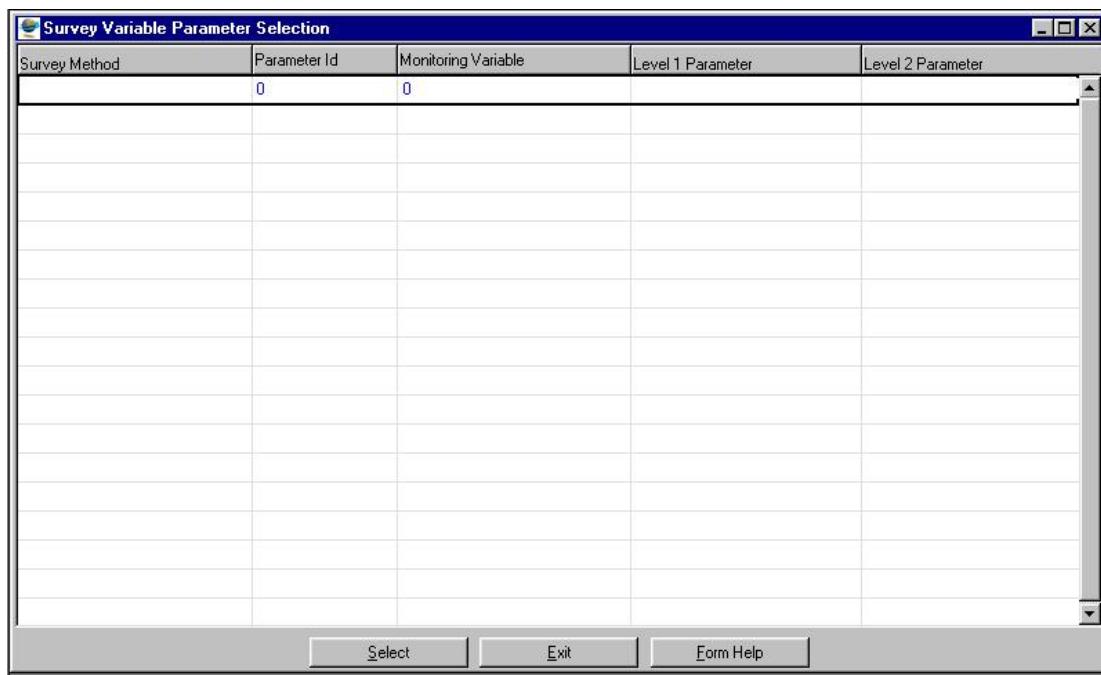
3.12.4. **Concatenated Var + Lev1 + Lev2** will be automatically displayed.

3.12.5. The **Create Date** will be automatically displayed **Note:** *this field displays the time and date when the record is created.*

3.12.6. **Create User Login** will be automatically displayed **Note:** *this field displays the login code for the person who created this record.*

3.12.7. **Create User Name** will be automatically displayed **Note:** *this field displays the name of the user logged in at the time of creating this record.*

3.12.8. **Create User Organisation ID** will be automatically displayed **Note:** *this field displays the organisation the user selected during organisation access control when this record was created*

3.12.9. **Create User Organisation Abbreviation** will be automatically displayed **Note:** *this field displays the abbreviation of the organisation the user logged on with for a work session on WMS Monitoring Management when this record was created*

Note: *The **Back** button will close the **Survey Method Parameter Maintenance** form and return back to the **Survey Method Maintenance** form*

3.12.10. Click the **Populate** button to populate the **Survey Method Parameters** with the variables and parameters.

3.12.11. Click the C**omplete** button to complete setting up the survey parameters for the survey method.

3.12.12. A message will pop up prompting you that "it will not be possible to add or delete parameters once the complete button is pressed. Are you sure you want to continue?"

[?] *Note: If **Cancel** button is selected then you return to the Survey Method Parameter Maintenance form to Add or Delete parameters*

3.12.13. Click the **Continue** button to Close the Method Survey Method Parameter Maintenance form an return to the Survey Method Maintenance form

3.13. The **Complete Indicator's** checkbox on the Survey Method Maintenance form will be automatically checked to display the status of the Survey Method parameters setup

How to Activate a Survey Method

3.14. Click on the **Activate** button. [?] **Note:** The Activate button will only be enabled if the Survey Method From Date and Survey Method to date have not bee populated with data and the Survey Method Historical Indicator's checkbox is not checked

3.14.1. The **Active Indicator's checkbox** on the Survey Method Maintenance form will be automatically checked to display that Survey Method is active.

3.14.2. **Survey Method From Date** will be automatically displayed with the date that the Survey Method was completed. [?] **Note:** *This is the date from which the Survey Method is being used on the system.*

3.14.3. **Survey Method To Date** will be automatically displayed. [?] **Note:** This is the date until which the Survey Method is being used on the system

597

3.14.4. The **Preceding Survey Method ID** will be automatically be populated with the Survey Method ID. *Note: It will only be populated if the Survey Method From Date, Survey Method to Date fields have value and the Survey Method Historical Indicator's checkbox is not checked*

3.14.5. The **Preceding Method Name** will be automatically as it is linked to the Preceding Survey Method ID.

3.14.6. The **Create Date** will be automatically displayed *Note: this field displays the time and date when the record is created.*

3.14.7. **Create User Login** will be automatically displayed Note: *this field displays the login code for the person who created this record.*

3.14.8. **Create User Name** will be automatically displayed *Note: this field displays the name of the user logged in at the time of creating this record.*

3.14.9. **Create User Organisation ID** will be automatically displayed *Note this field displays the organisation the user selected during organisation access control when this record was created*

3.14.10. **Create User Organisation Abbreviation** will be automatically displayed *Note: this field displays the abbreviation of the organisation the user logged on with for a work session on WMS Monitoring Management when this record was created*

3.14.11. The **Change Date** will be automatically displayed *Note: this field displays the time and date when the record was updated or created on this table*

3.14.12. **Change User Login** will be automatically, *Note: this field displays the user's login code for the person who updated this record*

3.14.13. **Change User Name** will be automatically displayed, *Note: this field displays the name of the user logged in at the time of updating this record.*

3.14.14. **Change User Organisation ID** will be automatically displayed, *Note: this field displays the Organisation Id of the organisation the user selected during organisational access control when updating or creating this record.*

3.14.15. **Change User Organisation Abbreviation** will be automatically displayed *Note this field displays the abbreviation of the organisation the user logged on with for a work session on WMS Monitoring Management*

 *Note: The **Back** button will close the Survey Method Maintenance form and return to the Environmental Survey Method Maintenance Decision Criteria*

3.15. Click the **Exit** button to close the *Survey Method Maintenance* form and return to the main menu

How to Edit the Survey Method:

Note: Only the Central Database Administrator can EDIT the records. These records are edited from the various Maintenance subset forms, e.g. Survey Method Maintenance form.

4.1.   Click on the record to be edited to highlight it, and click on the Modify Records button.

4.2.   Edit the record as required.

4.3.   Click on another record to accept the newly modified record.

How to Delete the Survey Method:

Note: Only the Central Database Administrator can Delete the records.

5.1.   Click on the record to be deleted, to highlight it.

5.2.   Click on the Delete button. Note: When records are referenced elsewhere in the system, the delete option will be disabled.

5.3.   A confirmation message will be displayed asking if you would like to delete the record

5.4.   Click on the OK option to confirm the deletion

Survey Monitor Maintenance

Introduction:

The Accreditation Maintenance form is used to maintain all the detail information regarding the valid monitor and survey method combinations.

1.   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Survey Monitor Maintenance** from the Monitoring Variable sub menu.

1.4   This will open the **Survey Method Monitoring Filter Criteria** form.

2.   How to Search for a Survey Monitor:

Filter Survey Method Monitoring Information:

2.1   Open the **Survey Method Monitoring Filter Criteria** form.

Note: *When no filtering (searching) is specified on the Survey Method Monitoring Filter Criteria form, a user can proceed by clicking on the **Survey Method** button to open **Survey Method for Monitor Maintenance** form from where all survey method information for the specified monitor is displayed and can be maintained. Else a user can specify the filter criteria parameters as follows:*

2.2   The **Analyst** fields will be automatically populated with the Organisation (Monitor) the user selected during logon but may be changed as follows: In the **Analyst ID** field, enter the Monitor ID, alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form, make your selection and click on the **Select** **Select** button to return your selection.

2.3   The **Analyst Name** and the **Analyst Abbreviation** fields will be automatically displayed as they are linked to the Monitor ID.

2.4   In the **Survey Method ID** field, enter a valid Survey Method ID**,** alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Survey Method Selection** form make your selection and click on the **Select** **Select** button to return your selection.

600

2.5 The **Survey Method Name** will be automatically displayed as it is linked to the Survey Method ID.

2.6 You now have four options:

- Click on the **Survey Method** button to open the Survey Method for Monitor Maintenance form with survey method monitors information displayed as specified in the filter criteria, from where the survey method monitors are maintained;

- Click on the **History** button to open the Survey Monitor History form to view the history of the survey method monitor;

- Click on the **Print** button to provide a standard system list of survey method monitor as specified in the filter criteria, OR

- Click on the **Exit** button to exit the form.

3. How to Add Survey Method for Monitor:

3.1 Open a **Survey Method for Monitor Maintenance** form.

3.2 Click on the ☑ **Create Records** button. A form displays in Create mode.

3.3 In the **Survey Method ID** field, enter the Survey Method ID for the monitoring variable to be linked to an organisation's accredited method, alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Survey Method Selection** form, make your selection and click on the Select **Select** button to return your selection, and tab.

3.4 The **Survey Method Name** will be automatically displayed as it is linked to the Survey Method ID.

3.5 In the **Begin Date** field, enter the date on which the survey method was implemented for a monitor and tab. *Note: Default Value is 9999-12-31*

3.6 In the **End Date** field, enter the date on which the survey method was terminated for a monitor and tab.

3.7 In the **Contract Number** field, enter the number of the contract between DWAF and the monitor, and tab.

3.8 In the **Contract Expiry Date** field, enter the expiry date of the contract, and tab.

3.9 In the **Survey Grading** field, enter the grading for the survey method record, and tab.

3.10 Check the **Pay Indicator** ☑ **Checkbox**, if a survey analysis cost is paid to a Monitor and tab.

3.11 In the **Survey Cost** field, enter the Rand value of cost per survey, and tab.

3.12 Tab to accept the new record.

4. How to Edit Survey Method for Monitor:

Note: The user may modify the survey method for monitor record only if it not used elsewhere in the system.

4.1 Click on the record to be edited, and click on the ⬛ **Modify Records** button.

4.2 Edit the accredited method as required.

4.3 Tab to accept the record changes, the **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".
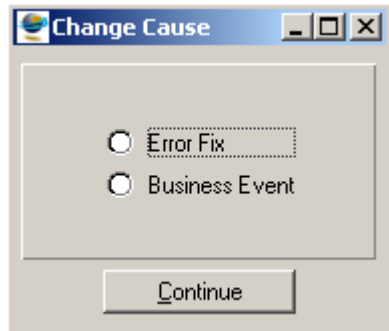
4.4 *If you have edited a record by mistake, click on the "Error fix" radio button, however if you are performing a valid edit, click on the "Business event " radio button, and then press the continue button to accept changes to the edited record.*

5. How to Delete Survey Method for Monitor:

⬛ *Note: The user may delete the survey method for monitor record only if it not used elsewhere in the system.*

5.1 Click on the record to be deleted, to highlight it, and click on the ⬛ **Modify Records** button

5.2 Click on the ✂ **Delete Record** button. A message will be displayed asking you to confirm the deletion.
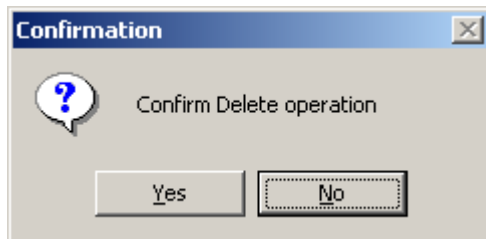
5.3 Click on the **Yes** button to confirm the deletion.

5.4 The **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".

5.5 If you have deleted a record by mistake, click on the "Error fix" radio button and press the continue button else click on the "Business event " radio button, and then press the continue button to accept deletion of the record

Feature Type for Questionnaire Template Maintenance

Introduction:

Geographical Features for Survey Methods links the Geographical Feature (for example a river, dam, canal, etc.) and the survey method (i.e. the information that should be gathered) to the Questionnaire template when conducting a specific type of an Environmental Survey.

Business Rules:

Only the Central Database Administrator has the rights to insert, update and delete records. Other users only have view rights.

Path:
How to access Survey Method Maintenance on the system:

1.1.   Select **Peripheral Info** from the Monitoring Management menu bar.

1.2.   Select **Monitoring Variable** from the drop down menu.

1.3.   Select **Feature Type for Questionnaire Template Maintenance** from the sub menu.

1.4.   This will open **Maintain Decision Criteria Wizard** form with the following option:

- **Feature Type for Questionnaire Template Maintenance**
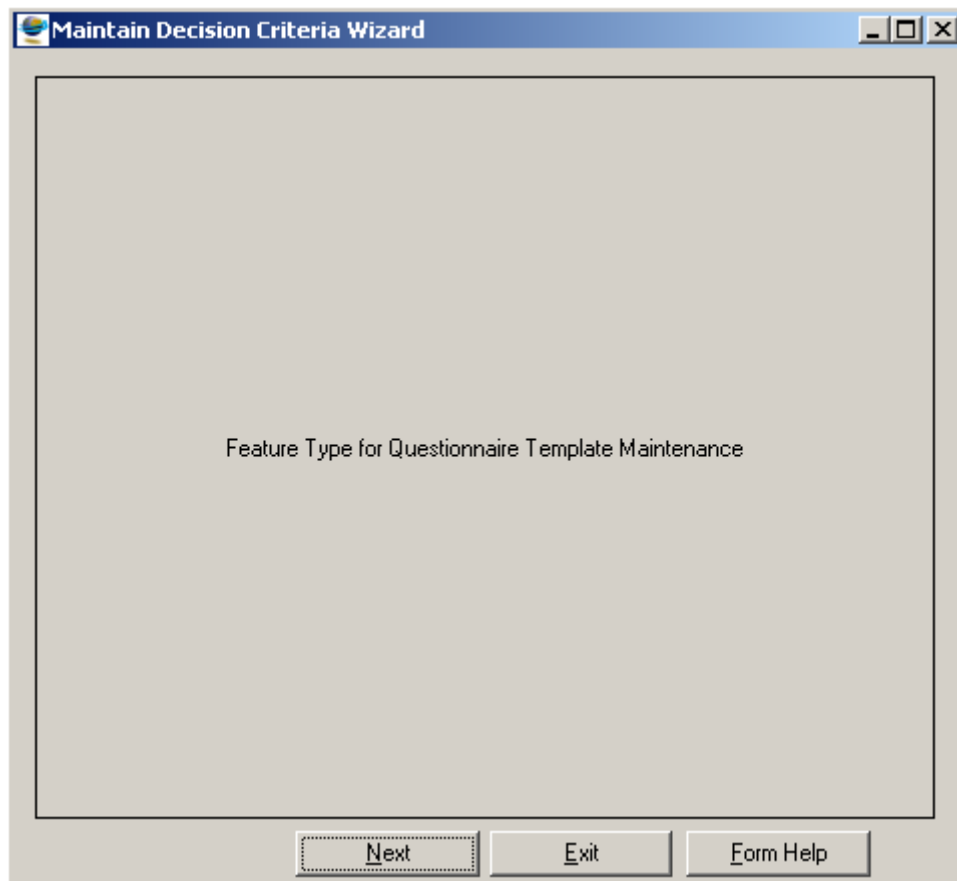
How to Search for Geographical Feature Type using Feature Type for Questionnaire Template Filter Criteria:

Select **Peripheral Info** from the Monitoring Management menu bar, then select **Monitoring Variable** from the drop down menu, then select **Feature Type for Questionnaire Template Maintenance** from the sub menu. This will open **Maintain Decision Criteria Wizard**

Click on Next button to open the Feature Type for Questionnaire Template Filter Criteria form

Enter the **Questionnaire ID** or click on the **ZOOM** **Zoom** button to open the **Questionnaire Template Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.

The **Questionnaire Name** will be automatically displayed as it is linked to the **Questionnaire Template ID**.

Enter the **Geographical Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associate Classes Type Selection** form. Select a class type from the class drop down list and the class type tree will be populated with the applicable classes. Select the applicable record then click on the **Select** **Select** button to return your selection.

The **Feature Type Name** will be automatically displayed as it is linked to the **Feature Type ID**.

Note: The **Back** button will close the form and return to the **Maintain Decision Criteria Wizard**.

Note: The **Exit** button will close the Feature Type Questionnaire Template Filter Criteria Wizard and return to the main menu.

Click on the **Next** button to close the Feature Type for Questionnaire Template Filter Criteria and open the **Feature Type for Questionnaire Template Maintenance Wizard** displaying the feature types for Questionnaire.

Click **Exit** button to close the Feature Type for Questionnaire Template Maintenance Wizard and return to the main menu.

How To Add Feature Type to a Questionnaire Template:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, then select **Monitoring Variable** from the drop down menu, then select **Feature Type for Questionnaire Template Maintenance** from the sub menu. This will open **Maintain Decision Criteria Wizard.** Click on **Next** button to open the **Feature Type for Questionnaire Template Filter Criteria**

3.2.   Select the **Next** button to open the **Feature Type for Questionnaire Template Maintenance Wizard**

3.3. Click on the [image] **Create** button or press F4 to insert a new line. An empty record displays to allow the creation of a new record.

3.4. Enter the **Questionnaire ID** or click on the **ZOOM** **Zoom** button to open the **Questionnaire Template Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.

3.5. The **Questionnaire Name** will be automatically displayed as it is linked to the **Questionnaire Template ID**.

3.6. Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associate Classes Type Selection** form, select a class type form the class drop down list and the class type tree will be populated with the applicable classes.

Select the applicable record then click on the [Select] **Select** button to return your selection

3.7. The **Feature Type Name** will be automatically displayed as it is linked to the **Feature Type ID**

*Note: The **Back** button will close the form and return to **the Feature Type for Questionnaire Template Filter Criteria***

*Note: The **Maintenance** button will close the form and open **the Maintain Decision Criteria Wizard** where the Questionnaire Template can be maintained*

3.8. Click the **Exit** button to close the form and return to the main menu

Questionnaire Template Maintenance

Introduction:

The **Questionnaire Template Maintenance** is used to create and define standard environmental survey templates. **Questionnaire Templates** form the basis of **Environmental Survey Methods** that are used to conduct surveys for the purpose of gathering and capturing information about the environmental state of geographical features.

Business Rules:

Only the Central Database Administrator has the rights to insert, update and delete records. Other users only have view rights.

Path:
How to access Survey Method Maintenance on the system:

1.1. Select **Peripheral Info** from the Monitoring Management menu bar.

1.2. Select **Monitoring Variable** from the drop down menu.

1.3. Select **Questionnaire Template Maintenance** from the sub menu.

1.4. This will open **Questionnaire Template Maintenance Decision Criteria Wizard** form with the following options:

- **Questionnaire Template Filter Criteria**.

- **Feature Type for Questionnaire Template Filter Criteria**
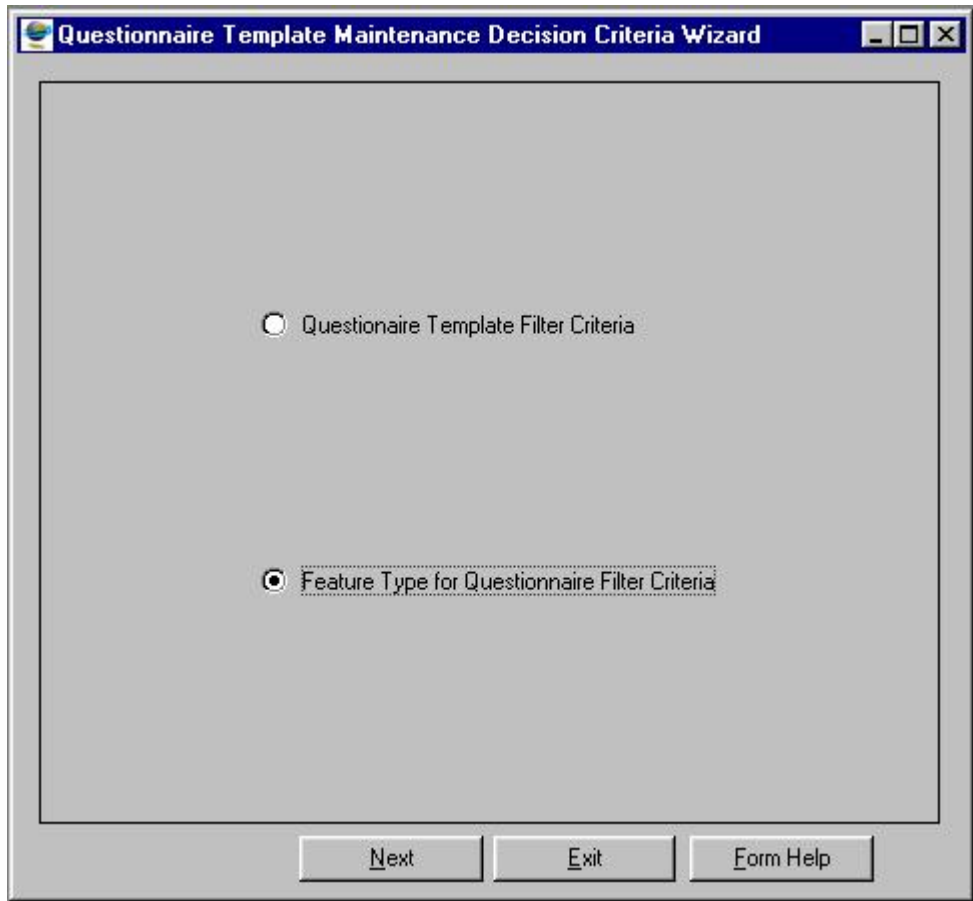
How to Search for Questionnaire Template using Questionnaire Template Filter Criteria:

2.1.   Select **Peripheral Info** from the Monitoring Management menu bar, then select **Monitoring Variable** from the drop down menu, then select **Questionnaire Template Maintenance** from the sub menu. This will open **Questionnaire Template Maintenance Decision Criteria Wizard**.

2.2.   Select the **Questionnaire Template Filter Criteria** radio button then click on **Next** button to open the **Questionnaire Template Filter Criteria Wizard**.

2.3.   Enter the **Questionnaire ID** or click on the **ZOOM** **Zoom** button to open the **Questionnaire Template Selection** form, select the applicable record then click on the ⌐ ₴ₑₗₑcₜ ⌐ **Select** button to return your selection.

2.4.   The **Questionnaire Name** will be automatically displayed as it is linked to the Questionnaire Template ID.

2.5.   Enter the **Variable Type ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.

2.6.   The **Monitoring Variable Type Name** will be automatically displayed as it is linked to the Variable Type ID.

2.7.   Enter the **Sample Type ID** or click on the ZOOM **Zoom** button to open the **Sample Type Selection** form, select the applicable record then click on the Select **Select** button to return your selection.

Sample Type Selection		☒

Sample Type Name			Filter

Sample Type	
0	NOT APPLICABLE
64	LOGGER
76	SECCHI
87	ALGAL ID-FIELD PREPARATION
105	HABITAT
309	TRACE SOLIDS - RQS

Select	Exit

2.8.   The **Sample Type Name** will be automatically displayed as it is linked to the Sample Type ID.

2.9.   Enter the **Change User Organisation ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select the applicable record then click on the Select **Select** button to return your selection.

613
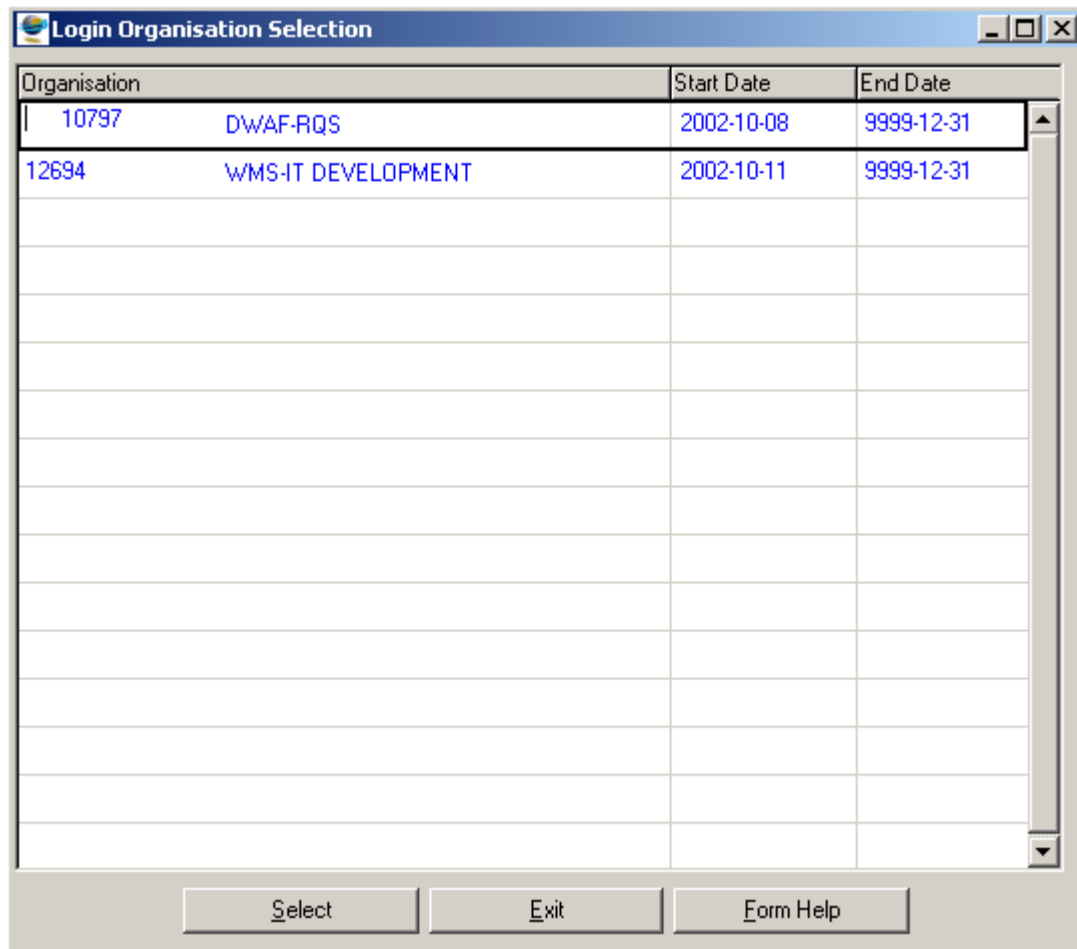
2.10.   The **Change User Organisation Name** will be automatically displayed as it is linked
to the Change User Organisation ID.

*Note: The **Back** button will close the **Questionnaire Templates Filter Criteria** and return
to the **Questionnaire Template Maintenance Decision Criteria Wizard**.*

*Note: The **Exit** button will close the **Questionnaire Template Filter Criteria Wizard** and
return to the main menu.*

2.11.   Click on the **Next** button to close the **Questionnaire Template Filter Criteria Wizard**
and open the **Questionnaire Template Maintenance Wizard** displaying the details
for a Questionnaire Template

2.12. Click on the **Next** button to close the **Questionnaire Template Maintenance Wizard** and open the **Feature Type for Questionnaire Template Maintenance Wizard** displaying the feature types for Questionnaire

2.13. Click **Exit** button to close the **Feature Type for Questionnaire Template Maintenance Wizard** and return to the main menu

How to Search for Geographical Feature Type using Feature Type for Questionnaire Template Filter Criteria:

2.1   Select **Peripheral Info** from the Monitoring Management menu bar, then select **Monitoring Variable** from the drop down menu, then select **Questionnaire Template Maintenance** from the sub menu. This will open **Questionnaire Template Maintenance Decision Criteria Wizard**

2.2   Select the **Feature Type for Questionnaire Template Filter Criteria** radio button then click on **Next** button to open the **Feature Type for Questionnaire Template Filter Criteria**

2.3   Enter the **Questionnaire ID** or click on the ZOOM **Zoom** button to open the **Questionnaire Template Selection** form, select the applicable record then click on the Select **Select** button to return your selection.

2.4   The **Questionnaire Name** will be automatically displayed as it is linked to the **Questionnaire Template ID**.

2.5   Enter the **Geographical Feature Type ID** or click on the ZOOM **Zoom** button to open the **Associate Classes Type Selection** form, select a class type form the class drop down list and the class type tree will be populated with the applicable classes.

Select the applicable record then click on the Select **Select** button to return your selection.

2.6 The **Feature Type Name** will be automatically displayed as it is linked to the **Feature Type ID**.

*Note: The **Back** button will close the form and return to the **Questionnaire Template Maintenance Decision Criteria Wizard**.*

*Note: The **Exit** button will close the Feature Type Questionnaire Template Filter Criteria Wizard and return to the main menu.*

2.7 Click on the **Next** button to close the Feature Type for Questionnaire Template Filter Criteria and open the **Questionnaire Template Maintenance Wizard** displaying the Questionnaire Template

Note: The **Back** button will close the Questionnaire Template Maintenance Wizard and return to the **Feature Type for Questionnaire Template Filter Criteria**.

Note: The **Maintenance** button will close the Questionnaire Template Maintenance Wizard and open the **Maintain Decision Criteria Wizard** from where Variable Type, Sample Type and Feature Types for Questionnaire Template are maintained

Note: The **Exit** button will close the **Questionnaire Template Maintenance Wizard** and return to the main menu

2.8   Click on the **Next** button to close the Questionnaire Template Filter Criteria Wizard and open the **Feature Type for Questionnaire Template Maintenance Wizard** displaying the feature types for Questionnaire

2.9   Click **Exit** button to close the Feature Type for Questionnaire Template Maintenance Wizard and return to the main menu.

How to Add Questionnaire Template:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, then select **Monitoring Variable** from the drop down menu, then select **Questionnaire Template Maintenance** from the sub menu. This will open **Questionnaire Template Maintenance Decision Criteria Wizard.** Select the **Questionnaire Template Filter Criteria** then click on **Next** button to open the **Questionnaire Template Filter Criteria Wizard**

3.2.   Click the **Next** button form the **Questionnaire Template Filter Criteria** to open the **Questionnaire Template Maintenance Wizard**

3.3. To search for existing records, enter the **Questionnaire Name** then click on the **Filter** button to filter the records accordingly.

3.4. If the Record is not available, click on the **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.5. **Questionnaire ID** will be automatically displayed, as it is a system-generated serial number. *Note:* **Questionnaire** *ID will only be generated once the record has been created.*

3.6. Enter the **Questionnaire Name**

3.7. Enter the **Variable type ID** or click on the **ZOOM Zoom** button to open the **Monitoring Variable Type Selection** form, select the applicable record then click on the **Select** button to return your selection.

3.8. The **Variable Type Name** will be automatically displayed as it is linked to the Variable Type ID.

3.9. Enter the **Sample Type ID** or click on the **ZOOM** **Zoom** button to open the **Sample Type Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.

3.10. The **Sample Type Name** will be automatically displayed as it is linked to the Sample Type ID.

3.11.   Enter the **Questionnaire Description**

3.12.   Tab to accept the newly created record

![?] *Note: The **Back** button will close the Questionnaire Template Maintenance Wizard and return to the **Questionnaire Template Filter Criteria Wizard***

![?] *Note: The **Maintenance** button will close the Questionnaire Template Maintenance Wizard and open the **Maintain Decision Criteria Wizard** from where Variable Type, Sample Type and Feature Types for Questionnaire Template are maintained*

3.13.   Click the **Next** button to close the **Questionnaire Template Maintenance Wizard** and open the **Feature Type for Questionnaire Template Maintenance Wizard** displaying the features types for Questionnaire template

Questionnaire Id	Questionnaire Name	Feature Type Id	Feature Type Name
1200000001	TRTR	84	Monitoring Points
1200000001	TRTR	117	Borehole
1200000001	TRTR	188	Tertiary Drainage Region
1200000001	TRTR	206	Impact Assessment Zoning
1200000001	TRTR	296	Reach
1200000001	TRTR	3184	Mine Shaft
1200000001	TRTR	3424	DWAF Water Resource Management Region
1200000001	TRTR	3429	WMA Forum Area
1200000001	TRTR	3467	Canal
1200000001	TRTR	4392	Informal
1200000002	EQWE	117	Borehole

Back   Exit   Maintenance   Form Help

3.14.   Click the **Exit** button to close the Questionnaire Template Maintenance Wizard and return to the main menu.

How To Add Feature Type to a Questionnaire Template:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, then select **Monitoring Variable** from the drop down menu, then select **Questionnaire Template Maintenance** from the sub menu. This will open **Questionnaire Template Maintenance Decision Criteria Wizard.** Select the **Feature Type for Questionnaire Template Filter Criteria** radio button then click on **Next** button to open the **Feature Type for Questionnaire Template Filter Criteria.** Click the **Next** button to open the **Questionnaire Template Maintenance Wizard.**

3.2.   Select the **Next** button to open the **Feature Type for Questionnaire Template Maintenance Wizard**

3.3. Click on the [icon]**Create** button or press F4 to insert a new line. An empty record displays to allow the creation of a new record.

3.4. Enter the **Questionnaire ID** or click on the `ZOOM` **Zoom** button to open the **Questionnaire Template Selection** form, select the applicable record then click on the `Select` **Select** button to return your selection.

3.5.   The **Questionnaire Name** will be automatically displayed as it is linked to the **Questionnaire Template ID**.

3.6.   Enter the **Geographical Feature Type ID** or click on the `ZOOM` **Zoom** button to open the **Associate Classes Type Selection** form, select a class type form the class drop down list and the class type tree will be populated with the applicable classes.

Select the applicable record then click on the `Select` **Select** button to return your selection

3.7.   The **Feature Type Name** will be automatically displayed as it is linked to the **Feature Type ID**

3.8.   Tab to accept the newly created record

*Note: The **Back** button will close the form and return to the **Questionnaire Template Maintenance Wizard***

*Note: The **Maintenance** button will close the Feature Type for Questionnaire Template Maintenance Wizard and open the **Maintain Decision Criteria Wizard** from where Questionnaire Template are maintained*

3.9.   Click the **Exit** button to close the form and return to the main menu

How to Edit the Questionnaire Template:

Note: Only the Central Database Administrator can EDIT the records. These records are edited from the various Maintenance subset forms, e.g. Questionnaire Template Maintenance Wizard.

4.1.   Click on the record to be edited to highlight it, and then click on the Modify Records button.

4.2.   Edit the record as required.

4.3.   Click on another record to accept the newly modified record.

How to Delete the Questionnaire Template:

Note: Only the Central Database Administrator can Delete the records.

5.1.   Click on the record to be deleted, to highlight it.

5.2.   Click on the Delete button. Note: When records are referenced elsewhere in the system, the delete option will be disabled.

5.3.   A confirmation message will be displayed asking if you would like to delete the record

5.4.   Click on the OK option to confirm the deletion

Accreditation Maintenance

Introduction:

The Accreditation Maintenance form is used to maintain all accreditation information needed for WMS analysis and survey methods. The Accreditation Maintenance form contains three sub-forms:

Accredited Method sub-form - used to view and maintain accredited methods.

Accredited WMS Method sub-form - used to view and maintain the WMS analysis methods and survey methods linked to an accredited organisation.

Accreditation Status sub-form - used to view and maintain the accreditation periods of an accredited WMS analysis method and survey methods. The Accreditation Status can be either active or suspended; when the status is active, all results with analysis dates within this period can be allocated an "accredited" status, however when the status is suspended, no results can be allocated a status of accredited.

Business Rules:

Accredited Method

i.   An external officer is not allowed to change the organisation on the Accredited Organisation Field.

ii.   User belonging to an external organisation may not select a different accredited organisation to the organisation selected during organisational access control.

iii.   User belonging to an external organisation may only view, create, modify, or delete accreditation information for his/her own organisation.

iv.   A central administrative officer can edit any field to make the changes.

v.   An organisation registered as a Responsible is allowed to select and modify data of the Executive and an organisation registered as an Executive is only allowed to change their own data.

vi.   User belonging to an internal organisation may view all records of all accredited organisations but only create, modify or delete accreditation information for his/her own organisation

1.   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Accredited Method Maintenance** from the Monitoring Variable sub menu.

1.4   This will open the **Accredited Method Filter Criteria** form.

2.   How to Search for an Accredited Method:

2.1   Open the **Accredited Method Filter Criteria** form.

Note: *When no filtering (searching) is specified on the Accredited Method Filter Criteria form, a user can proceed by clicking on the* **Accreditation** *button to open* **WMS Accreditation Method Maintenance** *form from where all accreditation information is displayed and can be maintained. Else a user can specify the filter criteria parameters as follows:*

2.2   The **Accredited Organisation** fields will be automatically populated with the Organisation the user selected during logon but may be changed as follows: In the **Accredited Organisation ID** field, enter a valid Accredited Organisation ID, alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Analyst Selection** form and Select **Select** the required organisation. **Note:** *If no methods are registered for the organisation, the user will not be able to access the Accreditation Registration form or attempt to view any accreditation history for that organisation. An error message will be displayed. Click on the 'OK' button and register method first for that organisation.*

2.3   If the valid Accredited Organisation ID that has methods is entered, the **Accredited Organisation Name** will be automatically displayed as it is linked to the Accredited Organisation ID.

2.4   In the **Accredited Method Code** field, enter the valid unique code of Accredited Method, alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Accreditation Method Selection** form and Select **Select** the required accredited method.

2.5   The **Accredited Method Description** will be automatically displayed as it is linked to the Accredited Method Code.

2.6   In the **Accredited Body ID** field, enter a valid Accredited Organisation Body ID, alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Organisation Selection** form and Select **Select** the required organisation body id.

2.7   The **Accredited Body Name** will be automatically displayed as it is linked to the Accredited Organisation Body ID.

2.8   Click on the **Accreditation** button to open the **WMS Accreditation Method Maintenance** form with accreditation information as specified in the filter criteria.

Note: *The History button will open the Accreditation Method History View form with the Accreditation Method history information displayed as specified in the filter criteria, and the Exit button will close the form and return to the main menu.*

Maintain accreditation information:

The WMS Accreditation Method Maintenance form contains three sub-forms: The **Accredited Method** sub-form is used to maintain accredited methods, the **Accredited WMS Method** sub-form is used to maintain the WMS analysis methods that are accredited and the **Accreditation Status** sub-form is used to maintain the accreditation periods of an accredited WMS analysis method.

3.   Accredited Method Sub-form

*TIP: To access the **Accredited WMS Method Sub-form**, click on the **WMS Method** button. The Accredited WMS Method Sub-form will open with the Accredited WMS methods of the focussed Accredited method.*

3.1   How to Add a new Accredited Method:

Note: You can only add a new accredited method to your own organisation.

3.1.1   Click on the **Create Records** button. An **Accredited Method** sub-form displays in Create mode.

3.1.2   The **Accredited Organisation** fields will be populated with the organisation the user selected at logon and may not change.

3.1.3   In the **Accredited Method Code** field, enter the unique identification code for a new accredited method, and tab.

3.1.4   In the **Accredited Method Description** field, enter the description of the accredited method as defined by the accredited organisation, and tab.

3.1.5   In the **Accredited Body ID** field, enter a valid Accredited Organisation Body ID, alternatively, press **F5** or click on the `ZOOM` **Zoom** button to open the **Organisation Selection** form and `Select` **Selec**t the required organisation.

3.1.6   The **Accredited Body Name** will be automatically displayed.

3.1.7   You now have four options:

- Tab to accept the new record and click on **Exit** button to exit the form;

- Click on the **WMS Method** button to open the **Accredited WMS** sub-form to add an Accredited WMS Method to be linked to the newly created Accredited Method;

- Click on the **History** button to open the Accredited Method History View form to view the history of the newly created record;

- Click on the **Print** button to provide a standard system list of accredited methods.

3.2   How to Edit an Accredited Method:

3.2.1   Click on the record to be edited, and click on the **Modify Records** button.

3.2.2   Edit the accredited method as required. *Note: Only the Accreditation body and the Accreditation Method Description may be edited.*

3.2.3   Tab to accept the record changes, the **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".
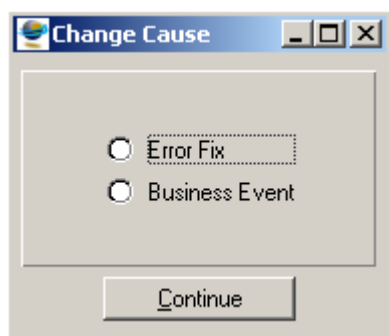
3.2.4   *If you have edited a record by mistake, click on the "Error fix" radio button, however if you are performing a valid edit, click on the "Business event " radio button, and then press the continue button to accept changes to the edited record.*

3.3   How to Delete an Accredited Method:

629

Deletion will only be possible if no Accredited WMS Method is linked to the Accredited Method, therefore all status records for all the Accredited WMS Methods belonging to the Accredited Method you want to delete need to be deleted first. You will only be allowed to delete records belonging to your own organisation.

3.3.1 Click on the record to be deleted, to highlight it and click on the ⬛ **Modify Records** button.

3.3.2 Click on the ✂ **Delete Record** button. A message will be displayed asking you to confirm the deletion.
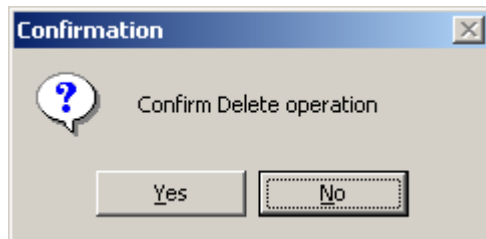
3.3.3 Click on the **Yes** button to confirm the deletion.

3.3.4 The **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".
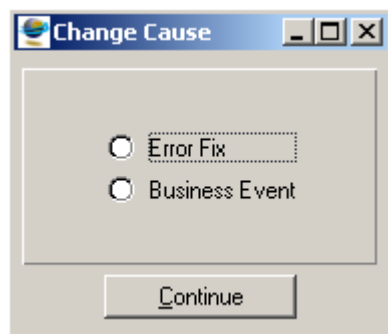
3.3.5 *If you have deleted a record by mistake, click on the "**Error fix**" radio button and press the continue button else click on the "**Business event** " radio button, and then press the continue button to accept deletion of the record.*

4. Accredited WMS Method Sub-form

The purpose of this sub-form is to maintain the WMS Analysis Methods and Survey Methods linked to an accredited method.

❓ *TIP: To access the Accredited Status sub-form, click on the Accredited Status button. The Accredited Status for the analysis or survey method in focus will be displayed.*

The Analysis Method button enables you to view the Analysis Method Maintenance form (in query mode) for the analysis method in focus and the Survey Method button enables you to view the Survey Method (in query mode) for the survey method in focus. ❓ *Note: If action type is 'Sample' or 'Observation', the Analysis Method button will be displayed, and the Survey Method button will be invisible and if the action type is 'Survey', the Analysis Method button will be invisible.*
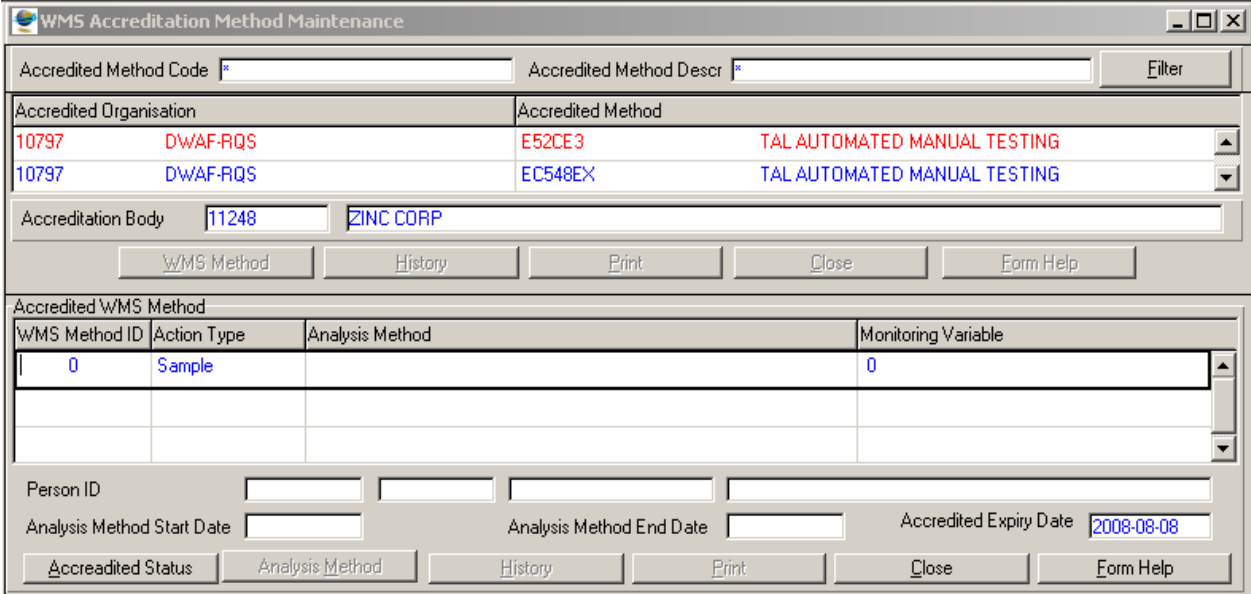
4.1 How to Add a new Accredited WMS Method:

Note: You can only add a new Accredited WMS Method to your own organisation.

4.1.1   Click on the [icon] **Create Records** button to add a new accredited WMS Method to the focussed Accredited Method. An **Accredited WMS Method** sub-form displays in Create mode.

4.1.2   Click on the **Action Type** [dropdown] Drop Down button, and select **Sample**, **Observation** or **Survey**, and tab.

4.1.3   If Action Type selected is **Sample** or **Observation** then:

- In the **Analysis Method ID** field, enter the analysis method ID**,** alternatively, press **F5** or click on the **ZOOM** Zoom button to open the **Analysis Method Selection** form and select the required analysis method, and tab.

- The **Analysis Method Description**, **Monitoring Variable ID** & **Monitoring Variable Abbreviation** for the selected Analysis Method will be displayed.

4.1.4   If Action Type is **Survey** then:

- In the **Survey Method ID** field, enter the Survey Method ID to be linked to an organisation's accredited method, alternatively, press **F5** or click on the **ZOOM** Zoom button to open the **Survey Method Selection** form and select the required survey method.

- The **Survey Method Name** will be automatically displayed as it is linked to the Survey Method ID.

- In the **Person ID** field, enter the Person ID, alternatively, press **F5** or click on the **ZOOM** Zoom button to open either **Employee Selection** form or the **Member Selection** form depending on the organisation type.

- The **Surname**, **First Names** & **Initials** of the person who is accredited in the accredited organisation will be automatically displayed.

4.1.5   Enter the **Accredited Expiry Date.** [icon] *Note: No **Accreditation Status** can be defined for periods later than this date and this date may not be later than the end*

631

date of the WMS Analysis Method or Survey Method for the specific laboratory or monitor.

4.1.6　Tab to accept the new record.

4.1.7　The new **Accredited WMS Method ID** will be automatically updated/created by the system.

4.1.8　You now have four options:

- Click on the **Accredited Status** button to open the **Accredited Status** sub-form in Create Mode to add an Accredited Status for the newly created Analysis/Survey Method;

- If the newly created record is of type "**Survey"** then click on the **Survey Method** button to open the **Survey Method Maintenance** form else if the newly created record is of type "**Sample**" or "**Observation**" then click on the **Analysis Method** button to open the **Analysis Method Maintenance** form;

- Click on the **History** button to open the Accredited Method History View form to view the history of the newly created record;

- Click on the **Print** button to provide a standard system list of accredited methods.

- Click on **Exit** button to exit the form.

4.2　How to Edit an Accredited WMS Method:

4.2.1　Click on the record to be edited, and click on the 🔲 **Modify Records** button.

4.2.2　Edit the **Accredited Expiry Date** field, as this is the only field that may be updated.

4.2.3　Tab to accept the record changes, the **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".
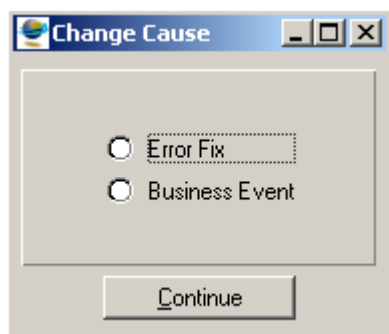
4.2.4　*If you have edited a record by mistake, click on the "**Error fix**" radio button, however if you are performing a valid edit, click on the "**Business event** " radio button, and then press the continue button to accept changes to the edited record.*

4.3　How to Delete an Accredited WMS Method:

🔲 *Note: You will only be allowed to delete records belonging to your own organisation and if the record is not used elsewhere in the system.*

4.3.1   Click on the record to be deleted, to highlight it and click on the 🗐 **Modify Records** button.

4.3.2   Click on the ✂ **Delete Record** button. A message will be displayed asking you to confirm the deletion.
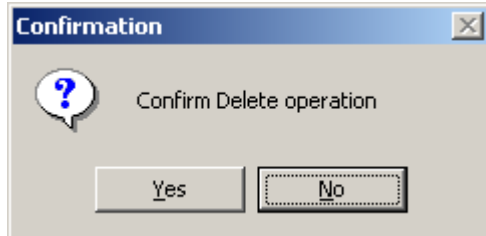
4.3.3   Click on the **Yes** option to confirm the deletion.

4.3.4   The **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".

4.3.5   *If you have deleted a record by mistake, click on the "**Error fix**" radio button and press the continue button else click on the "**Business event** " radio button, and then press the continue button to accept deletion of the record.*

5.   Accredited Status Sub-form

The purpose of this form is to view and maintain the accreditation periods of an Accredited WMS Method.

Business Rules:

i.   An Active status may not be specified if the WMS analysis method is closed for the specified date.

ii.   The first period will start at a specific date and can have a status of "A"ctive or "S"uspended. This period's "end date" will be equal to the expiry date of the accredited WMS method until a next period is defined that "S"uspend this "A"ctive period or vice versa. The suspension is then valid up to the expiry date until the method is re-instated by an "A"ctive status period or vice versa.

iii.   A status period may only be added to the set of status records if it is added after the latest status record.

iv.   On any change in status of an Accredited WMS method the effect on the accredited results must be determined and appropriate result records updated.

5.1   How to Add Accredited Status:

🗒 *Note: You can only add your own organisations records. You can only add two types of accredited status records, i) a new record with a different status than the last status record created, and with a later period start date. ii) A new record with a different status than the first status record created, and with an earlier period begin date.*

5.1.1 Click on the [icon] **Create Records** button to add accredited status to the focussed Accredited WMS Method. An **Accredited Status** sub-form displays in Create mode.

5.1.2 In the **Period Begin Date** field, enter the start of an accredited period of an accredited WMS Method, and tab. *The begin date of the new record must be earlier than the Accredited expiry date.*

5.1.3 The **Period End Date** field will display the calculated end date of status period.

5.1.4 Click on the **Period Status** [icon] Drop Down button, and select either an **Active** or **Suspended** status. *This field describes the status of a period from the period begin date of this record up to the period begin date of the new WMS accredited period record for an accredited WMS Method.*

5.1.5 Tab to accept the new record.

5.2 How to Edit an Accredited Status:

[icon] *Note: Only one status record may be modified at a time.*

5.2.1 Click on the record to be edited, and click on the [icon] **Modify Records** button.

5.2.2 Edit the **Period Begin Date** field. [icon] *Note: If the modification of the Period Begin Date has an effect on accredited results, a warning message will be displayed. Click on the **OK** button to approve the change or **Cancel** the modification*

5.2.3 Tab to accept the record changes, the **Change Cause** form will be displayed with two options, namely, "*Error Fix*" and "*Business Event*".

634

5.2.4   *If you have edited a record by mistake, click on the "**Error fix**" radio button, however if you are performing a valid edit, click on the "**Business event** " radio button, and then press the continue button to accept changes to the edited record.*

5.3   How to Delete an Accredited Status:

5.3.1   Click on the record to be deleted, to highlight it and click on the **Modify Records** button. *Note: Only the last record with the latest begin date may be deleted.*

5.3.2   Click on the **Delete Record** button. *Note: If the delete action will affect the accredited results, a warning message will be displayed. Click on the **OK** button to delete the record and updates will be made to the affected results, else **Cancel** the deletion.*

5.3.3   The **Change Cause** form will be displayed with two options, namely, "***Error Fix***" and "***Business Event***".

5.3.4   *If you have deleted a record by mistake, click on the "**Error fix**" radio button and press the continue button else click on the "**Business event** " radio button, and then press the continue button to accept deletion of the record.*

6.   How to View Accreditation History:

*Note: Each sub-form has a **History** button.*

6.1   Click on the **History** button in order to view the specific history of the record in focus.

6.2   An **Accreditation History View** form displays. *Note: The name of the form displaying will depend on the focused record on the sub-form. E.g. **Accreditation Method History** View*

635

Measuring Unit

Introduction:

The Measuring Unit Maintenance form is used to define the measured value of a monitoring variable in terms of its unit. Conversion factors between like units (e.g. mg per litre and gram per litre) can be registered with a conversion factor of mantissa X 10 to the power of exponent. As an example the conversion of 1 gram per litre to milligram per litre is: 1(value) X 1(mantissa) X 10 to the power of 3(exponent). Thus one gram per litre = 1000 milligram per litre. To convert 1 milligram per litre to gram per litre: 1 X 1X 10 to the power of -3. This measuring unit will be used during the results received and results released processes, as all released results will appear as a measured unit.

Business Rules:

i.　　　　A conversion factor formula with a mantissa and exponent is needed.

1.　　Path:

1.1　　Click on **Peripheral Info**.

1.2　　Click on the **Monitoring Variable** submenu.

1.3　　Select the **Measuring Unit** submenu.

2.　　How to Add a New Measuring Unit

2.1　　Click on the 　　**Create Records** button. A blank **Measuring Unit Maintenance** Form displays.
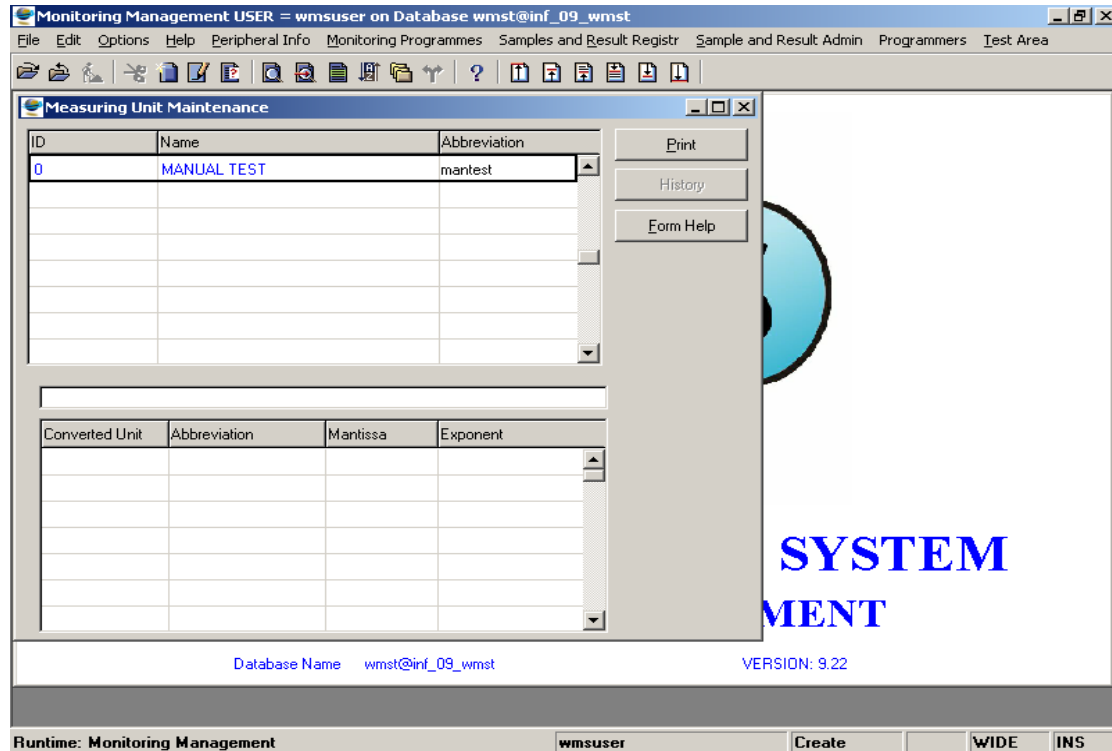
2.2   Enter the **Measuring Unit** name and tab.

2.3   Enter the **Measuring Unit** abbreviation and tab.

2.4   **If no conversion is necessary**, click on the 📄 **Next Row** button to accept the new record. A **Measuring Unit Maintenance** form displays with a list of the Measuring Units.
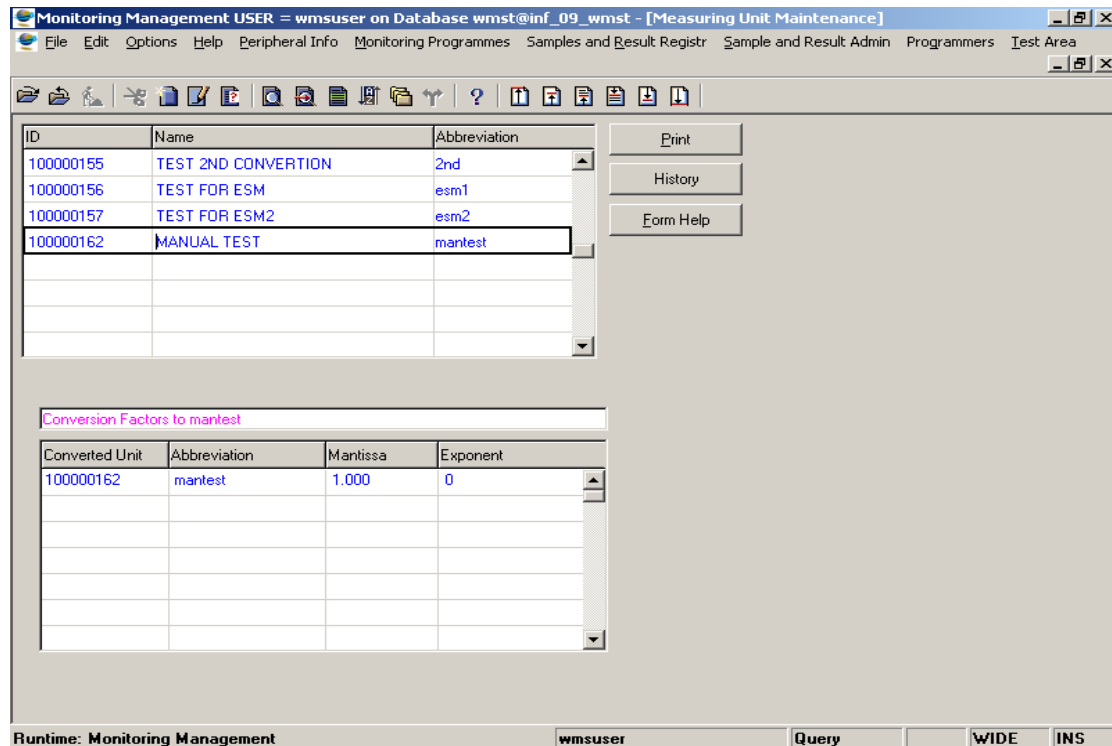
2.5　　**If there is a conversion to another unit**, both units must be added in the list as well as in the **Conversion Factors** grid appearing on the bottom half of the Measuring Unit form, by clicking in the grid.
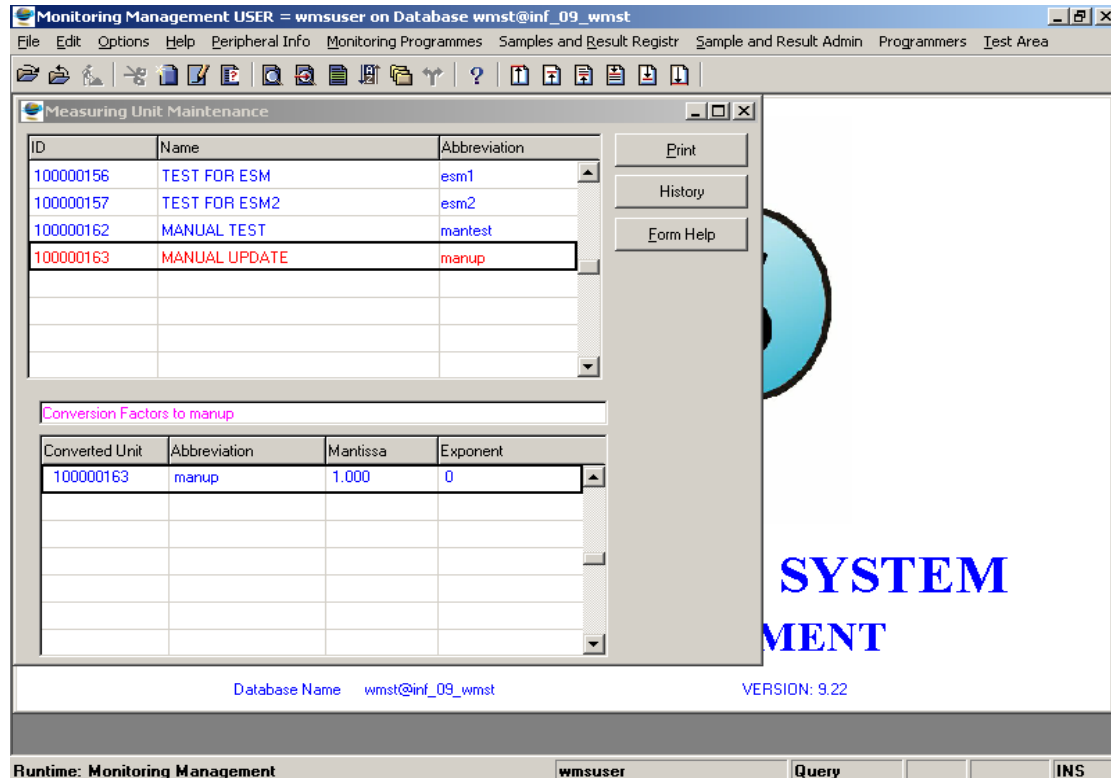
2.6　　Click on the **Create Records** button.

2.7　　Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the Measuring Unit form. A **Measuring Unit Selection** form displays.
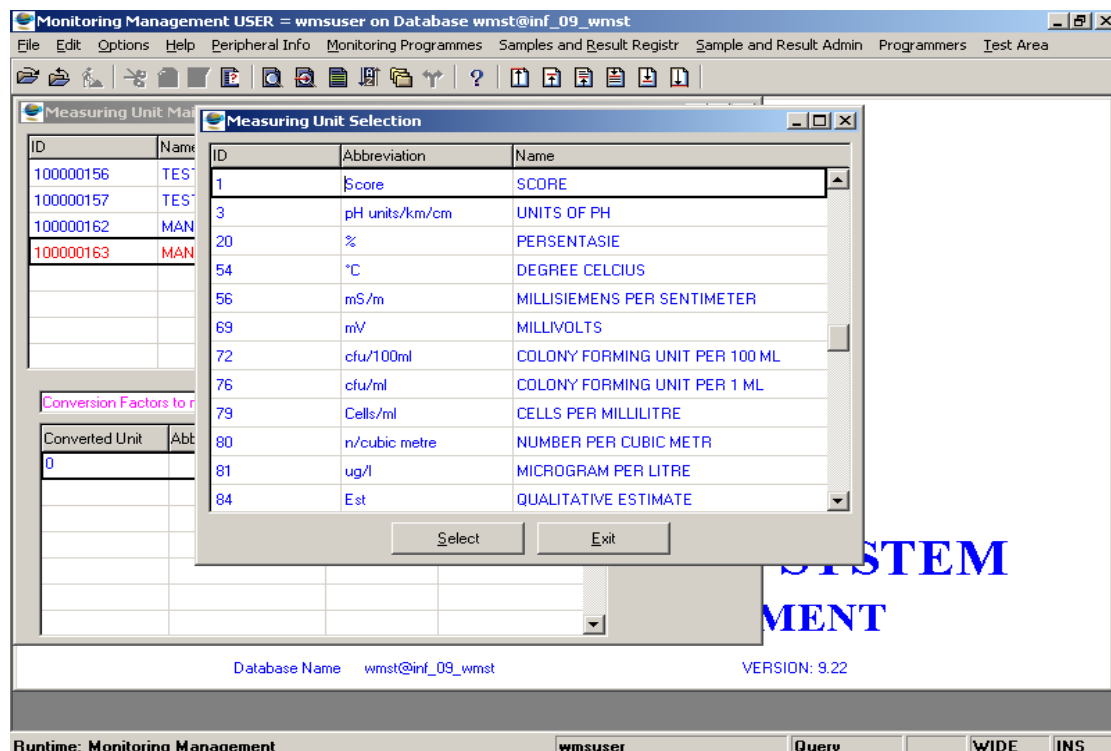
2.8   Click on the required record and click on the [Select] **Select** button to return the record.

2.9   Enter the **Mantissa** and tab.

2.10   Enter the **Exponent.**

2.11   Click on the [icon] **Next Row** button to accept the new record. A **Measuring Unit Maintenance** form displays with the converted unit.
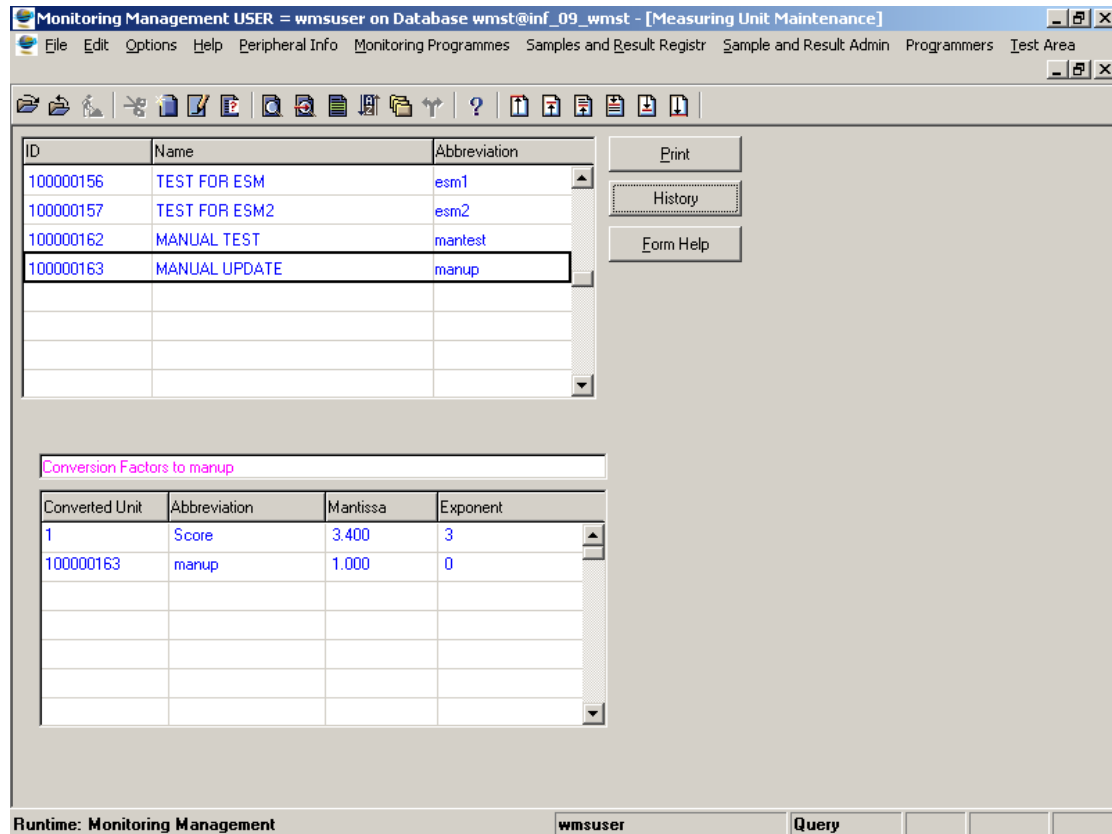
3.   How to Edit an Existing Measuring Unit:

3.1   Click on the [icon] **Modify Records** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the [icon] **Next Row** button to accept record.

3.5   A **Warning** message displays. Click **OK.**
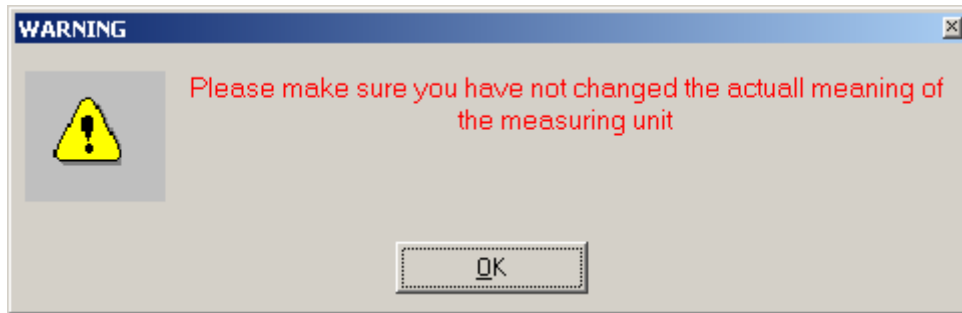
3.6   A **Change Cause** form displays. Select the applicable reason and click **Continue.**
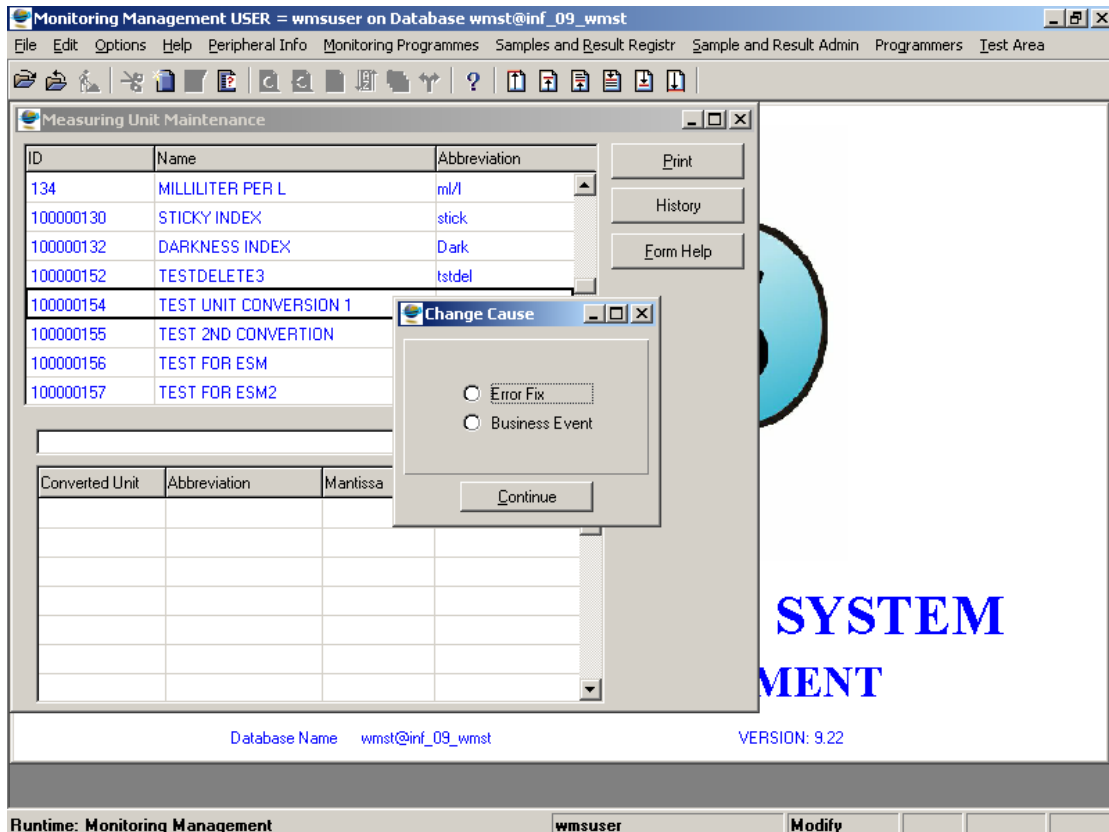
4.   How to Delete a Measuring Unit:

4.1   Click on the Measuring Unit record to be deleted, to highlight it.

4.2   Click on the ✂ **Delete Records** button.

4.3   A message will be displayed asking you to confirm the deletion. The Deletion is possible **ONLY** if the unit is not being used elsewhere in the system.
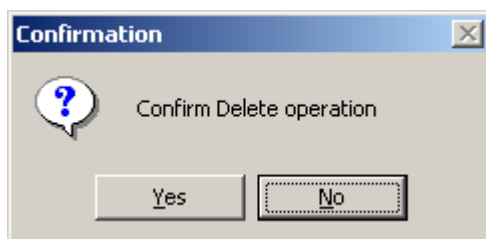
4.4   Click on the **Yes** option to confirm the deletion.

4.5   A **Change Cause** form will be displayed. Select the reason for the change and click on **Continue.**
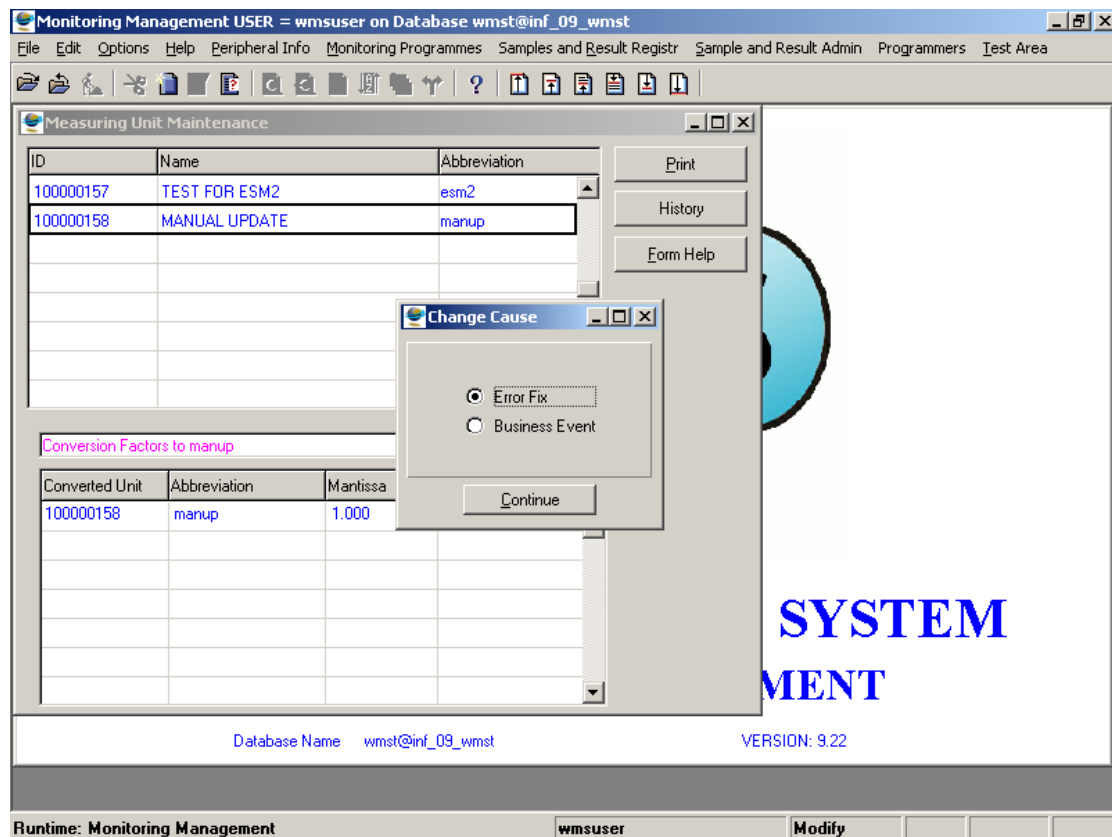
 Please Note! This form is maintained centrally.

Analysis Method

Introduction:

The objective of the **Analysis Method** module is to define or maintain analysis method information used to analyse **Samples** and **Observations.**

It is important to identify the analysis method in order to:

➢ distinguish between trends in the time series data that result from changes in measurement procedures, and

➢ differentiate between the different types of measured constituents to evaluate interferences that occur in specific measurement techniques.

Business Rules:

i. Monitoring Variable must exist.

1. Path:

1.1 Click on **Peripheral Info** main menu.

1.2 Select Monitoring Variable option.

1.3 Select the Monitoring Variable Maintenance submenu.

2. How to Add a New Analysis Method to a Monitoring Variable:

2.1 Click on **Peripheral Info** main menu.

2.2 Select **Monitoring Variable**, and then select the **Monitoring Variable Maintenance** submenu.

2.3 A **Monitoring Variable Maintenance** form displays.

2.4   Click on the **Analysis Method** button.

2.5   An **Analysis Method Maintenance** form displays with a list of records.

2.6   Click on the **Create Records** button.

644

2.7   A blank **Analysis Method Maintenance** form displays.

2.8   Enter the **Analysis Method ID,** and tab.

2.9   Tick the **Sample** Checkbox, if applicable, and tab.

2.10   Tick the **Observation** checkbox, if applicable, and tab.

2.11   Tick the **Out of Use** checkbox, if applicable.

2.12   Click on **F10** to accept the changes.

3.   How to Edit an Existing Analysis Method

3.1   Click on the [icon] **Modify Records** button.

3.2   Select the record to modify.

3.3   Make the applicable change.

3.4   Click on **F10** to accept the change.

4.   How to Delete an Analysis Method

[icon] *Please Note: Deletion will only be possible if an Analysis Method is not linked to an Analyst.*

4.1   Click on the record to be deleted.

4.2   Click on the ✂ **Delete Line** button.

4.3   A pop-up message displays asking you to confirm deletion.
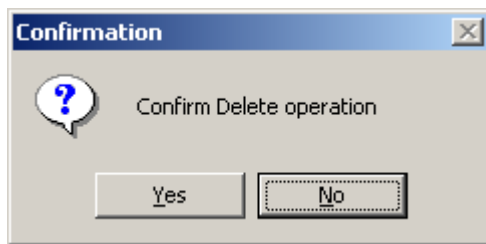
4.4   Click on the **Yes** option.

4.5   A **Change Cause** screen displays. Select the applicable reason to your deletion, and click on the **Continue** button to take you to the next step.
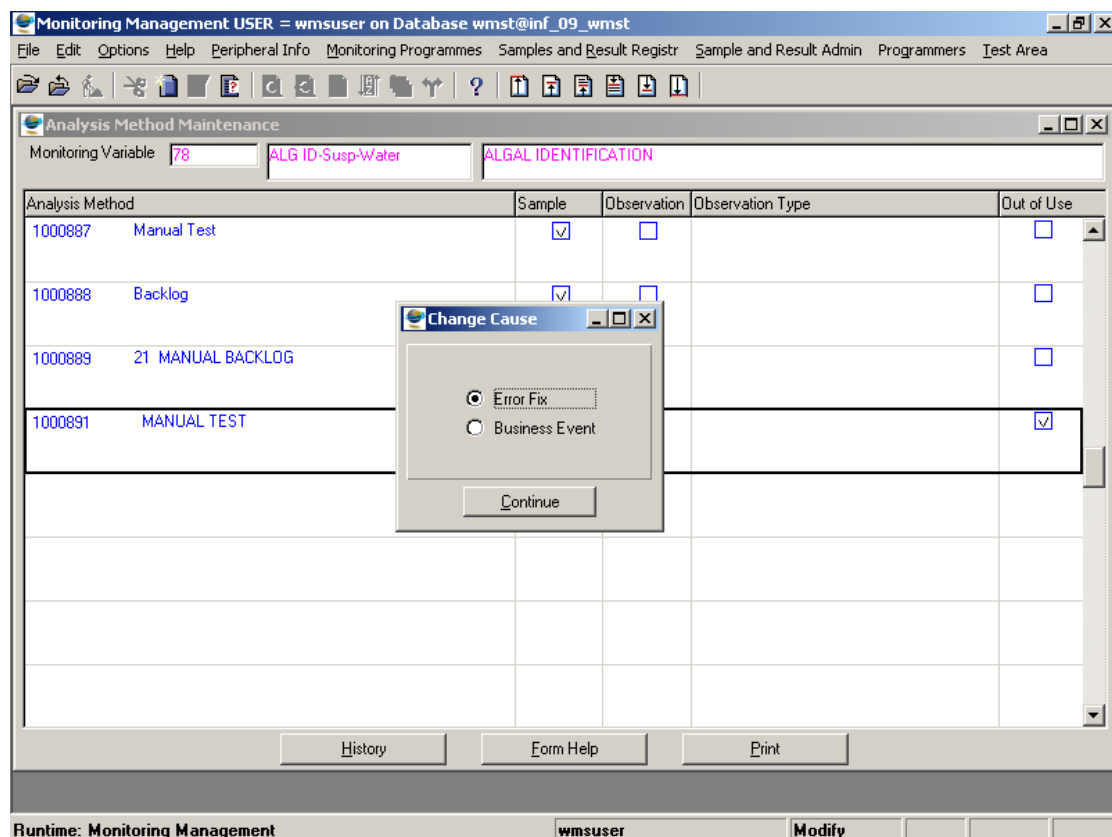
5.   How to View Laboratory/Monitor for Analysis Method

5.1   Click on **Peripheral Info**.

5.2   Click on **Monitoring Variable**, and then select **View Laboratory/Monitoring for Analysis Method.**

5.3   A **View Laboratory/Monitor for Analysis Method** form displays.

5.4   Select a **Monitoring Variable** by clicking on the ZOOM **Zoom** button to select the **Monitoring Variable** applicable to your selection criteria.

5.5   Select the Analysis Method by clicking on the ZOOM **Zoom** button to select the **Analysis Method** applicable to your selection.

5.6   Click on the **Analysis** button.

5.7   A **View Laboratory/Monitor** for **Analysis Method** form displays with the details of the Analyst that is performing the Analysis Method.
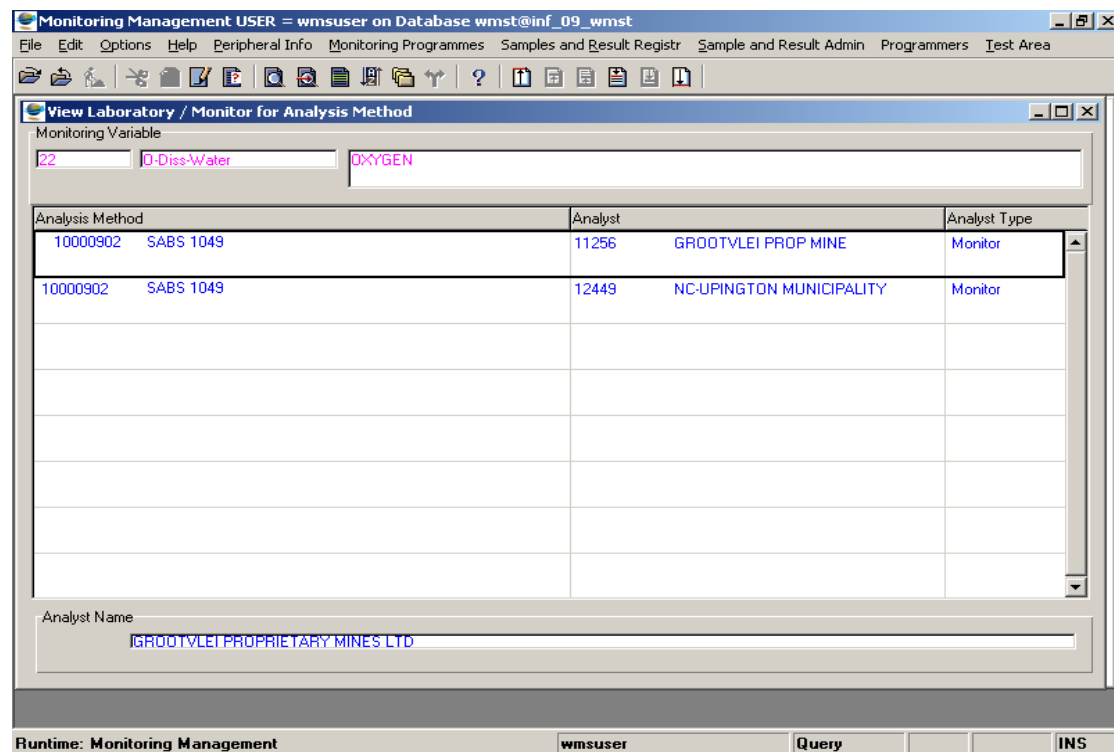
6. How to View/Establish the Relationship Between a User and an Analyst

6.1   Click on **Peripheral Info** main menu

6.2   Click on the **Monitoring Variable** submenu

6.3   Select **Analyst Method Maintenance** option.

6.4   An **Analyst Method Maintenance Filter Criteria** form displays.
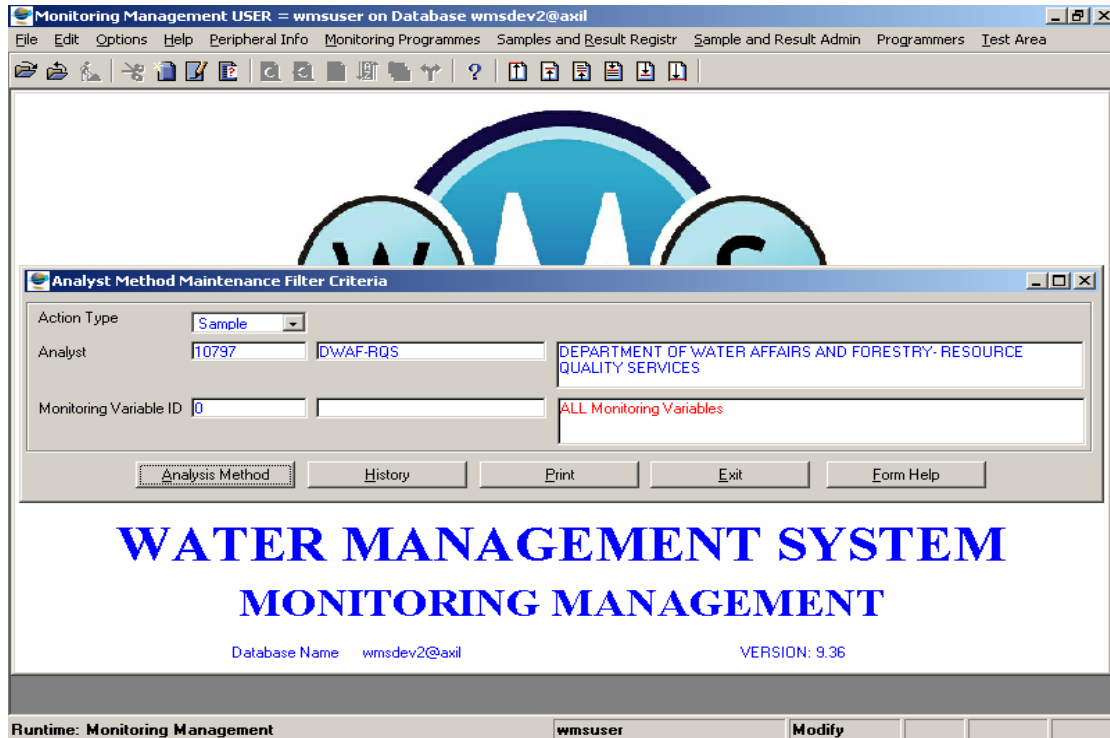
6.5 Select the **Action Type.**

6.6 Click on the **ZOOM** **Zoom** button to select the Analyst.

6.7 A **User to Analyst Functional Relationship Decision Criteria** screen is displayed.

6.8 Select **Managing** or **Responsible** and click **OK.**

Sample Type

Introduction:

The objective of the **Sample Type** module is used to define and maintain sample types. This information is used to identify the type of sample to be taken, and is used during programme administration, sample scheduling, and tag printing process.

Business Rules:
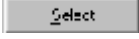
Action Type must exist.

1.   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Sample Type** from the Monitoring Variable sub menu.

1.4   This will open the **Sample Type Maintenance** form.
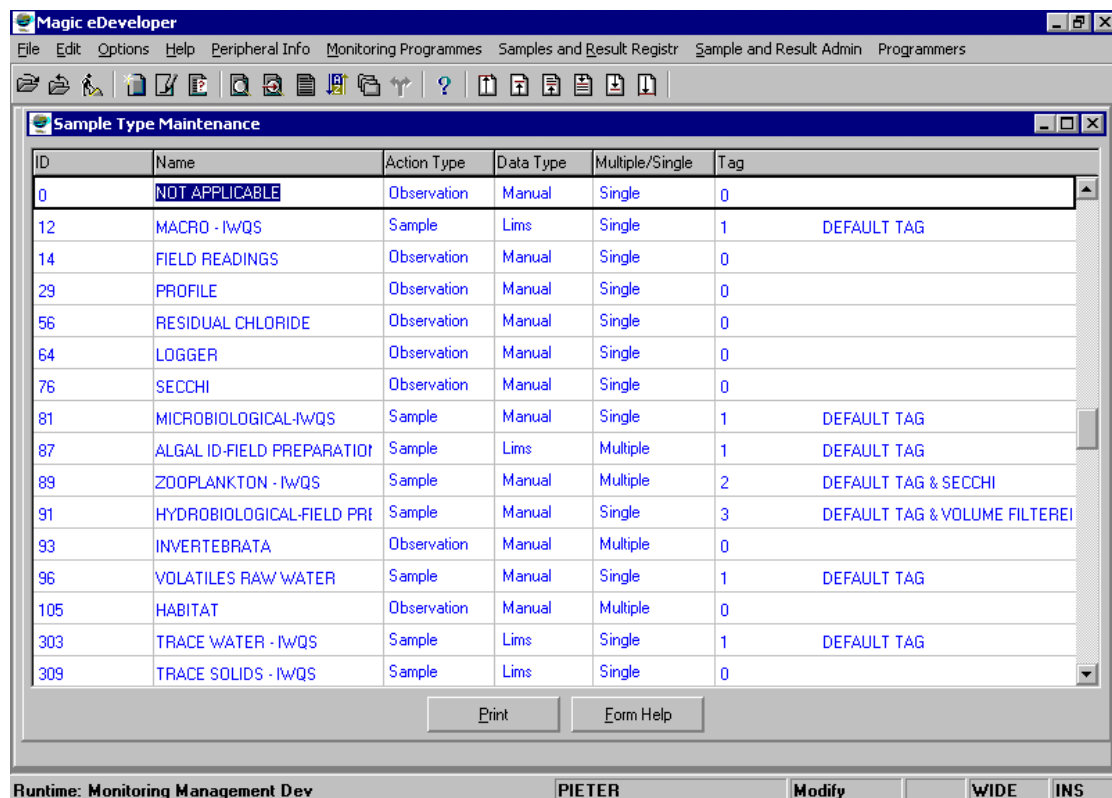
2.   How to Add a new Sample Type:

2.1   Click on the **Create** button. Click on the Tab button or click in the Name field.

2.2   Enter the **Sample Type Name** and tab.

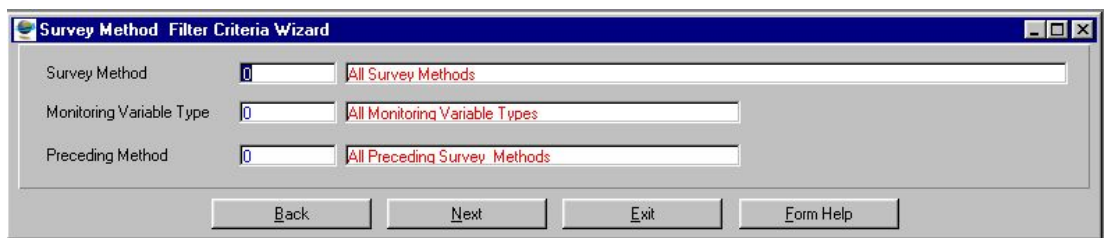2.3   Click on the **Action Type** field **Drop Down** button and select **Sample** or **Observation** or **Survey** and tab.

2.4   Click on the **Data Type** field **Drop Down** button and select either **LIMS**, **Manual** or **External** and tab. *LIMS is used only by the IWQS laboratory for results that are automatically imported from the IWQS Laboratory Information Management System. The Manual Data Type is used by laboratories and monitors for manual registration of samples and results that were generated by them. The External Data Type is used for offices that need to register samples and results received from laboratories or monitors. The external method does not do all the quality control on samples.*

2.5   Click on the **Multiple/Single Type** field **Drop Down** button and select either **Multiple** or **Single** and tab.

2.6   Enter the **Tag ID** or click on the ZOOM **Zoom** button to open the **Tags** form, click on the required record and click on the Select **Select** button to return the information, and tab.

2.7   Click on the **Next row** button to accept the new record.

3.   How to Maintain a Sample Type:

3.1   Click on the **Modify** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required. *See How to Add a Sample Type.*

3.4   Click on the **Next row** button to accept the record.

4.   How to Delete a Sample Type:

Deletion will only be possible if the record is not being used in another form.

4.1   Click on the Sample Type record to be deleted, to highlight it.

4.2   Click on the **Delete Record** button.

4.3   A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

Monitoring Action

Introduction:

The objective of the **Monitoring Action** module is to define a list of monitoring actions that can be used for sampling, as well as the instruction to execute the sampling activity. The monitoring actions will be used to draw up monitoring action specifications that will be incorporated in monitoring programs. The monitoring action, together with the monitoring action specifications is used to determine the required data when samples are received.

Business Rules:

i.   Only the central administrator may insert, update and delete records.

ii.   The Ecological Compartment must be registered.

iii.   The Equipment to be used must be registered.

iv.   The Sample Type must be registered.

v.   The Monitor must be registered.

1.   Path:

1.1   Select **Peripheral Info** from the Monitoring Management menu bar.

1.2   Select **Monitoring Action and Frequency** from the drop down menu.

1.3   Select **Monitoring Action Maintenance (New)** from the sub menu.

1.4   This will open the **Monitoring Action Maintenance Filter Criteria** form. *This form is used to search for a specific Monitoring Action or Monitoring Action Specification.*

2.   How to Search for a Monitoring Action:

2.1   In the Monitoring Action field, enter the valid **Monitoring Action ID**, alternatively, press **F5** or click on the `ZOOM` **Zoom** button to open the **Monitoring Action Selection** form, select the applicable record and click on the `Select` **Selec**t button to return your selection

2.2   The **Monitoring Action Name** will be automatically displayed as it is linked to the Monitoring Action ID

2.3   In the Sample Type field, enter the valid **Sample Type ID,** alternatively, press **F5** or click on the `ZOOM` **Zoom** button to open the **Sample Type Selection** form, select the applicable record and click on the `Select` **Selec**t button to return your selection.

2.4   The **Sample Type Name** will be automatically displayed as it is linked to the

2.5   In the Multimedia field, enter the valid **Multimedia ID,** alternatively, press **F5** or click on the `ZOOM` **Zoom** button to open the **Multimedia Selection** form, select the applicable record and click on the `Select` **Selec**t button to return your selection.

2.6   In the Monitoring Action Rule field, enter the valid **Monitoring Action Rule ID,** alternatively, press **F5** or click on the `ZOOM` **Zoom** button to open the **Monitoring Action Rule Selection** form and `Select` **Selec**t the Monitoring Action Rule.

2.7   The **Monitoring Action Rule** will be automatically displayed as it is linked to the Monitoring Action Rule ID

Note: The **Exit** button will close the form and return to the main menu

Note: The **Report** button enables the user to export the monitoring action records

2.8 Click on the **Next** button to display the monitoring actions on the Monitoring Action Maintenance form.

Note: The path as specified in step **1** & **2** must be followed to access the Monitoring Action Maintenance form in order to add, modify or delete monitoring actions

3 How to Add a new Monitoring Action:

3.1 Click on the ▦ **Create Records** button. A blank **Monitoring Action Maintenance** form displays.

3.2 In the Monitoring Action field, enter the **Monitoring Action Name** and tab. *This is a general classification of the monitoring action e.g. SUBSURFACE GRAB or BOREHOLE READING.*

3.3 In the **Instruction** field, enter the Instructions that indicate how the monitoring action should be carried out, and tab. *This is a detailed instruction that provides the monitor with the exact monitoring procedure*

3.4 In the **Monitoring Action Rule** field, press **F5** or click on the ZOOM **Zoom** button to open the **Monitoring Action Rule Selection** form and Select **Select** the Monitoring Action Rule with the required information. **Note:** *In the Monitoring Action Rule Selection form, the user will be required to fill in the indicators to verify the monitoring action rule selected. The user must select the Monitoring Action Rule, then select the relevant values (e.g. **Start Depth**, **End Depth**, **Start Date Time**, **End Date Time**, **Depth Interval**, **Combined Depth**, **Time Interval** or **Combined Depth** fields) that correspond to the chosen rule. The user may only continue with the addition of the Monitoring Action after the successful verification of the rule.*

3.5 The **Monitoring Action Rule** will be automatically displayed

3.6 In the **LIMS Code** field, enter the LIMS Code and tab. *This is the code used by departmental laboratory information system.*

3.7 In the Multimedia ID field, enter the document's **Multimedia ID** that defines the monitoring action (if the document is registered), alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form and **Select** **Select** the required record.

3.8 Tab to accept the newly created record. **Note:** *The **Monitoring Action ID** will be automatically displayed.*

Note *The **Back** button will close the Monitoring Action Maintenance Form and return to the Monitoring Action Maintenance Filter Criteria Form.*

Note *The **Maintenance** button enables the user to open the Options Decision Criteria for Monitoring Action Maintenance from where the specifications, Equipments and Monitors are maintained.*

Note *The **Report** button enables the user to export the monitoring action records*

Note *The **Next** button will close the form*

3.9 Click the **Exit** button to close and return to the main menu

3.10 Click on the **Next** button to display the Monitoring Action Specification Maintenance form, *and proceed with step 4.4 or else follow the steps respectively.*

TIP: *This is the minimum information required to register a Monitoring Action, however to be able to successfully specify the monitoring action in the monitoring programme, you will need to register Monitoring Action Specifications, Equipment, and Monitor information.*

656

4   How to Add a Monitoring Action Specification to a Monitoring Action record.

In the Monitoring Action Specification Maintenance form you can enter instructions for a specific Monitoring Action that will appear on the Monitoring Schedule Report. NB: The Monitoring Action Specification is used in monitoring programmes and schedules and must be unique.

4.1   Select the Monitoring Action that requires a new Monitoring Action Specification from the Monitoring Action Maintenance form.

4.2   Click on the **Next** button. *A Monitoring Action Specification Maintenance form displays*

4.3   Click on the 🖉 **Create Records** button.

4.4   In the **Monitoring Action Rule ID** will be automatically displayed

4.5   The **Monitoring Action Rule** will be automatically displayed

4.6   Enter a **Monitoring Action Specification Name** in the field, and tab. *This name must be unique so as not to confuse monitors.*

4.7   Enter the Start **Depth**, **End Depth**, **Start Date Time, End Date Time, Depth Interval**, and **Time Interval**

4.8   The **Monitoring Action Id** will be automatically populated with the input parameter for monitoring action

4.9   The **Monitoring Action Name** will be automatically displayed

4.10   To accept the newly created record, press the **Tab** key until the monitoring Specification ID is created.

❓ *Note: The **Exit** button will close the form and return to the Main Menu.*

❓ *Note: The **Back** button will close the Monitoring Action Specification Maintenance Form and return to the Monitoring Action Maintenance Form.*
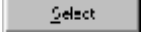
❓ *Note: The **Report** button enables the user to export the monitoring action specification records*

4.11   Click on the **Next** button to display the Monitoring Action Equipment Maintenance form, *and proceed with step 5.4 or else follow the steps respectively.*

5   How to Add Equipment to a Monitoring Action record:

In the Equipment form you can specify the equipment required for the specific monitoring action, and list the sample types that will be obtained. NB: Equipment must be registered in the Equipment form before it can be used in the Monitoring Action Maintenance form.

5.1   Select the Monitoring Action that requires additional equipment from the Monitoring Action Maintenance form.

5.2   Click on **Next** button to the Monitoring Action Specification Maintenance Form.

5.3   Click on the **Next** button to the Monitoring Action Equipment Maintenance Form.

5.4   Click on the ☑ **Create Records** button.

5.5   Enter an **Equipment ID** or click on the ZOOM **Zoom** button to open the Monitoring Equipment Selection form. Click on the required record, and click on the Select **Select** button to return the information, and tab.

5.6   Enter a **Sample Type ID** or click on the ZOOM **Zoom** button to open the Sample Type Selection form. Click on the required record, and click on the Select **Select** button to return the information.

5.7   Press the **Tab** Key to accept the newly created record

❓ *Note: The **Exit** button will close the form and return to the Main Menu*

❓ *Note: The **Back** button will close the Monitoring Action Equipment Maintenance form and return to the Monitoring Action Specification Maintenance Form.*

5.8   Click on the **Next** button to display the Monitoring Action Monitor Maintenance form and proceed with step 6.3 or else follow the steps respectively.

6   How to add a Monitor to a Monitoring Action record:

In the Monitor form you can specify monitors that are qualified and equipped to perform the specific monitoring action.

6.1   Select the monitoring action that requires an additional monitor from the Monitoring Action Maintenance form.

6.2   Click on **Next** button to the Monitoring Action Specification Maintenance Form.

6.3   Click on the **Next** button to the Monitoring Action Equipment Maintenance Form.

6.4   Click on **Next** button to the Monitoring Action Monitoring Maintenance Form.

6.5   Click on the ☑ **Create Records** button.

6.6   Enter a **Monitor ID** or click on the ZOOM **Zoom** button to open the Monitor Selection form. Click on the required record, and click on the Select **Select** button to return the information, and tab.

6.7   Enter a **Cost** per monitoring action, if required, and tab.

6.8   Click on the **Pay Indicator** to indicate if the monitor is paid for the action, and tab.

6.9   Enter a Contract **Number** if required, and tab

6.10   Enter an **Expiry Date** if required.

6.11   Press the **Tab** Key to accept the newly created record

6.12   Click on the **Exit** button to close the form and return to the Main Menu

❓ *Note: The **Back** button will close the Monitoring Action Monitor Maintenance form and return to the Monitoring Action Equipment Maintenance form.*

7 How to Modify a Monitoring Action

Only the central administrator may modify the record. If any Monitoring Action Specifications exist for a Monitoring Action, only the Monitoring Action Name, its Instruction, LIMS Code and the Multimedia may be changed and NOT the Monitoring Action Rule.

7.1 Find and select the monitoring action that must be edited.

7.2 Click on the **Modify Records** button.

7.3 Click on the field to be edited to highlight it.

7.4 Edit the record as required.

7.5 Click on the **Next row** button to accept the modified record.

8 How to Delete a Monitoring Action

Only the central administrator may delete the record if it is not being used elsewhere (e.g. if no monitor, specification or equipment is linked to the record).

8.1 Click on the Monitoring Action record to be deleted, to highlight it.

8.2 Click on the **Delete Record** button.

8.3 A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

Frequency

Introduction:

The objective of the **Frequency** module is to define frequencies in terms of the lapse in time between periodic event monitoring. e.g. Hourly, Daily, Weekly, 04 Weekly. The Frequencies will be used to draw up Frequency Specifications that will be incorporated in Monitoring Programs.

Business Rules:

i. Only the central data administrator may insert, update and delete records.

ii. The minimum hours required for the **hours per unit** is 24 hours and must also be multiples of 24. e.g. 24, 48, 72 etc

1   Path:

1.1 Select **Peripheral Information** from the Monitoring Management menu bar.

1.2 Select **Monitoring Action And Frequency** from the drop down menu.

1.3 Select **Frequency Maintenance (New)** from the Monitoring Action And Frequency sub menu.

1.4 This will open the **Frequency Maintenance** form.

2   How to Add a new Frequency:

Only the Central Administrator may insert the record.

2.1   Click on the ![icon] **Create Records** button.

![?] *Note: The **Frequency ID** will be automatically generated and displayed by the system*

2.2   In the Hours per Unit field, enter the **Frequency time** and tab. ![?] *Note: The minimum hours required for this field is 24 hours and must also be multiples of 24.*

2.3   In the Description field, enter the **Description** of the frequency and tab.

2.4   The **Days** will be automatically populated. ![?] *Note: this filed displays calculated days as derived from the entered Hours Per Unit*

2.5   The **Weeks** will be automatically populated. ![?] *Note: this filed displays calculated weeks as derived from the entered Hours Per Unit*

2.6   Tab to accept the newly created record.

![?] *Note: the **Report** button enables the user to export the frequency records*

2.7   Click the **Exit** button to close the form and return to the main menu

 Note: *the **Report** button enables the user to export the frequency records*

3   How to Edit a Frequency:

Only the Central Administrator may update the record.

3.1   Click on the **Modify Records** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the **Next row** button to accept the record.

4   How to Delete a Frequency:

Only the Central Administrator may delete the record if the record is not being used in another form.

4.1   Click on the **Modify Records** button.

4.2   Click on the Frequency record to be deleted, to highlight it.

4.3   Click on the **Delete Record** button.

4.4   A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

Frequency Specification And Season Range

Introduction:

The objective of the **Frequency Specification** module is to maintain a list of instructions regarding the frequency in which monitoring should be performed.

Business Rules:

i.   Only the central data administrator may insert, update and delete records.

1   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Action And Frequency** from the drop down menu.

1.3   Select **Frequency Specification** from the Monitoring Action And Frequency sub menu.

1.4   Select **Frequency Specification Maintenance (New)** from the Frequency Specification menu.

1.5   This will open the **Frequency Specification Maintenance** form.

2   How to Add a new Frequency Specification:

Only the Central Administrator may insert the record.

2.1   Click on the ▨ **Create Records** button.

▣ *Note: The **Frequency Specification ID** will be automatically generated and displayed by the system*

2.2   Enter the **Frequency Specification Name**

2.3   In the **Frequency Specification Type** field, click on the ▾ **Drop Down** button to select either **Variable** or **Period** to indicate a variable recurrence frequency or a fixed period frequency

Periodic Frequency Specification Maintenance:

2.4   In the Frequency field, enter the valid **Frequency ID,** alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Frequency Selection** form, select the applicable record and click on the ⬚ Select ⬚ **Select** button to return your selection

Screen dump

2.5   The **Frequency Description** will be automatically displayed as it is linked to the **Frequency ID**

2.6   The **Hours per Unit** will be automatically displayed

Variable Frequency Specification Maintenance:

2.7   Enter the **Full Variable Frequency Instruction**

2.8   Tab to accept the newly created record

▣ *Note: the **Maintenance** button will open the Option Decision Criteria form for Frequency specification Maintenance from where the Season Ranges are maintained*

▣ *Note: The **Report** button enables the user to export the frequency records*

2.9   Click the **Exit** button to close the form and return to the main menu

3   How to Edit a Frequency Specification:

Only the Central Administrator may update the record.

3.1   Click on the ▤ **Modify Records** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the **Next row** button to accept the record.

4   How to Delete a Frequency Specification:

Only the Central Administrator may delete the record if the record is not being used in another form.

4.1   Click on the [icon] **Modify Records** button.

4.2   Click on the Frequency record to be deleted, to highlight it.

4.3   Click on the [icon] **Delete Record** button.

4.4   A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

Season Range

Introduction:

The objective of the **Season Range** module is to maintain a range of months that defines a special season in which the monitoring should be performed.

Business Rules:

i.   Only the central data administrator may insert, update and delete records.

1   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Action And Frequency** from the drop down menu.

1.3   Select **Frequency Specification** from the Monitoring Action And Frequency sub menu.

1.4   Select **Season Range** from the Frequency Specification menu.

1.5   This will open the **Season Range Maintenance** form.

2   How to Add a new Season Range:

Note: Only the Central Database Administrator may insert/add the record.

2.1   Click on the **Create Records** button.

2.2   In the **start month** field, enter the number of the start month and tab. *The full name of the month that corresponds to the numeric start month will be automatically displayed.*

2.3   In the **end month** field, enter the number of the end month and tab. *The full name of the month that corresponds to the numeric end month will be automatically displayed.*

2.4   In the **Range Description** field, enter the description of the frequency season range.

2.5   Tab to accept the newly created record.

The Range ID will be automatically created.

3   How to Edit a Season Range:

Only the Central Administrator may update the record.

3.1   Click on the **Modify Records** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the **Next row** button to accept the record.

4   How to Delete a Season Range:

Only the Central Administrator may delete the record if the record is not being used in another form.

4.1   Click on the **Modify Records** button.

4.2   Click on the Frequency record to be deleted, to highlight it.

4.3   Click on the **Delete Record** button.

4.4   A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

Container

Introduction:

The objective of the **Container** module is to define and maintain container or sample holder information, used for physical samples.

1   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Container** from the Monitoring Variable sub menu.

1.4   This will open the **Container Maintenance** form.

2   How to Add a new Container:

2.1   Click on the ⬚ **Create** button.

2.2   Enter the new **Container Name** and tab.

2.3   Enter the **Container Description**.

2.4   Click on the **Next row** button to accept the new record.

3   How to Edit a Container:

3.1   Click on the **Modify** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the **Next row** button to accept the record.

4   How to Delete a Container:

Deletion will only be possible if the record is not being used in another form.

4.1   Click on the Container record to be deleted, to highlight it.

4.2   Click on the **Delete Record** button.

4.3   A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

Variable Groups

Introduction:

The objective of the **Variables Group** module is to define monitoring variable group names for frequently used variables. Variables that are frequently used in the design of a monitoring programme can be grouped together to speed up the entering process. The Variable Group (also known as Monitoring Group) is also used in Water Resource Management for the selection of variables in Result Management Information.

Business Rules:

i.   Variables are linked to a group or groups in the Monitoring Variable form.
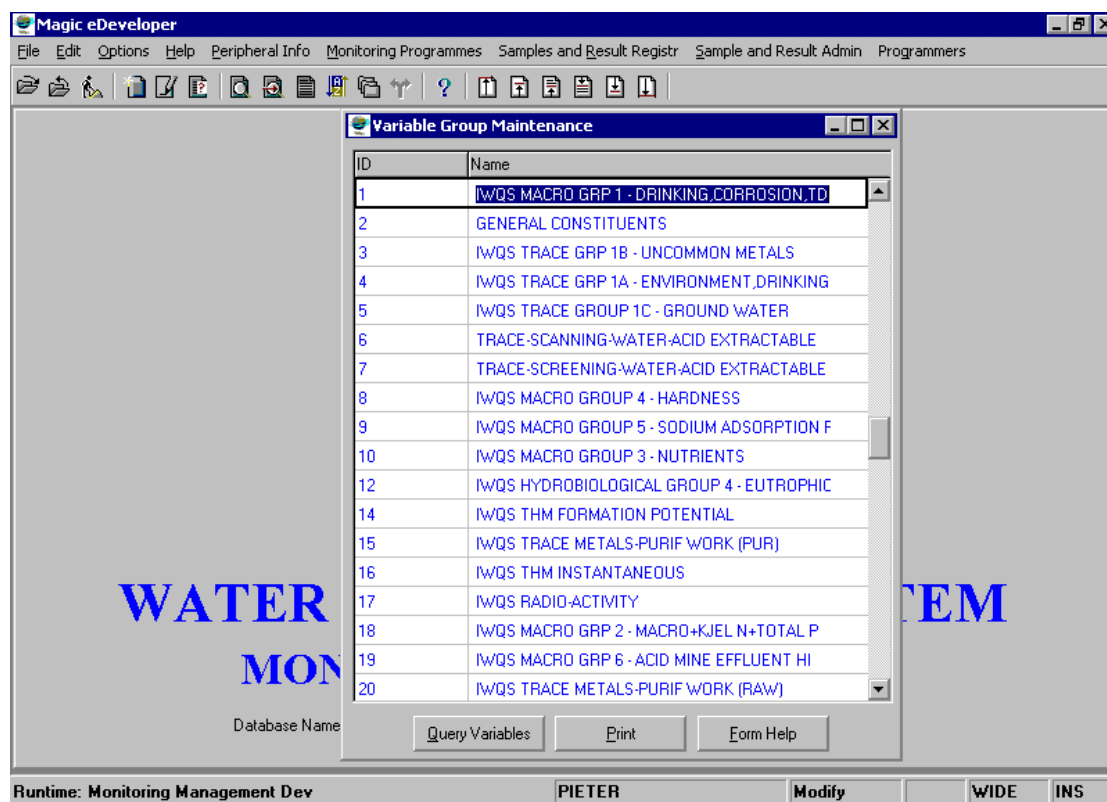
1   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Variable Groups** from the Monitoring Variable sub menu.

1.4   This will open the **Variable Group Maintenance** form.

2 How to Add a new Variable Group:

2.1 Click on the **Create** button.

2.2 Enter the new **Variable Group Name**.

2.3 Click on the **Next row** button to accept the new record.

3 How to Edit a Variable Group:

3.1 Click on the **Modify** button.

3.2 Click on the field to be edited to highlight it.

3.3 Edit the record.

3.4 Click on the **Next row** button to accept the record.

4 How to Delete a Variable Group:

Deletion will only be possible if the record is not being used in another form.

4.1 Click on the Variable Group record to be deleted, to highlight it.

4.2 Click on the **Delete** option.

4.3 A message will be displayed asking you to confirm the deletion. Click on the **Yes** option to confirm the deletion.

5 How to View Variables in a Group:

5.1 Click on the **Query Variables** button to view all the variables in the group.

Important: The variables in the group are maintained in Monitoring Variable on the Variable Group tab.

Default Transport and Packaging from Monitor to Laboratory

Introduction:

The objective of the **Default Transport and Packaging from Monitor to Laboratory** module is to specify the sample packaging and transport method from a monitor to a laboratory for each sample type. It also specifies the expected time for the delivery of the sample and makes provision for the entering transportation costs. The Default is created to speed up the programme administration process and registering non-programme sample process.

Business Rules:

i.   The Monitor must exist.

ii.   The Laboratory must exist.

iii.   The Sample Type must be registered.

iv.   The Packaging Method must exist.

v.   The Transport Method must exist.

vi.   The **Default Transport and Packaging from Monitor to Laboratory Maintenance** must be complete and accurate to speed up the setting up of operational requirements for monitoring programmes.

1   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitor** from the drop down menu.

1.3   Select **Default Transport and Packaging from Monitor to Laboratory Maintenance** from the Monitor sub menu.

1.4   This will open the **Default Transport and Packaging from Monitor to Laboratory Maintenance** form.

2   How to Add a new Default Transport and Packaging from Monitor to Laboratory:

2.1   Click on the 🔳 **Create** button.

2.2   Enter the **Monitor ID** number or click on the `ZOOM` **Zoom** button, to open the Lookup Monitor form. Range (Ctrl+R) on Abbreviation. Click on the required monitor record, and click on the `Select` **Select** button to return the record.

2.3   Tab to the **Laboratory ID** field and enter a **Laboratory ID** number or click on the `ZOOM` **Zoom** button, to open the Lookup Laboratory form. Range (Ctrl+R) on Abbreviation. Click on the required laboratory record, and click on the `Select` **Select** button to return the record.

2.4   Tab to the **Sample Type ID** field and enter a **Sample Type ID** number or click on the `ZOOM` **Zoom** button, to open the Sample Type form. Click on the required sample type record, and click on the `Select` **Select** button to return the record.

2.5   Tab to the **Hours** or **Days** field and enter the expected number of hours or days that it will take for a sample to reach the laboratory after sampling has been done.

2.6   Tab to the **Tariff** field and enter the sample transportation **cost**, if required Format ####.##.

2.7   Tab to the **Transport Method** field and enter a **Transport Method ID** number or click on the `ZOOM` **Zoom** button, to open the Transport Method form. Click on the required record, and click on the `Select` **Select** button to return the record.

2.8   Tab to the **Packaging Method** field and enter a **Packaging Method ID** number or click on the `ZOOM` **Zoom** button, to open the Packaging Method form. Click on the required record, and click on the `Select` **Select** button to return the record.

2.9   Click on the **Next row** button to accept the record.

3   How to Edit a Default Transport and Packaging from Monitor to Laboratory:

3.1   Click on the 🖉 **Modify** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the **Next row** button to accept the record.

4   How to Delete a Default Transport and Packaging from Monitor to Laboratory:

Deletion will only be possible if the record is not being used in another form.

4.1   Click on the Transport Method record to be deleted, to highlight it.

4.2   Click on the **Delete Record** button.

Defaults for Programme Samples

Introduction:

The objective of the **Defaults for Programme Samples** module is to define and maintain the default parameters that will be used in Write Details, the automatic process for the creation of programme samples.

For each Monitor/Sample Type/Laboratory combination, the Default, Container, Preservative and Analysis Method is created for each Monitoring Variable in the Sample Type. This data is used to "Write Detail" for a monitoring programme after a "Design" has been compiled, and assists the programme administrator by accelerating the setting up of operational information for monitoring programmes.

Business Rules:

i   The Sample Type, Container and Preservative must exist for a Laboratory in the Analysis Method form for all the Monitoring Variables of a sample type.

ii   The Default Transport and Packaging from a Monitor to Laboratory must exist.

iii   An Analysis Method for a Monitoring Variable at a Laboratory can be linked to more than one Sample Type. (E.g. Organic Carbon at IWQS)

1.   Path:

1.1   Select **Peripheral Information** from the Monitoring Management menu bar.

1.2   Select **Monitoring Variable** from the drop down menu.

1.3   Select **Defaults for Monitoring Programme Samples** from the Monitoring Variable sub menu.

1.4   This will open the **Defaults for Monitoring Programme Samples Maintenance** form.

2   How to Add new Defaults for Programme Samples:

2.1   Click on the ▣ **Create** button. The Laboratory ID field will be active

2.2   In the **Laboratory** field, click on the `ZOOM` **Zoom** button to open the **Lookup Mon-Lab- Sample Type** form. Range (Ctrl+R) or Locate (Ctrl+L) on Monitor ID or name. Click on the required combination (Monitor – Laboratory – Sample Type) record and click on the `Select` **Select** button to return the record.

2.3   Tab to the **Preservative ID** field. Click on the `ZOOM` **Zoom** button to open the **Lookup Laboratory-Sample Type** form. Click on the required container-preservative combination record and click on the `Select` **Select** button to return the record.

2.4   Click on the **Populate Variable** button to write all the Monitoring Variables and their analysis methods for the Monitor, Sample Type, Laboratory, Container, and Preservative combination.

It is unnecessary to accept the new record.

3   How to Edit Defaults for Programme Samples:

3.1   Click on the ▣ **Modify** button.

3.2   Click on the field to be edited to highlight it.

3.3   Edit the record as required.

3.4   Click on the **Next row** button to accept the record.

3.5   If a Monitoring Variable was linked to more than one Sample Type for the Laboratory, it can be deleted from the Default for Programme Samples and added to the other Sample Type for the Laboratory.   A Monitoring Variable can only be included in one Monitor – Laboratory – Sample Type combination.

4   How to Delete Defaults for Programme Samples:

Deletion will only be possible if the record is not being used in another form.

4.1   Click on the Defaults for Programme record to be deleted, to highlight it.

4.2   Click on the ✂ **Delete Record** button.

4.3   A message will be displayed asking you to confirm the deletion. Click on the **Yes** option
         to confirm the deletion.

Monitoring Programmes Overview

The Monitoring Programmes component of WMS is used to register the requirements for recurring monitoring and associated information.

The Monitoring Programmes component contains the following sub-modules:

Programme Registration

Programme Administration

Scheduling

Register Monitoring Programme

Introduction:

The objective of the **Register Monitoring Programme** module is to register a monitoring programme by specifying a name, defining the programme's operating time, and identifying the organisation and persons involved. The **Register Monitoring Programme** module is also used to view the status of existing monitoring programmes in relation to the consolidation process.

Business Rules:

When designing and setting up a programme, certain information must first be set up. For example, the laboratory should be registered, and linked to monitoring variables and also monitoring methods. The laboratory must also be linked to the monitor, and the monitoring frequency must be linked to the monitor i.e. specify if the monitor visits the monitoring point weekly of monthly etc. Note that if you set the visiting frequency of a monitor at monthly, then you cannot design a monitoring programme for that monitor specifying weekly sampling frequencies, because the monitor only visits the monitoring point once a month. Then, when you register your monitoring programme, you simply link the lab and monitor to the monitoring programmes, and the system will automatically populate the programme with all this information.

If you follow these steps and register all your information before hand, it will make your life easier!!

All these steps are available in modules contained in this manual.

Register Monitoring Program

This involves the following:

Monitoring Point

Step 1:   Register Person

Step 2:   Link to Monitoring Structure as executive

Step 3:   Register Monitoring Point

Step 4:   Link Monitor to point (set to default) and register the visit frequency

Peripheral Information

Step 5:   Ensure the Sample Type is registered (Central Function)

Step 6:   Ensure the Container is registered (Central Function)

Step 7:   Ensure the Preservative is registered (Central Function)

Monitoring Action

Step 8:   Register Monitoring Action (Central Function)

Step 9:   Link Monitor to action

Monitoring Frequency

Step 10:   Register Monitoring Frequency (Central Function)

Monitoring Variable

Step 11:   Register Monitoring Variable (Central Function)

Step 12:   Register Organisation (Laboratory)

Step 13:   Link to Laboratory Analysis Structure as executive

Step 14:   Register Analysis Method for Laboratory

Step 15:   Link Sample Type, Container & Preservative to Laboratory and

Analysis method

Step 16:   Link default Transport & Packaging (Central Function) request a change

Step 17:   Set up default for programme samples

Once all these steps have been completed you can Register a New Monitoring Programme!

1   Path:

How to access Monitoring Programmes on the system:

1.1   Select **Monitoring Programmes** from the Monitoring Management menu bar.

1.2   Select **Programme Registration** from the drop down menu.

1.3   Select **Register Programme** from the Programme Registration sub menu.

1.4   This will open the **Monitoring Programme Register Maintenance Decision Criteria** Wizard form with the following options.

- Monitoring Programme Register Filter Criteria

- Programme Liaison Person Filter Criteria

- Programme Liaison Organisation Filter Criteria

2   How to Search for Monitoring Programmes:

 Note: There are three filter criteria options available for searching monitoring programmes as shown on the Monitoring Programme Register Maintenance Decision Criteria Wizard form.

2.1   How to Search for Monitoring Programmes using Monitoring Programme Register Filter Criteria:
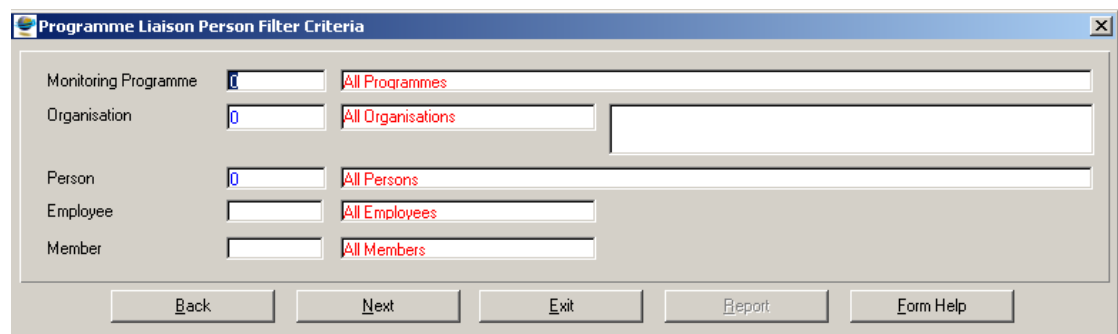
2.1.1   Select Monitoring Programme Register Filter Criteria option from the Monitoring Programme Register Maintenance Decision Criteria Wizard form.

2.1.2   Click on the **Next** button to open the **Monitoring Programme Register Filter Criteria** form.

2.1.3   Enter the **Monitoring Programme ID** or click on the **Zoom** button to open the **Monitoring Programme Selection** form, make your selection and click on the **Select** button to return your selection.

2.1.4   The **Monitoring Programme Name** will be automatically displayed as it is linked to the Monitoring Programme ID.

2.1.5   Enter the **Program Owner ID** or click on the **Zoom** button to open the **Q_Organisation Selection** form, make your selection and click on the **Select** button to return your selection.

2.1.6   The **Organisation Name** will be automatically displayed as it is linked to the Organisation ID.

2.1.7   Enter the **Person ID** or click on the **Zoom** button to open the **Persons Assigned to Monitoring Programmes Selection** form, make your selection and click on the **Select** button to return your selection.

2.1.8   The **Person Name** will be automatically displayed as it is linked to the Related Type Reason ID.

2.1.9   Click on the **Next** button to open the **Monitoring Programme Register Maintenance** form with the specified filter criteria.

2.2   How to Search for Monitoring Programmes using Programme Liaison Person Filter Criteria:

2.2.1   Select Programme Liaison Person Filter Criteria option from the Monitoring Programme Register Maintenance Decision Criteria Wizard form.

2.2.2   Click on the **Next** button to open the **Programme Liaison Person Filter Criteria** form.
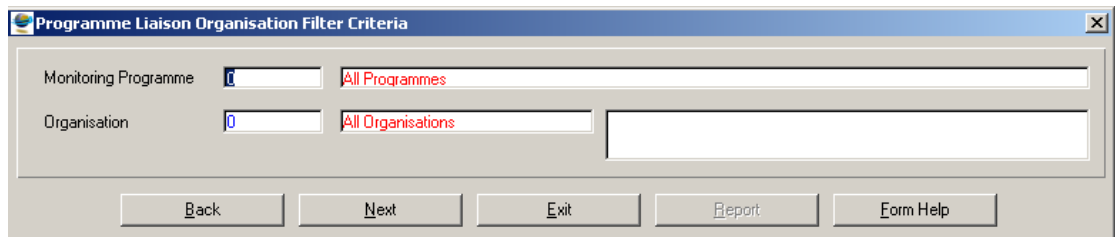
2.2.3   Enter the **Monitoring Programme ID** or click on the **Zoom** button to open the **Monitoring Programme Selection** form, make your selection and click on the **Select** button to return your selection.

2.2.4   The **Monitoring Programme Name** will be automatically displayed as it is linked to the Monitoring Programme ID.

2.2.5   Enter the **Organisation ID** or click on the **Zoom** button to open the **Q_Organisation Selection** form, make your selection and click on the **Select** button to return your selection.

2.2.6   The **Organisation Name** will be automatically displayed as it is linked to the Organisation ID.

2.2.7   Enter the **Person ID** or click on the **Zoom** button to open the **Persons assigned to Monitoring Programmes Selection** form, make your selection and click on the **Select** button to return your selection.

2.2.8   The **Person's Full Name** will be automatically displayed as it is linked to the Person ID.

2.2.9 Enter the **Employee ID** or click on the **Zoom** button to open the **Q_Employee Selection** form, make your selection and click on the **Select** button to return your selection.

2.2.10 The **Employee Name** will be automatically displayed as it is linked to the Employee ID.

2.2.11 Enter the **Member ID** or click on the **Zoom** button to open the **Q_Member Selection** form, make your selection and click on the **Select** button to return your selection.

2.2.12 The **Member Name** will be automatically displayed as it is linked to the Member ID.

2.2.13 Click on the **Next** button to open the **Monitoring Programme Register Maintenance** form with the specified filter criteria.

2.3 How to Search for Monitoring Programmes using Programme Liaison Organisation Filter Criteria:

2.3.1 Select Programme Liaison Organisation Filter Criteria option from the Monitoring Programme Register Maintenance Decision Criteria Wizard form.

2.3.2 Click on the **Next** button to open the **Programme Liaison Organisation Filter Criteria** form.

Programme Liaison Organisation Filter Criteria					✕
Monitoring Programme	0	All Programmes			
Organisation	0	All Organisations			
	Back	Next	Exit	Report	Form Help

2.3.3 Enter the **Monitoring Programme ID** or click on the **Zoom** button to open the **Monitoring Programme Selection** form, make your selection and click on the **Select** button to return your selection.

2.3.4 The **Monitoring Programme Name** will be automatically displayed as it is linked to the Monitoring Programme ID.

2.3.5 Enter the **Organisation ID** or click on the **Zoom** button to open the **Organisation Selection** form, make your selection and click on the **Select** button to return your selection.

2.3.6 The **Organisation Name** will be automatically displayed as it is linked to the Organisation ID.

2.3.7 Click on the **Next** button to open the **Monitoring Programme Register Maintenance** form with the specified filter criteria.

3 How to Register a new Monitoring Programme:

3.1 Click on the **Create Records** button from the Monitoring Programme Register Maintenance form,

3.2 In The **Abbreviation** field, enter an abbreviation for the new monitoring programme (10 alpha numeric characters allowed) and tab. This abbreviation must be unique.

3.3 In the **Name** field, enter a descriptive name for the programme (80 alphanumeric characters allowed) and tab.

3.4 In the **Description** field, enter the purpose of this new monitoring programme (240 alphanumeric characters allowed) and tab.

3.5 The **Registration Date** is populated by the system and cannot be changed.

3.6 In the **Start Date** field, enter the date on which this programme will begin, and tab.

3.7 In the **End Date** field, enter the date on which this monitoring programme will terminate, if the programme is ongoing, enter 9999-01-01.

3.8 The Creator field is system populated and cannot be changed.

3.9 In the **Priority No** field, click on the **Zoom** button to open the Monitoring Programme Priority Selection form, and select the time period for this monitoring programme. A programme ID will be system generated and cannot be changed.

3.10 The Approved Date and 1st Consolidation Date will be system populated and cannot be changed.

3.11 In the **Organisation** field, either enter the Organisation ID, or click on the **Zoom** button to open the **Organisation Selection** form, (Use Ctrl+R or Ctrl+L to find Organisation) and select an Organisation, and tab.

3.12 In the **Custodian** field, either enter the Member ID, or click on the **Zoom** button to open the **Employee Selection** form, (Use Ctrl+R or Ctrl+L to find Organisation) and select the responsible person, and tab.

3.13   In the **Role in Programme** field, either enter the Role ID, or click on the **Zoom** button to open the **Role of Person in Monitoring Programme Selection** field, and select the person's role at the organisation.

3.14   Tab to accept the record.

4   How to View Programme Details:

NB Some of these options will only be available for active Consolidated programmes.

4.1   Select the Monitoring Programme required to view its more detailed information from the Monitoring Programme Register Maintenance form.

4.2   Click on the **Views** button. *The View Decision Criteria Wizard form will be displayed with a list of views to choose from:*

4.2.1   Click on the Monitoring Programme Sample View option, and then the **Next** button to open the **Monitoring Programme Sample View** form and display/view all the samples associated with the monitoring programme.

•   The **Next** button will open the **Programme Analysis View** form, and the **Report** button will print a report.

4.2.2   Click on the Monitoring Programme History View option, and then the **Next** button to open the **Monitoring Programme History View** form and view the history of the monitoring programme. (History of changes made to the record)

4.2.3   Click on the Monitoring Programme Analysis History View option, and then the **Next** button to open the **Monitoring Programme Analysis History View** form and display/view detailed information associated with the monitoring programme.

4.2.4   Click on the Consolidated Sample View option, and then the **Next** button to open the **Consolidated Sample View** form and display/view the present monitoring schedule details.

4.2.5   Click on the Monitoring Programme Point View option, and then the **Next** button to open the **Monitoring Programme Point View** form and display/view all the monitoring points associated with a sample type.

4   How to Terminate a Programme Automatically

4.1   Select **Programme Registration** from the **Monitoring Programmes** sub-menu.

4.2   Click on the **Terminate Programme Automatically** option.

4.3   An **Automatic Monitoring Programme Termination Criteria Maintenance** form displays.

4.4 Enter the **Termination Date**, and click on the **Terminate** button.

4.5 The system automatically prints out a Termination letter to the connected printer.

Please Note: The System will write you a Notification Letter, just to inform you that your Programme is 3 months away from being Terminated, and if the Termination Date is in the past, the system will automatically do a Termination.

Register Programme Design

Introduction:

The Register Programme Design form is used to create and modify the detail of a Monitoring Programme design (as supplied by the programme custodian).

Business Rules:

i.   A programme must be registered before a design can be registered.

1.   Path:

1.1   Select **Monitoring Programmes** from the Monitoring Management menu bar.

1.2   Select **Programme Registration** from the drop down menu.

1.3   Select **Register Programme Design** from the Programme Registration sub menu.

1.4   This will open the **Register Programme Design Filter Criteria** form.
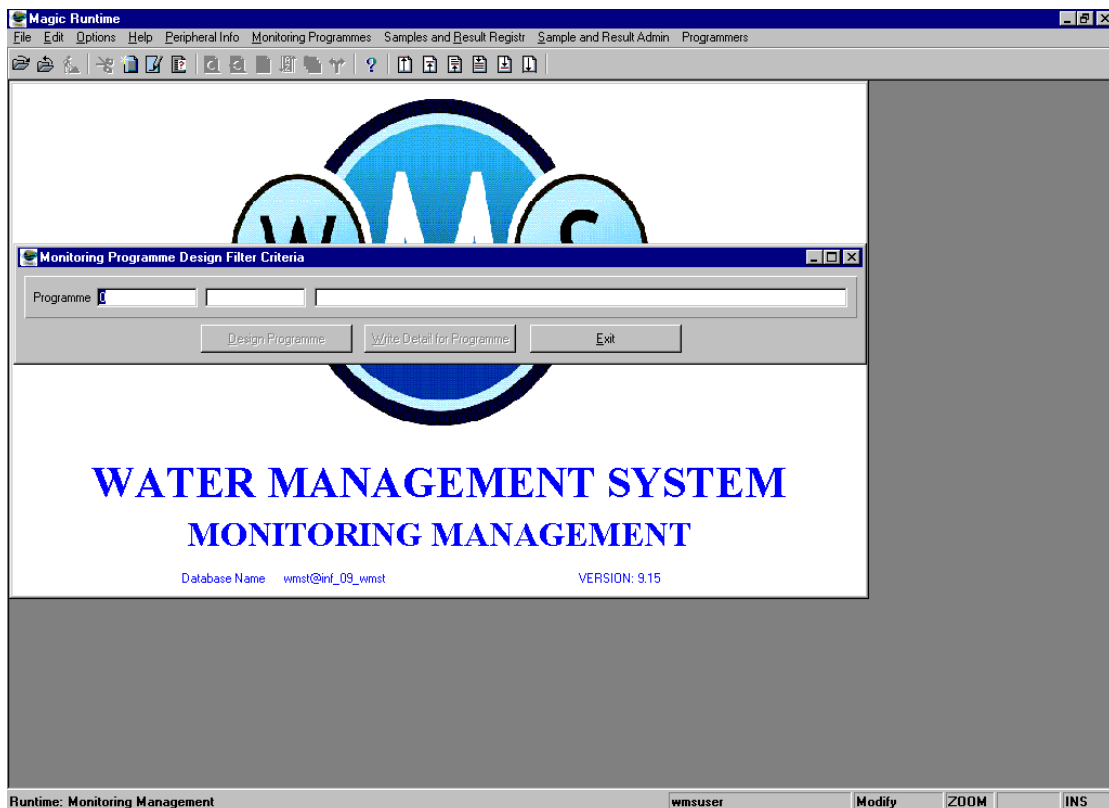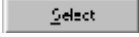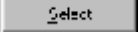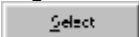
How to Register a new Programme Design:

2.1   Enter a **Monitoring Programme ID** and tab or click on the ZOOM **Zoom** button to open the **Monitoring Programme Selection** form. Locate the desired programme

and click on the [Select] **Select** button to return to the Register Programme Design record.

2.2 Click on the **Design Programme** button to open the Design Programme form. *The only way of closing this form is by clicking on the Exit button.*
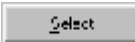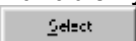
2. How to Design a New Monitoring Programme:

2.1 Click on the **Create Records** button.

2.2 Enter an **Eco Compartment ID** and tab or click on the ZOOM **Zoom** button to open the Ecological Compartment Selection form, choose the appropriate Ecological Compartment and click on the [Select] **Select** button, then tab.

2.3 In the **Type** field click on the ▼ **Drop Down** button to select either "Observation", "Questionnaire" or "Sample", then tab.

2.4 Enter a **Monitoring Action Specification ID** in the Monitoring Action Spec field, or click on the ZOOM **Zoom** button to open the Monitoring Action Specification Selection form. Locate the Monitoring Action Specification and click on the [Select] **Select** button, then tab. *If "Observation" was selected in the "Type" field, only Monitoring Actions classified as Observations is shown in the lookup table. For "Samples" only sampling actions are shown.*

2.5 Enter a **Monitoring Frequency Specification ID** in the Frequency Specification field, or click on the ZOOM **Zoom** button to open the Frequency Specification Selection form, locate the Frequency Specification and click on the [Select] **Select** button, then tab.

2.6 The "Monitoring Points" and "Monitoring Variables" fields will open. Enter a **Monitoring Point ID**, and tab or click on the ZOOM **Zoom** button to open the **Monitoring Point Selection** form. Locate the Monitoring Point and click on the [Select] **Select** button **OR** click on the **Monitoring Point Group** button to open the **Monitoring Programme Point Group Filter Criteria** form.

2.7 Enter a **Monitoring Point Group ID** or click on the ZOOM **Zoom** button to open the Monitoring Point Group Selection form. Locate the Monitoring Point Group and click on the [Select] **Select** button.

2.8 Click on the **Select Point** button to open the Monitoring Programme Point Group-Monitoring Point Selection form. *These are the monitoring points that were linked to the Monitoring Point Group in the Monitoring Point Group form.*

2.9 Locate a monitoring point and click on the **Write Points** button. Continue until all the required points are "written", i.e. copied to the Monitoring Points field in the Design Programme form **OR** Click on the **Write All** button to write all points in the table to the Monitoring Points field in the Design Programme form.

🔲 **Tip:** *If most of the points in the list is to be used, use the **Write All** button, return to the Monitoring Points field in the Design Programme form and delete the "unwanted" points.*

2.10 Click on the ⊠ button (top right hand corner) to close this form and click the **Exit** button of the Select by Group form to return to the Design Programme form.

2.11   The monitoring points in the "Monitoring Points" field can be edited and unwanted point deleted or points added. *NOTE: Only monitoring points with a linked monitor can be entered.*

2.12   Tab to the **Monitoring Variables** field. As with the monitoring points, different options are available to enter monitoring variables.

2.13   Enter a **Monitoring Variable ID**, tab and click on the down arrow button to move to the next line and repeat the process for all the required Monitoring Variables **OR** click on the `ZOOM` button to open the Monitoring Variable Selection form, locate the Monitoring Variable, find the correct Monitoring Variable and click on the `Select` **Select** button. Repeat for all the required Monitoring Variables **OR** Select Monitoring Variables from Type by clicking on the **Type** button.

2.14   A **Monitoring Variable Type Filter Criteria** form will open.

2.15   Enter a **Variable Type ID** or click on the `ZOOM` **Zoom** button to open the **Monitoring Variable Type Selection** form, select a Monitoring Variable Type and click on the `Select` **Select** button.

2.16   Click on the **Select Variable** button, the Monitoring Variable Type-Monitoring Variable Selection form will open.

2.17   Locate the required variable and click on the **Write Variable** button to write single variables to the Monitoring Variables field of the Design Programme form. Repeat for other variables **OR** Click on the **Write All** button to write all Monitoring Variables in the table to the Monitoring Variables field in the Design Programme form. **TIP:** *If most of the Monitoring Variables in the list are to be used, use the Write All button, return to the Monitoring Variables field in the Design Programme form and delete the "unwanted" Monitoring Variables.*

2.18   More than one Type can be selected and the Monitoring Variables written to the Monitoring Variables field in the Design Programme form.

2.19   Click on the ⊠ button (top right hand corner) to close this form and click the **Exit** button of the Select by Type form to return to the Design Programme form.

2.20   Monitoring Variables can be selected from **Monitoring Variable Class**. Click on the **Class** button, a Select by Class request form will open.

2.21   Enter a **Monitoring Variable Class ID** and tab or click on the `ZOOM` **Zoom** button to open the Monitoring Variable Class form. Locate the required Monitoring Variable Class and click on the `Select` **Select** button.

2.22   Click on the **Select Variable** button to open the Variables form.

2.23   Locate (Ctrl+L) the required variable and click on the **Write Variable** button to write single variables to the Monitoring Variables field of the Design Programme form. Repeat for other variables **OR** Click on the **Write All** button to write all Monitoring Variables in the form to the Monitoring Variables field in the Design Programme form.

2.24   Click on the ⊠ button (top right hand corner) to close this form and click the **Exit** button of the Select by Class form to return to the Design Programme form.

2.25   Monitoring Variables can be selected from **Monitoring Variable Group**. Click on the **Group** button, a **Select by Group** request form will open.

2.26 Enter a **Monitoring Variable Group ID** and tab or click on the `ZOOM` **Zoom** button to open the Variable Group form. Locate the required Monitoring Variable Group and click on the `Select` **Select** button.

2.27 Click on the **Select Variable** button to open the Variables form.

2.28 Locate (Ctrl+L) the required variable and click on the **Write Variable** button to write single variables to the Monitoring Variables field of the Design Programme form. Repeat for other variables **OR** Click on the **Write All** button to write all Monitoring Variables in the form to the Monitoring Variables field in the Design Programme form.

2.29 Click on the ⊠ button (top right hand corner) to close this form and click the **Exit** button of the Select by Group form to return to the Design Programme form.

2.30 Any one or combination of the processes can be used to enter Monitoring Variables in the Design Programme form.

2.31 More combinations of Eco Compartment; Type; Monitoring Action Spec and Frequency Specification can be entered in the upper half of the Design Programme form. Repeat all the steps under point 2 for all "combinations".

2.32 The functions of the **Write Detail for Point** and **Write Detail for Selection** buttons will be discussed later.

2.33 After entering **all** the required data click on the **Exit** button.

2.34 The next logical step is to click on **Print Programme Design**, *(This programme is found under the Monitoring Programmes menu option in the Programme Registration submenu)*. Enter the Programme ID or click on the **Zoom** button to open the lookup list and select the relevant programme. Click on the Run Report button to print a design of the programme and hand it to the programme custodian to check. If the custodian approves the design, then continue with 3.34.

2.35 The **Write Detail for Programme** button starts a process that uses the information in the Programme Design and Peripheral Information to create Sample Types per Monitor for Monitoring Actions at Frequencies for specific Analysis Methods at Laboratories. *Once the detail for a programme has been written, this button becomes disabled.*

2.36 This completes the creation of the Design of a new Monitoring Programme.

How to Edit an existing Monitoring Programme Design

The Design of an <u>active</u> Monitoring Programme can be edited at any stage. A programme that was terminated must first be Restarted.

3.1 When the menu option **Register Programme Design** is selected, a Register Programme Design "request" form opens.

3.2 Enter a **Monitoring Programme ID** and tab or click on the `ZOOM` **Zoom** button to open the Lookup Programme form. Locate (Ctrl+L) the relevant programme and click on the `Select` **Select** button to return to the Register Programme Design request form.

3.3 Click on the **Design Programme** button to open the **Design Programme** form.

TIP: *The only way of closing this form is by clicking on the Exit button.*

3.4   Find the field to be edited and click on the **ID** of the field to highlight it.

3.5   Effect changes by entering a **new ID number** for the field or click on the ZOOM **Zoom** button to open the respective Lookup form, locate and select the required record for the field. *TIP: If the change is not required, click on Esc now, before moving to any other field, the record will revert to the pre-modification data. If the modification must be effected click on F10 or move to any other field.*

TIP: *A line or new record can be **created**. If the line [Eco Compartment; Type; Monitoring Action Spec; Frequency Specification] is created, Monitoring Points and Monitoring Variables for that combination must be entered. A line or record can be **deleted**. If the line [Eco Compartment; Type; Monitoring Action Spec; Frequency Specification] is deleted, all Monitoring Points and Monitoring Variables for that combination will be deleted. After any editing, except for deletions, "Write Detail" and all subsequent steps (Edit, Check, Approve, and Consolidate) must be done.*

How to Write Detail for a Programme

4.1   For a new design or extensive changes to a design, the **Write Detail for Programme** button is used to write details. *TIP: This option is only available if the Write Detail for the Programme was not previously used.*

4.2   For additional Monitoring Points added to an existing [Eco Compartment; Type; Monitoring Action Spec; Frequency Specification] combination (with no change to the Monitoring Variables) the **Write Detail for Point** button can be used for each additional point.

4.3   Find the point in the Monitoring Points list, focus on the record it to highlight it, and click on the **Write Detail for Point** button.

4.4   The **Select point to write** form will open. Find the point in the table, focus on the record it to highlight it, and click on the Select **Select** button.

4.5   The **Write Details Confirmation** form will open. Click on the **Write Details** button to begin the "write details" OR click on **Exit** to skip it.

4.6   If the point(s) was added to more than one [Eco Compartment; Type; Monitoring Action Spec; Frequency Specification] combination, the **Write Detail for Point** must be done for each "combination".

4.7   For additional Monitoring Variable(s) the **Write Detail for Selection** button is used for each [Eco Compartment; Type; Monitoring Action Spec; Frequency Specification] combination where Monitoring Variable(s) were added.

Edit Programme Samples

Introduction:

In this description, the word "Sample" refers to both a physical sample and an observation, unless an observation is specifically indicated otherwise. In the Write Detail of the Register Programme Design function, the default detail in Peripheral Information is used to programme the monitoring. The Edit Programme Samples module is used to edit the "default" detail of a Monitoring Programme. You can now customise the default settings to suit operational requirements. This function starts with a "default" sample but you can drill down to the detail of the sample. The Edit Programme Details goes directly to the detail of the sample.

## 1	Path:

1.1	Select **Monitoring Programmes** from the Monitoring Management menu bar.

1.2	Select **Programme Administration** from the drop down menu.

1.3	Select **Edit Sample in Monitoring Programme** from the **Programme Administration** sub menu.

1.4	This will open the **Edit Sample in Monitoring Programme** form.

2 How to add a record:

Records are added in Register Programme Design and will be visible in Edit Programme Samples after Write Details has been done.

2.1 A blank **Edit Programme Samples** form is displayed. The Pick Sample and Exit buttons are enabled (active). By clicking on the **Pick Sample** button the "List Programme Samples" for **ALL** Samples for **ALL** Monitoring Programmes opens. (**Beware: This is a very long list!**) **NB** This form can only be closed by clicking on the Exit button.

2.2 Enter the **Programme ID** for the Monitoring Programme and tab, or click on the **Zoom** button to open the **Lookup Programme with Indicator** form. Locate the Monitoring Programme, click on it, a border will appear around the Programme, click on the **Select** button. The Programme ID, Abbreviation and Programme Name will appear in the **Edit Programme Samples** form. The Pick Sample, Exit and LIMS Method Report buttons are enabled.

2.3 Click on the **Pick Sample** button. The "List Programme Samples" opens. This list displays the Monitoring Point (ID and description), Monitoring Action Specification (ID and description) for each Sample (including observations) for the Monitoring Programme as well as the Eco Compart(ment), Frequency Spec, Monitor, Laboratory, Sam/Obs Type, Preservative, Container and "Sample Indicators" (Check, Approve, Terminate, Composite, Consolidate). The Select and Exit buttons are enabled. For a "new" Programme some of the "information" fields" (Eco Compart(ment), Frequency Spec, Monitor, Laboratory, Sam/Obs Type, Preservative', Container) can have a zero ID and the Sample Indicators will be unchecked.

2.4 Locate a Sample by clicking on it, a border will form around the Sample. Click on the **Select** button. The **Edit Programme Samples** form will open. On the left-hand side the information fields and the Sample Indicators are displayed. These fields are in Query mode (read only). On the right-hand side a column of buttons are displayed:

> ➢ **EXIT** -   This button is always enabled and can be used at any time to close this part of the Edit form.

> ➢ **PROGRAMME DETAIL**   **-** This button is always enabled and is used to display the detail of the Sample, Monitoring Variables, Analysis Method, Preservative and Container.

> ➢ **CHECK SAMPLE -** This button is always enabled for active samples and is used to "check" the sample to see if all the set parameters comply with monitoring requirements.

> ➢ **APPROVE SAMPLE** - This button will be enabled for active samples if the sample was checked and found correct. It is to approve checked samples before consolidation can be done.

> ➢ **TERMINATE SAMPLE** - This button will be enabled for active samples. It is used to terminate a sample.

> ➢ **RESTART SAMPLE** - This button is enabled for all terminated samples and can be used to restart the sample.

> ➢ **CHANGE FREQUENCY** - This button is always enabled for active samples and can be used to change Monitoring Frequency for the sample.

> ➢ **CHANGE MONITOR** - This button is always enabled for active samples and can be used to change the Monitor at a monitoring point for the sample.

> ➤ **CHANGE LAB** - This button is always enabled for active **samples** and can be used to change the laboratory that is used for the sample. (It is not enabled for observations).

> ➤ **VIEW ERROR LOG** - This button will be enabled for active samples that have been "checked" and still have errors. It can be used to see what errors must still be solved for the sample to be correct.

> ➤ **LIMS METHOD REPORT** - This button is always enabled for active samples and is used to do a comparison of the LIMS and WMS analysis methods. A report is printed.

3 How to Edit the Analysis Detail of a Sample:

3.1 Click on the **Programme Detail** button. The Edit Programme Details form opens. *This form is similar to that found in Edit Programme Details.*

3.2 In this form the variables in the sample are displayed on the left-hand side, on the upper half of the right hand side the detail for each is displayed. On the lower half are the Detail Indicators (view only) and buttons for: **EXIT**, **DEFAULT MONITOR**, **TERMINATE**, **DUPLICATE VARIABLE**, **RESTART**, **CHOOSE MONITOR**, **OBSERVMETHOD** and **ANALMETH-LAB**.

> ➤ The **EXIT** button is used to return to the Edit Programme Samples form at any stage of editing.

> ➤ The **DEFAULT MONITOR** button is used to change the monitor to the default monitor.

> ➤ By clicking this button the monitor is changed to the default monitor.

> ➤ **NB:** If the monitor is changed and it is not the same for all the variables in the selected sample, different samples will be created for each monitor after this form is exited.

> ➤ The **TERMINATE** button is used to terminate an active variable in a sample. This button is disabled when the variable is terminated. You will be prompted to confirm the termination.

> ➤ The **DUPLICATE VARIABLE** button is used to select an alternative analysis method for a variable that has more than one analysis method for the determination of the variable at the same laboratory.

> ➤ The **RESTART** button is active only when a variable has been terminated and used to restart single variables in a sample. You will be prompted to confirm the restart.

> ➤ The **CHOOSE MONITOR** button is used to select any active monitor that is linked to the monitoring point. On clicking this button the Lookup Monitors for Mon Point form with all active monitors at the point is opened. Select and Exit buttons are available. This function changes the monitor per variable. If the monitor must be changed for all the variables, use the **CHANGE MONITOR** button in the Edit Programme Samples form.

> ➤ The **OBSERVMETHOD** button is active only if the variable is an observation. It is used to select an observation method for the variable and monitor at the monitoring point. On clicking this button the Lookup Monitor ObservMethod

form will be opened. Scroll to the appropriate Monitor, Sample Type, Name Analysis Method combination and select or exit if inappropriate.

➢ The **ANALMETH-LAB** button is active if the variable is derived from a sample. It is used to select an analysis method for the variable at the laboratory. On clicking this button the Lookup LabMethContPres form is opened. Scroll to the appropriate Container, Preservative, Laboratory, Analysis Method combination and select or exit if inappropriate.

TIP: *If any change is made to a sample that was previously checked, the sample becomes unchecked.*

3.3 Click on the **Exit** button once editing has been completed. *It does take time to close the form!*

3.4 The **Check Sample** button is used to check a sample to see if it is executable, that is:

➢ That the monitor can do the monitoring action at the frequency specified,

➢ The transport and packing method from the monitor to the laboratory is specified,

➢ That the laboratory can perform the analysis, etc.

3.5 If the sample does not comply with any one of these requirements, an Error Log is generated. The errors can be viewed in **VIEW ERROR LOG**.

3.6 The following error messages can occur:

Error id	Sample / Detail	Description	Problem	Corrective Action
1	S	FREQUENCY IS NOT WQO VISIT FREQUENCY (CHOOSE AGENT)	Sampling frequency < Visit Frequency	1 If visit frequency is wrong in WRM, rectify it in Monitoring Network. 2 Get other monitor, WRM Monitoring Network. 3 Ask custodian of programme to select a longer frequency.
2	S	MONITOR CANNOT PERFORM MONITORING ACTION	Monitor not linked to monitoring action	Peripheral information > Monitoring Action and Frequency > Monitoring Action. Find Monitoring Action, click on Monitor tab and add Monitor.
3	S	THERE IS NO TRANSPORT AND PACKAGING METHODS DEFINED	Default Transport and Packaging from Monitor to Laboratory detail not complete.	Peripheral information > Liaison Entity > Default Transport and Packaging from Monitor to Laboratory. Add Monitor, Laboratory, Sample Type, delivery time, Transport method and

695

Packaging method.

4	S	THERE IS NO DATA TRANSFER FROM MONITOR DEFINED	Field ex WQIMS. Not required in WMS.	No action.
5	S	THERE IS NO DATA TRANSFER FROM LABORATORY DEFINED	Field ex WQIMS. Not required in WMS.	No action.
6	S	THERE IS NO SAMPLE TYPE DEFINED	Sample type for the Analysis method not entered.	Peripheral Information > Monitoring Variable > Analysis Method for Variable for each variable in programme. Add Laboratory, Sample Type, Container, Preservative, and shelf life time.
7	S	A SAMPLE CANNOT BE TAKEN WITH AN OBSERVATION ACTION	Wrong Design	Check and rectify programme design. Write details.
8	S	AN OBSERVATION CANNOT BE DONE WITH A SAMPLE ACTION	Wrong Design	Check and rectify programme design. Write details.
9	D	LABORATORY CANNOT PERFORM SAMPLE ANALYSIS METHOD	The Laboratory was not linked to do the Analysis Method for the Variable.	If it is known that the Laboratory can do the Analysis Method, the Laboratory can be linked. Peripheral Information > Monitoring Variable > Analysis Method for Variable. Add Laboratory etc.
10	D	MONITOR CANNOT PERFORM OBSERVATION ANALYSIS METHOD	The Monitor was not linked to do the Analysis Method for the Variable.	If it is known that the Monitor can do the Analysis Method, the Monitor can be linked. Peripheral Information > Monitoring Variable > Analysis Method for Variable > Observation Method for Monitors tab. Add Monitor etc.
11	D	A SAMPLE ANALYSIS CANNOT BE DONE WITH AN OBSERVATION ACTION	Wrong Design	Check and rectify programme design. Write details.
12	D	AN OBSERVATION ANALYSIS CANNOT BE DONE WITH A SAMPLE ACTION	Wrong Design	Check and rectify programme design. Write details.
13	D	ANALYSIS METHOD HAS AN ENDDATE AT THE LABORATORY	The specific Analysis Method was closed.	The specific Analysis Method was closed. Ascertain what method the Laboratory uses, register it and select the method in program detail.
14	D	OBSERVATION METHOD HAS AN ENDDATE AT THE MONITOR	The specific Observation Method was closed.	The specific Observation Method was closed. Ascertain what method the Monitor uses, register it and select the method in program detail.
15	S	SAMPLE HAS NO DETAIL	Peripheral	Check and update peripheral

			Information lacking, or Write Detail was not done.	information. Edit sample detail.
16	S	INVALID FREQUENCY SPECIFICATION		
17	S	UNKOWN MONITOR SPECIFIED FOR SAMPLE	Monitor deleted after write detail was done.	Check the existence of the monitor in WRM.
18	D	INVALID LAB, METHOD, CONTAINER, PRESERVATIVE, SAMPLE-TYPE	Detail in Peripheral information changed after write detail was done.	Edit sample detail.
19	S	THERE ARE UNRESOLVED PROGRAM SAMPLE CHANGES		Resolve changes in Maintain Programme Changes.
20	S	MONITOR HAS ENDDATE WITHIN 3 MONTHS		Ask custodian of programme to have new monitor appointed.
21	S	LABORATORY HAS ENDDATE WITHIN 3 MONTHS		Ask custodian of programme to assign new monitor.

3.7   Rectify the error and redo the **Check Sample**. Repeat the process until the sample is correct

➢ **Approve Sample** button is only active after a sample was checked as correct. *This is a central base data administrator function, and can only be performed at IWQS.*

➢ The **Restart Sample** button is active only for terminated samples (all variables in the sample terminated) and restarts the terminated sample (all variables are restarted). You will be asked to confirm the action. *If only selected variables must be restarted use the **Restart** button in Edit Programme Detail.*

➢ The **Change Frequency** button is used to change the monitoring frequency of any sample from that in the original design to any other frequency within the visiting frequency of the monitor.

➢ The **Change Monitor** button enables you to assign an alternative monitor for the monitoring action. Clicking on this button opens the **Choose new Monitor** form.

   ➢ The **Choose New Monitor** form displays the new Monitor ID, abbreviation, and the full name of the monitor. The form also has a choose box with Default and Monitor buttons and an Execute box with Change Monitor and Exit buttons. **Note:** When this form opens the "New Monitor" is the existing monitor, it only changes after a selection has been made.

➢ In Write Details the default monitor for a monitoring point is selected. If any other monitor has been selected in the editing process for the monitoring point, the **Default** button allows you to revert to the default monitor.

➢ The **Monitor** button opens the Lookup Monitors for Mon Point form that shows all monitors linked to the monitoring point. Select the appropriate monitor or exit.

➢ If a new monitor was selected click on the **Execute Change Monitor** button to effect the change of the monitor or **Exit** button to revert to the previous selection.

> ➢ **NB** This action changes the monitor for all the variables in the sample. If the Monitor must be changed for single variables in a sample, use the **Choose Monitor** button in the Edit Programme Details form.

> ➢ The **Change Lab** button is used to assign an alternative laboratory for the monitoring action. In Write Details the default laboratory for a monitor is selected. This button opens Choose new Laboratory form.

> ➢ The Choose new Laboratory form displays New Laboratory detail and has **Change Laboratory** and Exit buttons. The laboratory ID number is highlighted and the **Zoom** button is active.

> ➢ **Zoom** opens the Lookup Laboratory form with Select and Exit buttons.

> ➢ Find the appropriate laboratory and click on the [Select] **Select** button or Exit to return to the Choose new Laboratory form.

> ➢ In Choose new Laboratory form click on **Change Laboratory** to activate the choice or Exit to revert to the existing laboratory.

> ➢ **NB** This process changes the laboratory for all the variables in the sample. If the laboratory must be changed only for selected variables, use the **Analmeth-Lab** button in the Edit Programme Details form.

> ➢ The **View Error Log** button and its functions were discussed in point 3.6 of this section.

> ➢ The **LIMS Method Report** activates a report generator and prints a comparison of the LIMS (IWQS Laboratory Information Management System) and WMS analysis methods.

Edit Programme Details

Introduction:

The Edit Programme Details module is used to edit the "default" detail of a Monitoring Programme. In the **Write Detail** of the **Register Programme Design** function, the default detail in **Peripheral Information** was used to programme the monitoring. You can now customise the default settings to fit operational requirements. This function goes directly to the detail of the sample.

## 1	Path:

1.1	Select **Monitoring Programmes** from the Monitoring Management menu bar.

1.2	Select **Programme Administration** from the drop down menu.

1.3	Select **Edit Programme Details** from the **Programme Administration** sub menu.

1.4	This will open the **Edit Programme Details** form.

2 How to Search for Programme Details:

Edit Programme Details opens the form with various filter options. By entering one or more of the following fields the detail that is returned is narrowed down to detail of the selected data. NB If nothing is entered a very long list is returned!

2.1 **Programme:** The programme Id if known or selected from the Lookup Programme with Ind obtain with the **Zoom** button.

2.2 **Eco Compartment:** The Eco Compartment Id if known or selected from the Ecological Compartment obtain with the **Zoom** button.

2.3 **Action Type:** Select **Observation; Sample; ALL** or **Survey** from the drop down menu.

2.4 **Monitoring Action Specification:** The Id if known or selected from the table obtain with the **Zoom** function.

2.5 **Frequency Specification:** The Id if known or selected from the table obtain with the **Zoom** function.

2.6 **Monitoring Point:** The Id if known or selected from the table obtain with the **Zoom** function.

2.7 **Monitoring Variable:** The Id if known or selected from the table obtain with the **Zoom** function.

2.8 **Analysis Method:** The Id if known or selected from the table obtain with the **Zoom** function.

2.9 **Preservative:** The Id if known or selected from the table obtain with the **Zoom** function.

2.10 **Container:** The Id if known or selected from the table obtain with the **Zoom** function.

2.11 **Sample Type:** The Id if known or selected from the table obtain with the **Zoom** function.

2.12 **Laboratory:** The Id if known or selected from the table obtain with the **Zoom** function.

2.13 **Monitor:** The Id if known or selected from the table obtain with the **Zoom** function.

2.14 The filter can also be applied to the Detail Indicators. The check boxes can be checked ✔ to return only detail that complies with the selected indicator. **Checked**; Approved; Terminated; Consolidated; are available.

3 How to Edit Programme Details:

3.1 First Perform a Search for the Programme Details, and then click on the **Edit Programme Detail** button.

3.2 In this form the variables in the sample are displayed on the left-hand side, on the upper half of the right hand side the detail for each is displayed. On the lower half are the Detail Indicators (view only) and buttons for: **EXIT, DEFAULT MONITOR, TERMINATE, DUPLICATE VARIABLE, RESTART, CHOOSE MONITOR, OBSERVMETHOD** and **ANALMETH-LAB**.

3.3 The **EXIT** button is used to return to the Edit Programme Samples form at any stage of editing.

3.4   The **DEFAULT MONITOR** button is used to change the monitor to the default monitor.

3.4.1   By clicking this button the monitor is changed to the default monitor.

3.4.2   **NB** If the monitor is changed and it is not the same for all the variables in the selected sample, different samples will be created for each monitor after this form is exited.

3.5   The **TERMINATE** button is used to terminate an active variable in a sample. This button is disabled when the variable is terminated. You will be prompted to confirm the termination.

3.6   The **DUPLICATE VARIABLE** button is used to select an alternative analysis method for a variable that has more than one analysis method for the determination of the variable at the same laboratory.

3.7   The **RESTART** button is active only when a variable is terminated and used to restart single variables in a sample. You will be prompted to confirm the restart.

3.8   The **CHOOSE MONITOR** button is used to select any active monitor that is linked to the monitoring point. On clicking this button the Lookup Monitors for Mon Point form with all active monitors at the point is opened.

3.9   The **OBSERVMETHOD** button is active only if the variable is an observation. It is used to select an observation method for the variable and monitor at the monitoring point. On clicking this button the Lookup Monitor ObservMethod form will be opened. Scroll to the appropriate Monitor, Sample Type, Name Analysis Method combination and select or exit if inappropriate.

3.10   The **ANALMETH-LAB** button is active if the variable is derived from a sample. It is used to select an analysis method for the variable at the laboratory. On clicking this button the Lookup LabMethContPres form is opened. Scroll to the appropriate Container, Preservative, Laboratory, Analysis Method combination and select or exit if inappropriate.

3.11   **NB** If any change is made to a sample that was previously checked, the sample becomes unchecked.

3.12   Click on the **Exit** button, once the editing has been completed.

Print Schedules

Introduction:

The Scheduled Sample And Analysis module is used to print schedules and reports relevant to the monitoring and sampling processes.

The following reports can be obtained:

➢ **Monitoring Schedule Report** - *used by the monitor to determine what samples must be taken and when. The Monitoring Schedule Report is also sent with the monitoring equipment to the monitor and is needed to obtain the sample.*

It is important to regularly print/receive an updated report as changes can be made to the scheduling at any time.

➢ **Observation Analysis Schedule Report** - *used to specify what field observations the monitor must perform.*

➢ **Laboratory Analysis Schedule Report** - *used to specify what laboratory analysis must be done by the laboratory.*

➢ **Sampling Audit Report** - *used to check the amount of samples scheduled and received.*

➢ **Sampling Process Problem Report** - *used to check the amount of samples scheduled or received, problem samples, and problem samples rejected per monitoring point.*

1   Path:

1.1   Select **Monitoring Programmes** from the Monitoring Management menu bar.

1.2   Select **Scheduled Sample And Analysis** from the drop down menu.

1.3   Proceed with the following steps to obtain a relevant report.

2   How to obtain a Monitoring Schedule Report:

2.1   Select **Monitoring Schedule Report** from the **Scheduled Sample And Analysis** sub menu. This will open the **Monitoring Schedule Report Filter Criteria** form.

2.2   Enter criteria for the report you require. Entering or selecting multiple field criteria can refine this report. Enter the filter criteria as follows:

2.2.1   In the **Period From** field, enter the monitoring period that you want the report to start from.

2.2.2   In the **Period To** field, enter the monitoring period that you want the report to end on.

2.2.3   In the **Managerial Office** field, enter the Managerial office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

2.2.4   In the **Responsible Office** field, enter the Responsible office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

2.2.5   In the **Monitor ID** field, enter the Monitor ID or click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form and select the required monitor.

2.2.6   If you have the **Sample Type**, **Monitoring Action**, and **Monitoring Point**, you can enter this information, or click on the **ZOOM** **Zoom** button to open the Sample Type Selection form, Monitoring Action Selection form and Monitoring Point Selection form respectively and select the required information, but it is not compulsory.

2.2.7   Once the report selection criteria has been chosen, you can do one of the following:

- Click on the **View Schedule** button to display the information on **Monitoring Schedule Report View** form. To print tags click on the **Print Tags** button from this form. After viewing the information close the form to return to the previous form.

- To print a report, select the Reports you require by checking the checkboxes under "**Select Report(s) to be printed**", and click the **Print Report** button.

- To export a report: In the **Directory Name** field, click on the **Zoom** button to open the **Import Directory Selection Wizard** form, enter the directory to import data or click on the **Zoom** button to select the directory then click on the **Next** button to return the path. Specify the File Name in the **File Name** field, and then click on **Export Reports** button to export the saved report.

3   How to obtain an Observation Analysis Schedule Report:

3.1   Select **Observation Analysis Schedule Report** from the **Scheduled Sample And Analysis** sub menu. This will open the **Observation Analysis Schedule Report Filter Criteria** form.

3.2   Enter criteria for the report you require. Entering or selecting multiple field criteria can refine this report. Enter the filter criteria as follows:

3.2.1   In the **Period From** field, enter the monitoring period that you want the report to start from.

3.2.2   In the **Period To** field, enter the monitoring period that you want the report to end on.

3.2.3   In the **Managerial Office** field, enter the Managerial office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

3.2.4   In the **Responsible Office** field, enter the Responsible office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

704

3.2.5   In the **Monitor ID** field, enter the Monitor ID or click on the `ZOOM` **Zoom** button to open the **Monitor Selection** form and select the required monitor.

3.2.6   If you have the **Sample Type**, **Monitoring Action**, and **Monitoring Point**, you can enter this information, or click on the `ZOOM` **Zoom** button to open the Sample Type Selection form, Monitoring Action Selection form and Monitoring Point Selection form respectively and select the required information, but it is not compulsory.

3.2.7   Once the report selection criteria has been chosen, you can do one of the following:

- Click on the **View Schedule** button to display the information on **Observation Analysis Schedule Report View** form. After viewing the information close the form to return to the previous form.

- To print a report, select the Reports you require by checking the checkboxes under "**Select Report(s) to be printed**", and click the **Print Report** button.

- To export a report: In the **Directory Name** field, click on the **Zoom** button to open the **Import Directory Selection Wizard** form, enter the directory to import data or click on the **Zoom** button to select the directory then click on the **Next** button to return the path. Specify the File Name in the **File Name** field, and then click on **Export** button to export the saved report.

4   How to obtain a Laboratory Analysis Schedule Report:

4.1   Select **Laboratory Analysis Schedule Report** from the **Scheduled Sample And Analysis** sub menu. This will open the **Laboratory Analysis Schedule Report Filter Criteria** form.

4.2   Enter criteria for the report you require. Entering or selecting multiple field criteria can refine this report. Enter the filter criteria as follows:

4.2.1   In the **Period From** field, enter the monitoring period that you want the report to start from.

4.2.2   In the **Period To** field, enter the monitoring period that you want the report to end on.

4.2.3   In the **Managerial Office** field, enter the Managerial office ID or click on the ZOOM **Zoom** button to open the Monitor Selection form, select the required information and click on the Select **Select** button to return the selection. *It is not compulsory.*

4.2.4   In the **Responsible Office** field, enter the Responsible office ID or click on the ZOOM **Zoom** button to open the Monitor Selection form, select the required information and click on the Select **Select** button to return the selection. *It is not compulsory.*

4.2.5   In the **Laboratory ID** field, enter the Laboratory ID or click on the ZOOM **Zoom** button to open the **Monitor Selection** form and select the required monitor. *Note: This is a compulsory field. The view Report button and the Print Report button will only be enabled when the Laboratory ID is entered.*

4.2.6   If you have the **Sample Type**, **Monitoring Action**, and **Monitoring Point**, you can enter this information, or click on the ZOOM **Zoom** button to open the Sample Type Selection form, Monitoring Action Selection form and Monitoring Point Selection form respectively and select the required information, but it is not compulsory.

4.2.7   Once the report selection criteria has been chosen, you can do one of the following:

- Click on the **View Report** button to display the information on **Laboratory Analysis Schedule Report View** form. After viewing the information close the form to return to the previous form.

- To print a report, select the Reports you require by checking the checkboxes under "**Select Report(s) to be printed**", and click the **Print Report** button.

- To export a report: In the **Directory Name** field, click on the **Zoom** button to open the **Import Directory Selection Wizard** form, enter the directory to import data or click on the **Zoom** button to select the directory then click on the **Next** button to return the path. Specify the File Name in the **File Name** field, and then click on **Export Report** button to export the saved report.

5   How to obtain a Sampling Audit Report:

5.1   Select **Sampling Audit Report** from the **Scheduled Sample And Analysis** sub menu. This will open the **Sampling Audit Report Filter Criteria** form.

5.2   Enter criteria for the report you require. Entering or selecting multiple field criteria can refine this report. Enter the filter criteria as follows:

    5.2.1   In the **Period From** field, enter the monitoring period that you want the report to start from.

    5.2.2   In the **Period To** field, enter the monitoring period that you want the report to end on.

    5.2.3   In the **Managerial Office** field, enter the Managerial office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

    5.2.4   In the **Responsible Office** field, enter the Responsible office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

    5.2.5   In the **Monitor ID** field, enter the Monitor ID or click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form and select the required monitor.

    5.2.6   If you have the **Sample Type** and **Monitoring Point**, you can enter this information, or click on the **ZOOM** **Zoom** button to open the Sample Type Selection form and Monitoring Point Selection form respectively and select the required information, but it is not compulsory.

    5.2.7   Once the report selection criteria has been chosen, you can do one of the following:

        •   To print a report, select the Reports you require by checking the checkboxes under "**Select Report(s) to be printed**", and click the **Print Report** button.

- To export a report: In the **Directory Name** field, click on the **Zoom** button to open the **Import Directory Selection Wizard** form, enter the directory to import data or click on the **Zoom** button to select the directory then click on the **Next** button to return the path. Specify the File Name in the **File Name** field, and then click on **Export Report** button to export the saved report.

6   How to obtain a Sampling Process Problem Report:

6.1   Select **Sampling Process Problem Report** from the **Scheduled Sample And Analysis** sub menu. This will open the **Sampling Process Problem Report Filter Criteria** form.

6.2   Enter criteria for the report you require. Entering or selecting multiple field criteria can refine this report. Enter the filter criteria as follows:

6.2.1   In the **Period From** field, enter the monitoring period that you want the report to start from.

6.2.2   In the **Period To** field, enter the monitoring period that you want the report to end on.

6.2.3   In the **Managerial Office** field, enter the Managerial office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

6.2.4   In the **Responsible Office** field, enter the Responsible office ID or click on the **ZOOM** **Zoom** button to open the Monitor Selection form, select the required information and click on the **Select** **Select** button to return the selection. *It is not compulsory.*

6.2.5   In the **Monitor ID** field, enter the Monitor ID or click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form and select the required monitor.

6.2.6   If you have the **Sample Type** and **Monitoring Point**, you can enter this information, or click on the ZOOM **Zoom** button to open the relevant form and select the required information, but it is not compulsory.

6.2.7   Once the report selection criteria has been chosen, you can do one of the following:

- To print a report, select the Reports you require by checking the checkboxes under "**Select Report(s) to be printed**", and click the **Print Report** button.

- To export a report: In the **Directory Name** field, click on the **Zoom** button to open the **Import Directory Selection Wizard** form, enter the directory to import data or click on the **Zoom** button to select the directory then click on the **Next** button to return the path. Specify the File Name in the **File Name** field, and then click on **Export Report** button to export the saved report.

Sample and Result Registration Overview

The Sample and Result Registration module is used to enter monitoring samples, observations and results into the WMS system.

The Sample and Result Registration module deals with the following sub-modules:

➢   Register Non-Programme Samples

➢   Receive Programme Samples

➢   Receive Results

➢   Non Programme Samples and Observations

Register Non-Programme Samples

Introduction:

The Register Non-Programme Samples module is used to register samples and observations that are not part of a monitoring programme, as well as programme samples that do not occur within a scheduled time frame.

Business Rules:

To complete this form, ensure the following:

i   A Monitoring Point must have been registered.

ii   The Monitor responsible for sampling must have been registered.

iii   The Laboratory must have been registered and linked to the monitor.

iv   The Monitoring Variable as analysed by the laboratory and their respective analysis methods must have been registered.

v   Preservative and Container for the sample type must be registered and linked to the Laboratory and Analysis Method.

vi   **Client Office/Client Person** must be have been registered.

1   Path:

1.1   Select **Sample and Result Registration** from the Monitoring Management menu bar.

1.2   Click on the **Input Results** button, and the results template opens.

1.3   Select **Sample and Result Registration** from the Monitoring Management menu bar.

1.4   Select **Register Non-Programme Samples** from the **Sample and Result Registration** sub menu.

1.5   This will open the **Register Non-Programme Samples** form.

2   How to View a Non Programme Sample:

2.1   Click on the View Non-Programme Sample option on the menu-bar.

2.2   A list of all the Non-Programme Samples displays.

Only Non-Programme samples that have not yet been received will be displayed.

3   How to register a Non Programme Sample:

3.1   Click on the **Register Non-Programme** Sample option.

3.2   A **Register Non-Programme Sample Filter Criteria** form displays.

3.3   Enter the **Non-Programme Sample ID**, if you know the ID number.

3.4   Click on the **Register New** button, to register a Non-Programme Sample.

3.5   A **Register Non-Programme Sample** form displays.

3.6 In the **Eco Compartment** field, either enter the Eco Compartment ID and tab, or click on the `ZOOM` **Zoom** button to open the **Eco Compartment** form. Click on the required record and click on the `Select` to return the record.

3.7 In the **Action Type** field, click on the `▾` **Drop Down** button and select either a **Sample** or **Observation** or **Survey** by clicking on the record, and tab.

3.8 In the **Monitoring Action Specification** field, either enter the Monitoring Action Specification ID and tab, or click on the `ZOOM` **Zoom** button to open the **Lookup Monitoring Action Spec** form. Click on the required record, and click on the `Select` **Select** button to return the record.

3.9 In the **Monitoring Point** field, either enter the Monitoring Point ID and tab, or click on the `ZOOM` **Zoom** button to open the **Lookup Mon Feature/Ext Ref.** form.
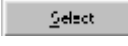
You can search for and select a record in the following way:

➢ Click on the **System Datasource list** button to display a drop down list. Click on the required record and click on the `Select` **Select** button. All the records will be displayed for the specific datasource.

➢ Click on the `▣` **Range** button and click in the right-hand side of the **Monitoring Feature** grid to highlight the field. Enter the Monitoring Point ID and * and click on enter. The required record will be displayed, click on the `Select` **Select** button to return the record.

3.6 In the **Monitor** field, depending on the **Action Type** that you have selected, the following process must be followed:

> ➢ **Sample**
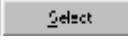
Click on the ZOOM **Zoom** button to open the **Lookup Mon/Lab/Sample Type** form. Click on the required record and click on the ⌐ Select ¬ **Select** button or for additional combinations click on the **Additional Monitors** button and select the record. *The Monitor, Laboratory and Sam/Obs Type record will be displayed in the fields.*

> ➢ **Observation**

Click on the ZOOM **Zoom** button to open the **Lookup Monitor** form. Click on the required record and click on the ⌐ Select ¬ **Select** button to return the record. *The Monitor and Sam/Obs Type record will be displayed in the fields.*
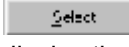
3.7 In the **Preservative** field, click on the ZOOM **Zoom** button to open the **Lookup Laboratory/Sample Type** form. Click on the required record and click on the ⌐ Select ¬ **Select** button to return the Preservative and Container record. *The Laboratory, Preservative and Container fields are not applicable to observation type.*

3.8 In the **Client Office** field, either enter a Client Office ID or click on the ZOOM **Zoom** button to open the **Liaison Entity** form. Click on the required record and click on the ⌐ Select ¬ **Select** button to return the record.

3.9 In the **Member** field, either enter a Client Person ID or click on the ZOOM **Zoom** button to open the **Person** form. Click on the required record and click on the ⌐ Select ¬ **Select** button to return the record.

3.10 In the Reason field, enter a **reason** for analysis.

Display variables for the new Non-Programme Sample that you are registering, in **one** of the following ways:

> ➢ Click on the Variables button to display default variables to be registered for this new sample.

> ➢ Click on the **Analysis Group** field, either enter an Analysis Group ID and tab, or click on the ZOOM **Zoom** button to open the **Analysis Groups** form. Click on the required record and click on the ⌐ Select ¬ **Select** button to return the record. Click on the Variables Button to display the variables for this analysis group.

4 How to define variables for analysis:

4.1 Click on the Variables button to display all the variables. Edit as required by adding or deleting variables, and click on the Samples button to select the group of variables. *The number of variables in the group, and the registration date is displayed.*

The non-programme sample number is automatically displayed, as the sample information has now been registered.

4.2 Click on the Receive Sample button to open the Receive Programme Sample form.

5 How to edit a Non Programme Sample:

5.1   Do a **View Non-Programme Sample** to locate the required record for editing.

5.2   Click on the field to be edited and enter the changes, *as explained in the Register Steps 2-11.*

5.3   Tab to accept the changes.

Important

The **Delete Sample** button is used to permanently erase a non-programme sample from the system. The Sample Administrator only performs this action. Contact your WMS Super user to submit new or changed information.

Register Programme Samples

Introduction:

The Register Programme Samples module is used to register samples and observations that are part of a monitoring programme.

Business Rules:

To complete this form, ensure the following:

i.   The Monitoring Programme must have been registered for a specific sample(s).

1.   Path:

1.1   Select **Sample and Result Registration** from the Monitoring Management menu bar.

1.2   Select **Register Programme Sample** from the sub menu.

1.3   This will open the **Register Sample** form.

2.   How to View Sample Tag Information:

You can view Sample Tag Information in the following ways:

2.1   **Either** enter the Consolidation ID and tab. The Sample Tag Information will be displayed, **OR**

2.2   Click on the **Consolidation ID** field and click on the **ZOOM** **Zoom** button to open the **Monitoring Point and Sample Type Selection** form. Either enter the Monitoring Point ID or enter a Monitoring Point Name or portion of the Name with * and enter.

Click on the required record and click on the [*Select*] **Select** button. The **Sample Type** form will be displayed with all the registered sample type records. Click on the required sample type record and click on the [*Select*] **Select** button to return the Mon Feature Id and the sample type combination to the **Scheduled Consolidation ID** form. Click on the required combination and click on the [*Select*] **Select** button to return all the **TAG** information to the **Register Sample** form.

3.   How to Register a Programme Sample:

3.1   Follow the relevant steps listed in **How to view Sample Tag Information**, either step 2.1 or 2.2. *The user must verify the Sample Tag Information for the specified Consolidation ID before entering the particulars of the sample.*

3.2   A message will be displayed *"Tag Confirmation Accept/ Reject"*. Click on the Accept button if the tag information corresponds with the sample information.

3.3   The **Quality Control** form will be displayed for LIMS and Manual data type sources. Check that the details are correct, and confirm by clicking on the **check box**. Click on the **OK** button. A message will be displayed *" are you sure the information is correct? Once you continue you will not have another chance to change?"* Click on the **Continue** option if the information is correct to open the **Register Programme Sample** form or click on the **Return** option to change the details and repeat the process.

3.4   In the Flow Type field, click on the ▼ **Drop Down** button, and select either a **yes**, **no or irrelevant** flow from the list and tab. *(When the dam is spilling, during a big flood, then the flow indicator should be yes)*

3.5   Enter the Sample Date and tab.

3.6   In the Sample Time field enter the **time** and tab.

3.7   A **Confirm dates and time screen** will be displayed, re-enter the dates and time and tab. If the information is correct, it will be displayed in the **Receive Sample** form.

3.8   In the **Depth** fields, one or more Depths will be highlighted (this depends on the monitoring action specification) enter the **depth** and tab. *(Note: Integrated samples have a begin and end depth – if both fields are not entered, the sample will be marked as a problem.)*

3.9   In the Analyst Sample Reference no. field you can enter information if required, and tab. (*this field is optional. LIMS samples will be updated with LIMS sample ID.)*

3.10   In the Remarks field, enter any remarks appearing on the tag e.g. ALGAE BLOOM and tab *(this field is optional).*

3.11   Click on the Accept Sample button.

3.12   A message will be displayed, *" Print certification?"* if you require a printed copy of the sample information click **yes** to receive a print. Check the information and click the **Correct** button if the information is correct. If the information is incorrect, click on the **Incorrect** button and repeat the **Register Programme Sample** steps.

3.13   A sample id, and where applicable, a LIMS box number and position in the box, will be displayed. Click on **Print** to print a label with a sample id if you require a label.

3.14   Either click on **Exit**, **Next Sample** (to register the next sample) or **Input Results** (to immediately enter the results for the registered sample).

Important

When you register a sample ensure the information is correct, as you cannot edit it afterwards.

3.14   Either click on **Exit**, **Next Sample** (to register the next sample) or **Input Results** (to immediately enter the results for the registered sample).

Register Results (Input Results)

Introduction:

This Input Results module is used to enter analysis results as well as observation results into the WMS, prior to storing these results onto the database. Users can register results directly on the WMS that are not electronically imported via the LIMS or from other analysts.

Business rules:

i.   The Sample must be registered.

ii.   Sample/Observation types, measuring units, analysis methods, etc. must exist.

1.   Path:

1.1   Select **Sample and Result Registration** from the Monitoring Management menu bar.

1.2   Select **Register Results** if the sample/observation has already been registered earlier, from the drop down menu.

1.3   Enter the **Sample number** and tab.

1.4   Click on the **Input Results** button, depending on the **Result Type**, one of the following forms will be opened:

   ➢   **Single** – For a single sample, the **Single Result Registration Maintenance** form will be opened.

   ➢   **Multiple** – the **Multiple Method Maintenance** form will be opened, to enable the user to input the information that is common to the results for each variable for the sample. The results for the parameters of a Multiple Variable will be captured in a separate form.

   ➢   **Depth Profile** – the **Depth Profile Method Maintenance** form will be opened, to enable the user to input the common information to all results as each variable Analysis Method combination may have many results.

   ➢   **Depth Interval** – the **Depth Interval Method Maintenance** form will be opened, to enable the user to input the common information to all results as each variable Analysis Method combination may have many results.

2.   Single Results:

2.1   How to Create a Variable Record for Single Results:

*Note: Follow the path as specified in step 1 to access **Single Result Registration Maintenance** form.*

2.1.1   Click on the [icon] **Create Records** button.

2.1.2   In the **Monitoring Variable** field, either enter the Monitoring Variable ID and tab, or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Selection** form. Either click on the required record and click on the **Select** **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the **Select** **Select** button to return the record.

2.1.3   In the **Analyst** field, either enter the Analyst ID and tab, or click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form. Either click on the required record and click on the **Select** **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the **Select** **Select** button to return the record.

2.1.4   In the **Analysis Method** field, either enter the Analysis Method ID and tab, or click on the **ZOOM** **Zoom** button to open the **Analysis Method Selection** form. Either click on the required record and click on the **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the **Select** **Select** button to return the record.

2.1.5   Continue with the **Register Single Results** steps 2.2.

2.2   How to Register Single Results:

2.2.1   In the **Numeric Results** field, enter the **results** and tab. *A warning will be displayed if the entered result value does not conform to the specified quality control parameters. You must check that the entered value corresponds with the measured value, and proceed.*

2.2.2   In the **Greater than** field, enter the "**>**" sign if required and tab. *This field is to be used when an exact result is not available and an approximate value is entered for numeric value of results.*

720

2.2.3   In the **Analysis date** field, enter the **date** and tab. *A warning message will be displayed if the future date is enter and if the analysis date is earlier than the Sampling date.*

2.2.4   In the **Measuring Unit** field, either enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Measuring Unit** Selection and ⎢ Select ⎟ **Select** the required record. If the record is not found in the list, click on the **Not Found** button and enter the required measuring unit.

2.2.5   In the **Accreditation Status** field, enter "A" or "N" to indicate if a result is accredited or not. *Only when the monitoring variable is a fundamental variable and NOT a derived variable.*

2.2.6   Repeat steps 2.2.1 to 2.2.5 for all the required result records.

[?] *Note: If some variables do not have results, leave their result fields blank*

2.2.7   Once the last result information has been entered and if there are no variables that need to be added, click on the **Last Result** button to activate the result validation programme.

2.2.8   Calculate the total numerical value of all results entered and enter this value in the field provided, when prompted.

2.2.9   Enter the number of results entered on the template, in the field provided.

2.2.10   Click on the **OK** button.

2.2.11   Click on the **Exit** button.

3.   Multiple Results:

Multiple Monitoring Variables have many parameters linked to them, and therefore many results can also be expected.

3.1   How to access Variable record for Multiple Results:

[?] *Note: Follow the **Path** as specified in item 1 to access the **Multiple Monitoring Variable Method Maintenance** form. This form is used to display information that is common to the results for each variable for the sample. When changes are made, all the results for that variable will be updated.*

3.1.1   Click on the required multiple variable.

3.1.2   Click on the **Multiple Results** button to enter results for the parameters of a multiple variable on the **Multiple Results Registration** form. *Refer to 3.2 on How to Register Multiple Results.*

3.1.3   Once the results have been entered for all the multiple variables, click on the **Last Record** button to activate the result validation programme. *Note: Ensure that you've entered results for all the multiple variable of a sample before clicking on the Last Record button.*

3.1.4   Calculate the total numerical value of all results entered and enter this value in the field provided, when prompted

3.1.5   Enter the number of results entered on the template, in the field provided

3.1.6   Click on the **OK** button

3.1.7   Click on the **Exit** button

3.2   How to Register Multiple Results:

The results for the parameters of a multiple variable are recorded on the Multiple Results Registration form.

3.2.1 If the record (parameter) you want to add results to does not exist, **Create a Record** else proceed to 3.2.2.

- In the **Parameter ID** field, enter the valid Multiple Monitoring Variable Parameter ID or click on the **ZOOM** **Zoom** button to open the **Multiple Monitoring Variable Parameter Selection** form. Click on the required record and click on the **ZOOM** **Select** button to return the record and tab.

3.2.2 In the **Alpha** field, enter the Alpha result value if required and tab. *This field is used if the alpha results are expected.*

3.2.3 In the **Numeric Result** field, enter the Numeric Result value if required. *This field is used if the numeric results are expected.*

3.2.4 In the **Greater than** field, enter the "**>**" sign if required and tab. *This field is to be used when an exact result is not available and an approximate value is entered for numeric value of result.*

3.2.5 In the **Accreditation Status** field, enter "A" or "N" to indicate if a result is accredited or not. *Only when the monitoring variable is a fundamental variable and NOT a derived variable.*

3.2.6 Repeat this process for all the result records.

3.2.7 Once the last result information has been entered for this variable, click on the **Exit** button to go back to the **Multiple Monitoring Variable Method Maintenance** form and continue with step 3.1.9.

4. Depth Profile:

4.1 How to Create/Modify Variable record for Depth Profile Results:
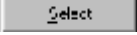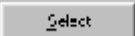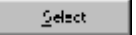
Note: Follow the Path as specified in step 1 to access the Depth Profile Method Maintenance form.

4.1.1   Click on the [icon] **Create Records** button.

4.1.2   In the **Monitoring Variable** field, either enter the Monitoring Variable ID and tab, or click on the `ZOOM` **Zoom** button to open the **Monitoring Variable Selection** form. Either click on the required record and click on the `Select` **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the `Select` **Select** button to return the record.

4.1.3   In the **Analyst** field, either enter the Analyst ID and tab, or click on the `ZOOM` **Zoom** button to open the **Monitor Selection** form. Either click on the required record and click on the `Select` **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the `Select` **Select** button to return the record.

4.1.4   In the **Analysis Method** field, either enter the Analysis Method ID and tab, or click on the `ZOOM` **Zoom** button to open the **Analysis Method Selection** form. Either click on the required record and click on the **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the `Select` **Select** button to return the record.

4.1.5   In the **Analysis date** field, enter the **date** and tab. *A warning message will be displayed if the future date is enter and if the analysis date is earlier than the Sampling date.*

4.1.6   In the **Accreditation Status** field, enter "A" or "N" to indicate if a result is accredited or not. *Only when the monitoring variable is a fundamental variable and NOT a derived variable.*

4.1.7   Click on the **Depth Profile Results** button to enter results on the **Depth Profile Results Registration** form. *Refer to 4.2 on How to Register Depth Profile Results.*

4.1.8   Once the last result information has been entered for all the variables, click on the **Last Record** button to activate the result validation programme. [icon] *Note: Ensure*

*that you've entered results for all the variables of a sample before clicking on the **Last Record** button.*

4.1.9   Calculate the total numerical value of all results entered and enter this value in the field provided, when prompted.

4.1.10   Enter the number of results entered on the template, in the field provided.

4.1.11   Click on the **OK** button.

4.1.12   Click on the **Exit** button.

4.2   How to Register Depth Profile Results:

4.2.1   If the result depth you want to add results to does not exist, **Create a Record** else proceed to 4.2.2.

- In the **Result Depth** field, enter the result depth and tab.

4.2.2   In the **Numeric Result** field, enter the **result** value and tab. *A warning will be displayed if the entered result value does not conform to the specified quality control parameters. Check that the entered value corresponds with the measured value and proceed.*

4.2.3   In the **Greater than** field, enter the "**>**" sign if required and tab. *This field is to be used when an exact result is not available and an approximate value is entered for numeric value of result.*

4.2.4   In the **Accreditation Status** field, enter "A" or "N" to indicate if a result is accredited or not. *Only when the monitoring variable is a fundamental variable and NOT a derived variable.*

4.2.5   Repeat this process for all the result records.

4.2.6   Once the last result information has been entered, click on the **Exit** button to go back to the **Depth Profile Method Maintenance** form and continue with step 4.1.9.

5.   Time Interval:

5.1   How to Create/Modify Variable record for Time Interval Results:

*Note: Follow the **Path** as specified in step 1 to access the **Time Interval Method Maintenance** form.*
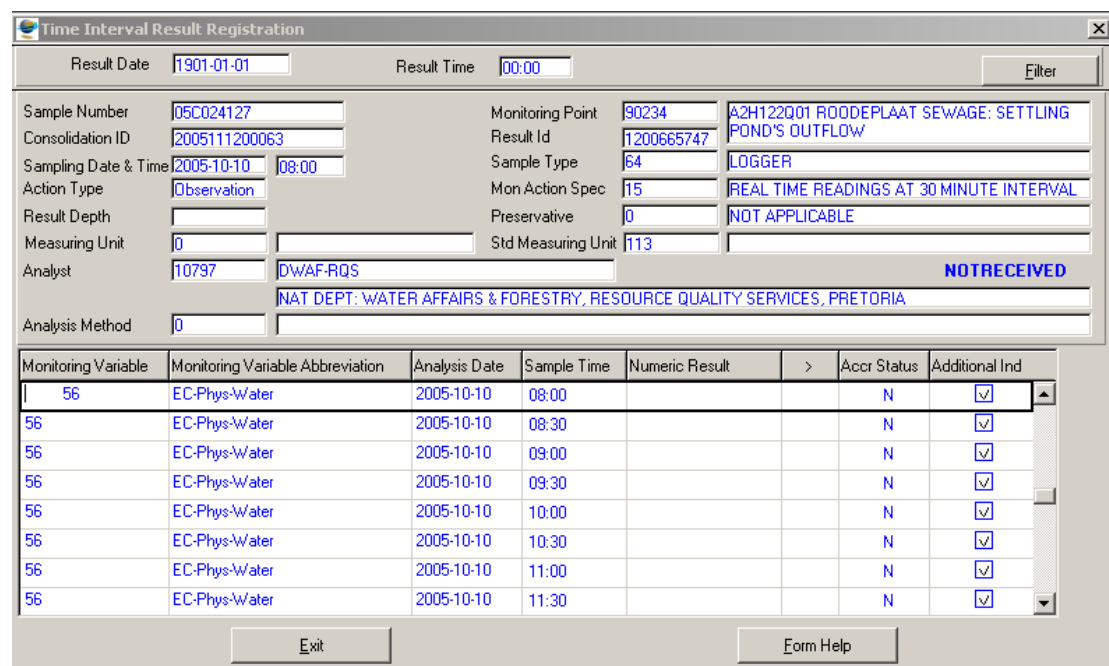
5.1.1   Click on the **Create Records** button.

5.1.2   In the **Monitoring Variable** field, either enter the Monitoring Variable ID and tab, or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Selection** form. Either click on the required record and click on the **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the **Select** button to return the record.

5.1.3   In the **Analyst** field, either enter the Analyst ID and tab, or click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form. Either click on the required record and click on the **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the **Select** button to return the record.

5.1.4   In the **Analysis Method** field, either enter the Analysis Method ID and tab, or click on the **ZOOM** **Zoom** button to open the **Analysis Method Selection** form. Either click on the required record and click on the **Select** button to return the record, or if the required record is not found click on the **Not Found** button, enter the new record and click on the **Select** button to return the record.

5.1.5   In the **Accreditation Status** field, enter "A" or "N" to indicate if a result is accredited or not. *Only when the monitoring variable is a fundamental variable and NOT a derived variable.*

5.1.6   Click on the **Time Results** button to enter results on the **Time Interval Results Registration** form. *Refer to **5.2** on How to Register Time Interval Results.*

5.1.7   Once the last result information has been entered for all the variables, click on the **Last Record** button to activate the result validation programme. 🔲 *Note: Ensure that you've entered results for all the variables of a sample before clicking on the Last Record button.*

5.1.8   Calculate the total numerical value of all results entered and enter this value in the field provided, when prompted

5.1.9   Enter the number of results entered on the template, in the field provided

5.1.10 Click on the **OK** button

5.1.11 Click on the **Exit** button

5.2   How to Register Time Interval Results:

5.2.1   If the Analysis Date and the Sample Time you want to add results to does not exist, **Create a Record** else proceed to 5.2.2.

- In the **Analysis date** field, enter the **date** and tab. *A warning message will be displayed if the future date is enter and if the analysis date is earlier than the Sampling date.*

- In the **Sample Time** field, enter the **time** and tab.

5.2.2   In the **Numeric Result** field, enter the **result** value and tab. *A warning will be displayed if the entered result value does not conform to the specified quality control parameters. Check that the entered value corresponds with the measured value and proceed.*

5.2.3   In the **Greater than** field, enter the "**>**" sign if required and tab. *This field is to be used when an exact result is not available and an approximate value is entered for numeric value of result.*

5.2.4   In the **Accreditation Status** field, enter "A" or "N" to indicate if a result is accredited or not. *Only when the monitoring variable is a fundamental variable and NOT a derived variable.*

5.2.5   Repeat this process for all the result records.

5.2.6   Once the last result information has been entered, click on the **Exit** button to go back to the **Time Interval Method Maintenance** form and continue with step 5.1.7.

Sample Administration

The Sample and Result Administration module is used to enforce quality assurance on the monitoring, sample registration, results registration and analysis processes.

The Sample and Result Administration module deals with the following sub-modules:

- Sample Administration (to enforce quality assurance on samples information)

- Result Administration (to enforce quality assurance on analysis results)

- LIMS Administration (to manage information transferred between LIMS and WMS)

- Administrative Reports (used for managing quality assurance of sample information and analysis results)

Result Quality Control Method Maintenance

Introduction:

The Result Quality Control Method Maintenance form is used to maintain the quality control methods used to perform quality assurance on the analysed value of a result. Quality control can be performed on a single result value or a group of variables

Enables the users to maintain the Result Quality Control Methods for the monitoring variables and parameters, excluding the Derived variables.

Business Rules:

i.   Only the Central Database Administrator has the rights to insert, update and delete records. Other users only have view rights.

Path:

How to access Result Quality Control Method Maintenance on the system:

1.1.   Select **Sample and Result Admin** from the Monitoring Management menu bar.

1.2.   Select **Result Quality Control Methods** from the drop down menu.

1.3.   This will open the **Result QC Method Maintenance Wizard**.

ID	Description	Min/Max	Group QC	Critical Error
0	NOT APPLICABLE	Min	No	No
1	RESULT VALUE GREATER THAN QC MAXIMUM	Max	No	No
2	RESULT VALUE LESS THAN QC MINIMUM	Min	No	No
3	RESULT VALUE GREATER THAN ABS. MAXIMUM	Max	No	Yes
4	RESULT VALUE LESS THAN ABS. MINIMUM	Min	No	Yes
5	ANION - CATION BALANCE MINIMUM	Min	Yes	No
6	ANION - CATION BALANCE MAXIMUM	Max	Yes	No
8	CONDUCTIVITY CHECK MAXIMUM	Max	Yes	No
10	NITROGEN CHECK	Min	Yes	Yes
12	PHOSPHATE CHECK	Min	Yes	Yes
15	TEMPERATURE CHECK MINIMUM	Min	No	No
16	TEMPERATURE CHECK MAXIMUM	Max	No	No
1200000022	TEMP	Max	No	Yes

Result QC Method: *

Buttons: Maintenance | Next | Exit | View | History | Form Help

How to Add Result Quality Control Method:

3.1.   Select **Sample and Result Admin** from the Monitoring Management menu bar, and then select **Result Quality Control Methods** from the drop down menu. This will open **Result QC Method Maintenance Wizard.**

ID	Description	Min/Max	Group QC	Critical Error
0	NOT APPLICABLE	Min	No	No
1	RESULT VALUE GREATER THAN QC MAXIMUM	Max	No	No
2	RESULT VALUE LESS THAN QC MINIMUM	Min	No	No
3	RESULT VALUE GREATER THAN ABS. MAXIMUM	Max	No	Yes
4	RESULT VALUE LESS THAN ABS. MINIMUM	Min	No	Yes
5	ANION - CATION BALANCE MINIMUM	Min	Yes	No
6	ANION - CATION BALANCE MAXIMUM	Max	Yes	No
8	CONDUCTIVITY CHECK MAXIMUM	Max	Yes	No
10	NITROGEN CHECK	Min	Yes	Yes
12	PHOSPHATE CHECK	Min	Yes	Yes
15	TEMPERATURE CHECK MINIMUM	Min	No	No
16	TEMPERATURE CHECK MAXIMUM	Max	No	No
1200000022	TEMP	Max	No	Yes

Result QC Method Maintenance Wizard — Result QC Method: *

Buttons: Maintenance | Next | Exit | View | History | Form Help

3.2.   To search for existing records, enter the **Result Quality Control Method Description** and click on the **Filter** button to filter the records accordingly.

3.3.   If the Record is not available, click on the ▣ **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.4.   **Result Quality Control Method ID** will be automatically displayed, as it is a system-generated serial number. ▣ *Note:* **Result Quality Control Method** *ID will only be generated once the record has been created.*

3.5.   Enter the **Result Quality Control Method Description**

3.6.   Click on the **Min/Max** field ▾ **Drop Down** button and select the **Min/Max** indicator to show the type of quality control test that has been performed and tab

3.7.   Click on the **Group QC** field ▾ **Drop Down** button and select **Yes** or **No** to indicates if a specific quality control method is for a specific variable or a group of variables. ▣ *Note: if the indicator shows* **Yes** *then quality control method is for group of variables, and if* **No** *then the quality control is for a specific variable.*

3.8.   Click on the **Critical Error** field ▾ **Drop Down** button and select a **Yes** or **No** to indicator if a result has failed a specific quality control. ▣ *Note: if the indicator shows* **Yes** *then the result cannot be accepted, and* **No** *if the result can be accepted.*

3.9.   Tab to accept the newly created record

▣ *Note: The* **History** *button will close the Result Quality Control Method Maintenance form and open the* **Display Result Quality Control** *form*

Note: *The* **View** *button will close the Result Quality Control Method Maintenance form and open the* **Option Decision Criteria for Result Quality Control Method View** *form from where the result* **Quality Control method for variable** *are viewed*

Note: *The* **Exit** *button will close the Result Quality Control Method Maintenance form and return to the main menu*

Note: *The* **Next** *button to close the Result Quality Control Method Maintenance form and open the* **Monitoring Variable View** *(displaying all variable details for the Result quality Control (e.g. Variable Type, Monitoring Variable Class and the Fundamental Composite Type))* *or the* **Result Calculation Method for Group QC** *form depending on whether the* **Result Quality Control Group Indicator** *is Yes or No*

a. If the **Group QC** is **Yes** then the **Result QC Calc Method M** form will be opened

Calc Method ID	Calculation Method Description	Start Date	End Date	Value
1	ANION CATION BALANCE	1999-08-31	2005-09-01	-2.000

Back Exit Modify End QC Variables New Method

b. If the **Group QC** is **No** then the **Monitoring Variable View Wizard** will be opened

Mon Variable Abbr [*   Mon Variable Name [*   Filter

Monitoring Variable			Monitoring Variable Type		Monitoring Variable Class		Type
65	ASAR-Diss-Water	ADJUSTED SODIUM ADSORF	3	DISSOLVED	63	INDEX	Derived
64	SAR-Diss-Water	SODIUM ADSORPTION RATI(	3	DISSOLVED	63	INDEX	Derived
63	DMS-Tot-Water	DISSOLVED MAJOR SALTS	2	TOTAL-WATER	61	CALCULATED	Derived
361	HARD-Tot-Water	HARDNESS AS CACO3	2	TOTAL-WATER	61	CALCULATED	Derived
408	RYZNAR-Index-Wat	RYZNAR	3	DISSOLVED	63	INDEX	Derived
407	LANGL-Index-Water	LANGLIER INDEX	3	DISSOLVED	63	INDEX	Derived
410	CORR-Diss-Water	CORROSIVITY INDEX	3	DISSOLVED	63	INDEX	Derived
95	ITTHM-Tot-Water	TOTAL INSTANTANEOUS TR	2	TOTAL-WATER	61	CALCULATED	Derived
359	FPTTHM-Tot-Water	TOTAL FORMATION POTENT	2	TOTAL-WATER	61	CALCULATED	Derived
1200000438	the derived	TEST THE DERIVED	6	ACID EXTRACTABLE	61	CALCULATED	Derived
1200000439	create mode	TEST THE CREATE MODE	11	SUSPENDED	97	ORGANIC	Derived
1200000440	param	TEST THE PARAM	26	NEUTRAL EXTRACT	86	ORGANIC-TRIHOLOM	Derived
1200000442	Test mult params	TEST MULT PARAM	2	TOTAL-WATER	61	CALCULATED	Derived

Back Next Exit Form Help
Add Maintenance Report View

3.10. Click the **Maintenance** button to close the Result Quality Control Method Maintenance form and open the **Options Decision Criteria for Result Quality Control Method Maintenance** form where the Single, Survey and Multiple Variable Result QC are maintained

*Note: The maintenance button will only be activated if the Group QC is **No***
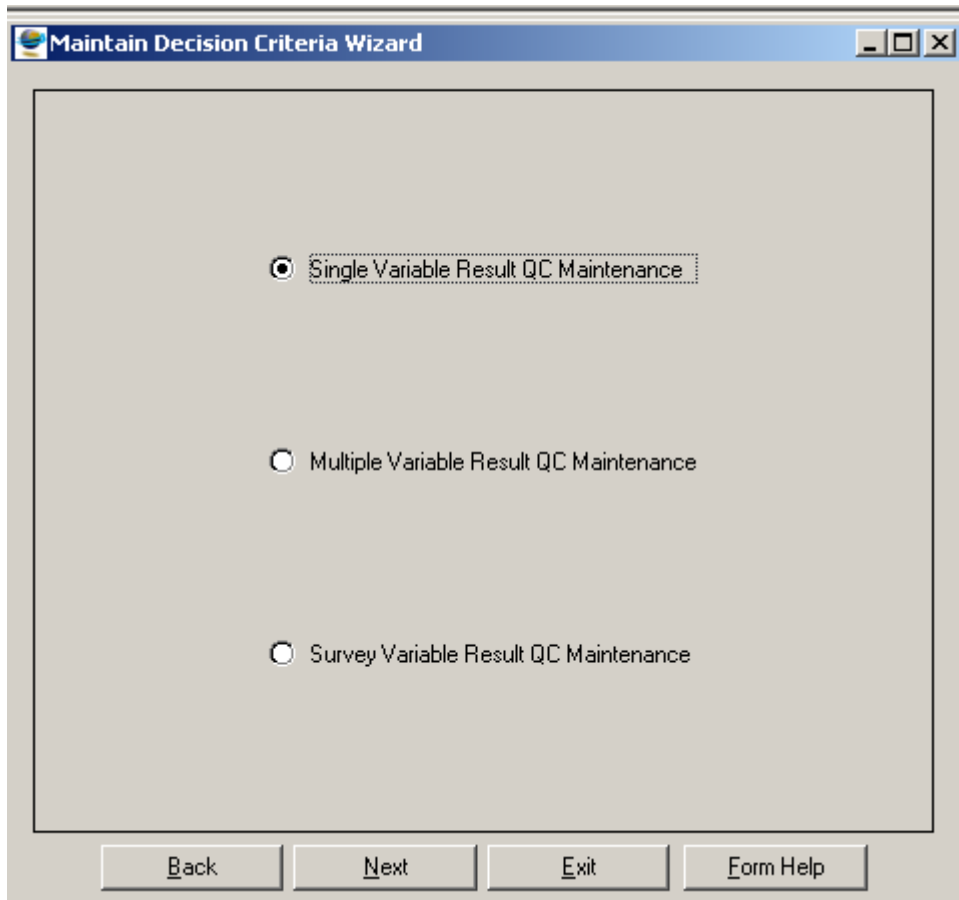
3.11.   Click the **Exit** button to return to the main menu

How to Add Variable Result Quality Control

3.11.1. Select **Sample and Result Admin** from the Monitoring Management menu
bar, and then select **Result Quality Control Methods** from the drop down
menu. This will open **Result QC Method Maintenance Wizard**

3.11.2. Click on the **Maintenance** button. *Note: the **Maintenance** button will only
be activated if the Group QC is **No***

3.11.3. This will open **Maintain Decision Criteria Wizard** with the following options
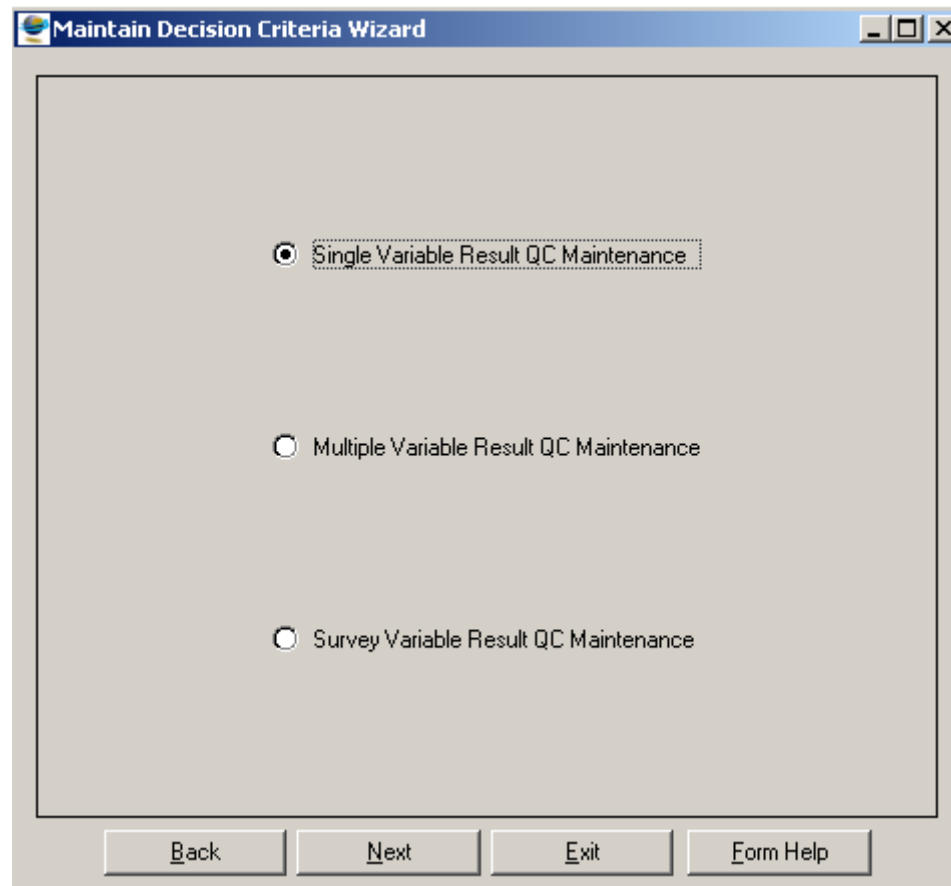
How to Add a Single Variable Result Quality Control

3.11.3.1.   Click on the **Single Variable Result QC Maintenance** radio button then select the Next button

3.11.3.2.   This will open the **Single Variable Result Quality Control Maintenance Wizard**

3.11.3.3. The **Result Quality Method Id, Result Quality Method Description, Start date, Start time, End date, End time, Sever Name** and **User Login** will be automatically be displayed

3.11.3.4. Click on the **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.11.3.5. Enter the **Monitoring Variable ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Selection** form, select the applicable record then click on the **Select** button to return your selection

3.11.3.6. **Monitoring Variable Abbreviation, Monitoring name** will be automatically be displayed

3.11.3.7.   Click the **Start / Modify** button to start or Modify the Single Quality Control Method as of the current system date, one of the two pop up screens will open depending on whether the variable had value or not prompting the user to enter the new value

3.11.3.8.   Enter the Min/Max value then click on the [Modify] **modify** button

3.11.3.9.   Click the **End QC** button to start or Modify the Single Quality Control Method as of the current system date

*Note: The **History** button will open the **Result Quality Control History View** form to display the history of the record in focus*

*Note: The **Back** button will close the form and return to the Maintain Decision Criteria Wizard*

3.11.3.10.   Click the **Exit** button to close the form and return to the main menu

How to Add a Multiple Variable Result Quality Control

3.11.3.1.   Click on the **Multiple Variable Result QC Maintenance** radio button then select the Next button

3.11.3.2.   This will open the **Multiple Variable Result Quality Control Maintenance Wizard**

3.11.3.3. The **Result Quality Method Id, Result Quality Method Description, Start date, Start time, End date, End time, Server Name** and **User Login** will be automatically be displayed

3.11.3.4. Click on the **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.11.3.5. Enter the **Monitoring Variable ID** or click on the ZOOM **Zoom** button to open the **Monitoring Variable Selection** form, select the applicable record then click on the ⎿ Select ⏌ **Select** button to return your selection

3.11.3.6. **Monitoring Variable Abbreviation, Monitoring name** will be automatically be displayed

3.11.3.7. Enter the **Multiple Monitoring Variable Parameter ID** or click on the ZOOM **Zoom** button to open the **Multiple Monitoring Variable Parameter Selection** form, select the applicable record then click on the ⎿ Select ⏌ **Select** button to return your selection.

3.11.3.8. The **Multi Monitoring Variable Parameter Name** will be automatically displayed as is linked to the Multi Monitoring Variable Parameter ID

3.11.3.9. Click the **Start / Modify** button to start or Modify the Multiple Quality Control Method as of the current system date, one of the two pop up screens will open depending on whether the variable had value or not prompting the user to enter the new value

3.11.3.10. Enter the Min/Max value then click on the [Modify] **modify** button

3.11.3.11. Click the **End QC** button to start or Modify the Multiple Quality Control Method as of the current system date

Note: *The **History** button will open the **Result Quality Control History View** form to display the history of the record in focus*

Note: *The **Back** button will close the form and return to the Maintain Decision Criteria Wizard*

3.11.3.12. Click the **Exit** button to close the form and return to the main menu

How to Add a Survey Variable Result Quality Control

3.11.3.1. Click on the **Survey Variable Result QC Maintenance** radio button then select the Next button

3.11.3.2. This will open the **Survey Variable Result Quality Control Maintenance** form

3.11.3.3. The **Result Quality Method Id, Result Quality Method Description, start date, start time, end date, end time, server name** and **User Login** will be automatically be displayed

3.11.3.4. Click on the [icon]**Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.11.3.5. Enter the **Monitoring Variable ID** or click on the **ZOOM Zoom** button to open the **Monitoring Variable Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection

3.11.3.6. **Monitoring Variable Abbreviation, Monitoring name** will be automatically be displayed

3.11.3.7. Enter the **Survey Variable Parameter ID** or click on the **ZOOM** **Zoom** button to open the **Survey Variable Parameter Selection** form, select the applicable record then click on the **Select** **Select** button to return your selection.
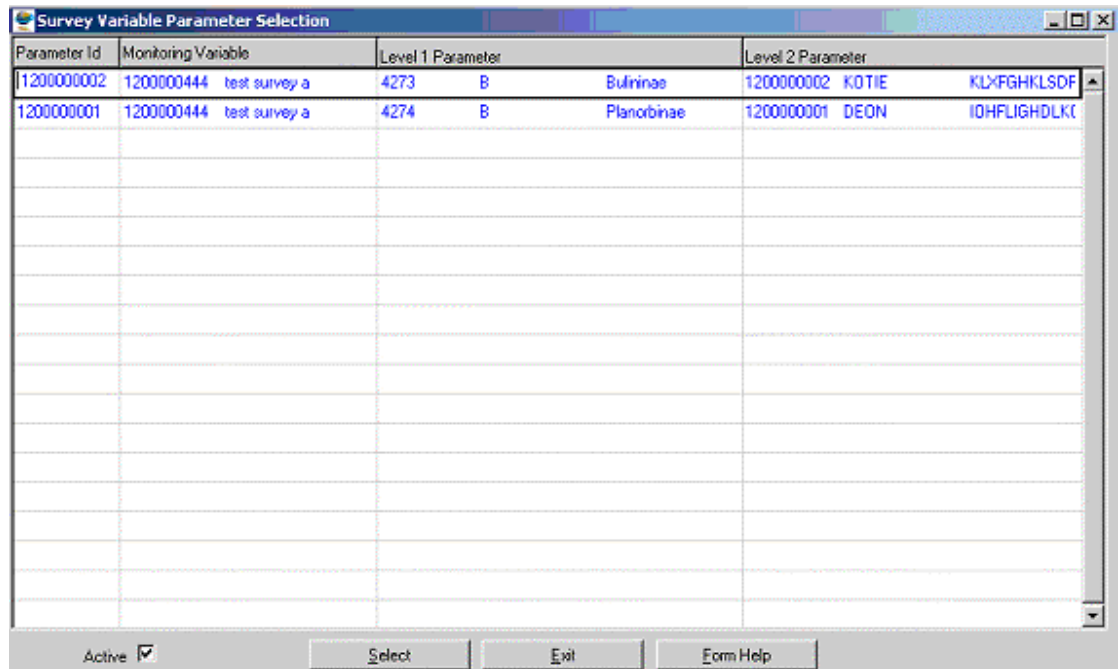
3.11.3.8. The **Level1 Survey Parameter Name** and **Level2 Survey Parameter Name** will be automatically displayed as is linked to the Survey Variable Parameter ID

3.11.3.9. Click the **Start / Modify** button to start or Modify the Survey Quality Control Method as of the current system date, one of the two pop up screens will open depending on whether the variable had value or not prompting the user to enter the new value

3.11.3.10. Enter the Min/Max value then click on the **Modify** **modify** button

3.11.3.11. Click the **End QC** button to start or Modify the Survey Quality Control Method as of the current system date

Note: *The **History** button will open the **Result Quality Control History View** form to display the history of the record in focus*

Note: *The **Back** button will close the form and return to the Maintain Decision Criteria*

3.11.3.12.   Click the **Exit** button to close the form and return to the main menu

How to Edit the Result Quality Control Method:

Note: Only the Central Database Administrator can EDIT the records. These records are edited from the various Maintenance subset forms, e.g. Survey Method Maintenance form.

4.1.   Click on the record to be edited to highlight it, and click on the Modify Records button.

4.2.   Edit the record as required.

4.3.   Click on another record to accept the newly modified record.

How to Delete the Result Quality Control Method:

Note: Only the Central Database Administrator can Delete the records.

5.1.   Click on the record to be deleted, to highlight it.

5.2.   Click on the Delete button. Note: When records are referenced elsewhere in the system, the delete option will be disabled.

5.3.   A confirmation message will be displayed asking if you would like to delete the record

5.4.   Click on the OK option to confirm the deletion

Results Administration (Check and Release Results)

The Sample and Result Administration module is used to enforce quality assurance on the monitoring, sample registration, results registration and analysis processes.

The Sample and Result Administration module deals with the following sub-modules:

> Sample Administration (to enforce quality assurance on samples information)

> Result Administration (to enforce quality assurance on analysis results)

> LIMS Administration (to manage information transferred between LIMS and WMS)

> Administrative Reports (used for managing quality assurance of sample information and analysis results)

Check and Release Results

Introduction:

Through this functionality, analysis results as well as observation results are released onto the database. Applying QC parameters, to ensure integrity and validity of results on the database, checks results.

Business rules:

i.   Results must have been entered and verified.

1   Path:

1.1   Select **Sample and Result Administration** from the Monitoring Management menu bar.

1.2   Select **Result Administration** from the drop down menu, and a Find screen opens.

1.3   Enter a sample number in the appropriate field OR enter selection criteria as necessary

1.4   Click on the **Samples** tab

1.5   If the sample has verification problems/illegal results/not received results/QC problems, the **Global Accept Results** button will not be active

1.6   Solve problems in the manner described below, finally click on the Results tab and check results

1.7   Click on the Samples tab and click on **Global Accept Results** button to release the results to the database.

2   How to solve Result Problems:

Verification problems:

2.1   Click on the Verification Problems tab to select variables with verification problems.

2.2   Click on the **View Problems** button to see the reason for a result being marked as problem.

2.3   Activate or reject result by clicking on the appropriate button, and select an activation/rejection reason by clicking on **ZOOM** **ZOOM** and selecting a reason.

2.4   Click on the **OK** button.

2.5   Click on the Samples tab to trigger verification and QC process

Illegal Results problems:

3.1   Click on the Illegal Results tab to select variables with illegal results

3.2   When parking the cursor on a variable, the reason/s for the result being illegal is displayed in the lower half of the screen.

3.3   Fix the problem/s in the **Peripheral Information** menu, return to the Illegal Results tab to trigger the verification and QC process

Not Received problems:

4.1   Click on the Not Received tab to select variables without results

4.2   If the results will not be entered at any stage in future, reject one by one by clicking on the **Reject** button, or reject all simultaneously by clicking on the **Reject All** button

4.3   If any results became available after initial result registration for the sample, these results can be entered on this screen.

4.4   Click the **Last Result** button and verify by calculating and entering numerical total and number of results when prompted

QC problems:

5.1   Click on the QC Problems tab to select variables with QC problems

5.2   Several QC tests are done, and a result may fail one or more of these:

5.2.1   RESULT VALUE GREATER THAN QC MAXIMUM

➢   Accept result if its value has been checked, by clicking on the **Accept** button.

➢   Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢   Click on the **OK** button.

➢   Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.2 RESULT VALUE LESS THAN QC MINIMUM

➢ Accept result if its value has been checked, by clicking on the **Accept** button.

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.3 RESULT VALUE GREATER THAN ABS. MAXIMUM

➢ Accept result if its value has been checked, by clicking on the **Accept** button.

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.4 RESULT VALUE LESS THAN ABS. MINIMUM

➢ Accept result if its value has been checked, by clicking on the **Accept** button.

➢ Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.5 ANION - CATION BALANCE MINIMUM

➢ Accept result if its value has been checked, by clicking on the **Accept** button.

➢ Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.6 ANION - CATION BALANCE MAXIMUM

➢ Accept result if its value has been checked, by clicking on the **Accept** button.

➢ Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ If all results fail QC for the same (and only this one) reason, all these results can be accepted simultaneously by clicking on the **Global Accept** button.

➢ Enter a reason id for status change, or click on **ZOOM** **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on `ZOOM` **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.7 CONDUCTIVITY CHECK MAXIMUM

➢ Accept result if its value has been checked, by clicking on the **Accept** button.

➢ Enter a reason id for status change, or click on `ZOOM` **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ If all results fail QC for the same (and only this one) reason, all these results can be accepted simultaneously by clicking on the **Global Accept** button.

➢ Enter a reason id for status change, or click on `ZOOM` **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on `ZOOM` **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.8 NITROGEN CHECK

➢ Accept result if its value has been checked, by clicking on the **Accept** button, but

➢ **If the result of KN<result of NH4, reject the KN result value.**

➢ Enter a reason id for status change, or click on `ZOOM` **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on `ZOOM` **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

5.2.9   PHOSPHATE CHECK

➢ Accept result if its value has been checked, by clicking on the **Accept** button, but

➢ **If the result of TP<result of PO4, reject the TP result value.**

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Reject results if value is questionable, by clicking on the **Reject** button.

➢ Enter a reason id for status change, or click on ZOOM **ZOOM** and select a reason.

➢ Click on the **OK** button.

➢ Register re-analysis value by clicking on the **Register Re-analysis** button.

➢ Enter a new analysis date and click on tab.

➢ Enter a new value.

➢ Click on the **Accept value** button.

Electronic Results Import

Introduction:

Water quality data is received from External Systems and Analysts. This data must be imported into the Water Management System (WMS). The data can be in different formats and this functionality will import data from the different sources.

A worktable will be used for the preliminary import. This functionality exists through two modules, Importing the Data and Administrating the Data. Data from each source will be imported into the work table. WMS codes (ID's) will be assigned where possible from mapping tables (Importing the Data). Where codes (id's) are not available you (the officer importing the data) will be prompted to select the correct ID's from selection tables. When the required ID's are not on WMS you must use the normal maintenance functionality to register the ID's (Administrating the Data). There must be existing data on WMS as well as the mapping, which references WMS data to Datasource before any data can be Imported and Administrated.

When all ID's for a sample/result are entered, the data will pass through the normal verification and validation processes. When all validations and verifications pass, the results will be released. Error/problem reports will be available to view and/or print.

Business Rules:

i.   Insert and Delete cannot be performed on imported records.

ii.   Datasets to be imported are unique according to the system and format supplied. Functions must be written for every datasets.

Note: At this stage, data that can be imported is Geodata from the VSA Earth Resource Consultants (Pty) Ltd.

The following are the Geodata formats that are currently used: CHEM_000.DBF chem_000.mdx, CHEM_001.DBF, chem_001.mdx, CHEM_002.dbf, chem_002.mdx, chem_003.dbf, chem_003.mdx, chem_004.dbf, chem_004.mdx, chem_005.dbf, chem_005.mdx, userchem.dbf, userchem.mdx

1   Path:

1.1   Select **Sample and Result Registration** from the **Monitoring Management USER** menu-bar.

1.2   Select **Electronic Data Import** from the sub menu.

1.3   Select **Import Electronic Data** from the **Electronic Data Import** sub-menu.

1.4   This will open the **Electronic Import Wizard**.

2   How to Import Data into the Water Management System:

2.1   Open the **Electronic Import Wizard** and select the **External** option from a ⏷ **drop-down** list.

[?] *Note: There are different types of transfer types namely, External, Analyst, Standard and Logger. We are using the External option at this stage because the data is received from an external system. The other three types will be used in future releases.*

2.2   Check the **Is this data related to a Monitoring Program ☑ checkbox** if your answer is **Yes**. If not, just leave the checkbox unchecked.

2.3   Click on the **Next** button to open the **Data Format Select Wizard**.
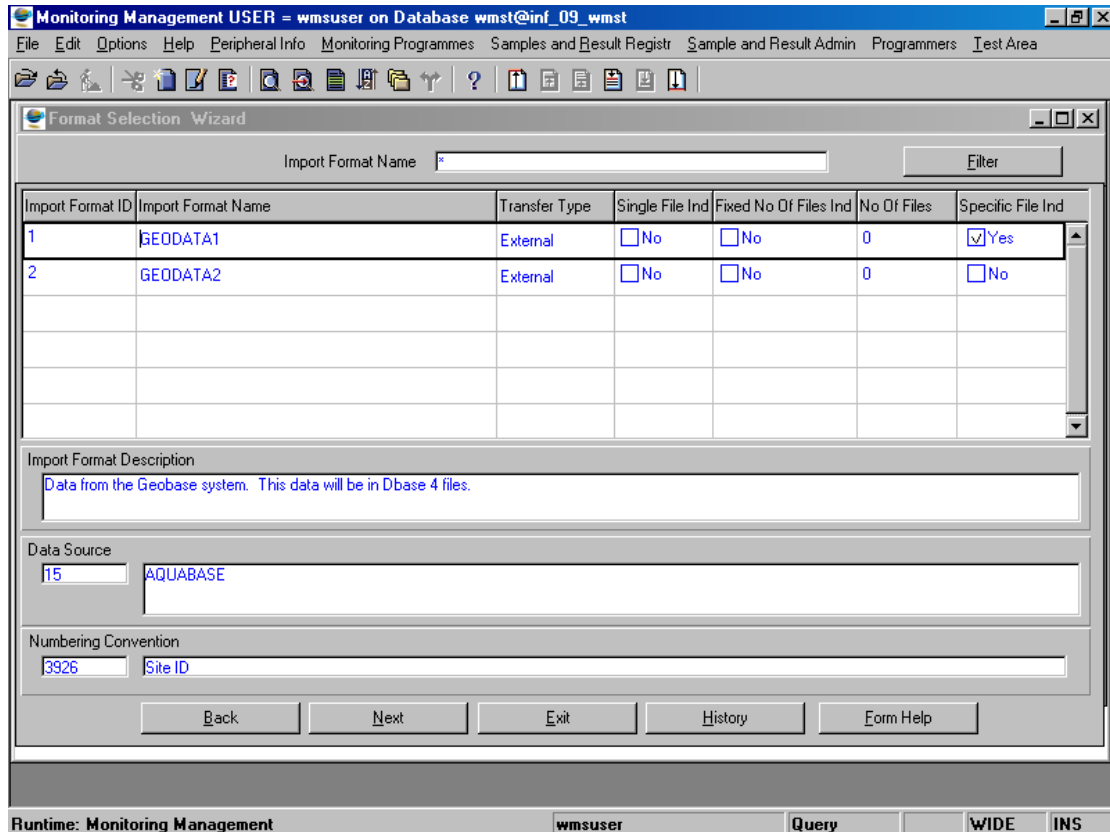
2.4   Select the applicable record and click on the **Next** button to open the **Import Directory Selection Wizard**.

2.5 Click on the **ZOOM** **Zoom** button or press **F5** to open the **Browse for Folder** screen.
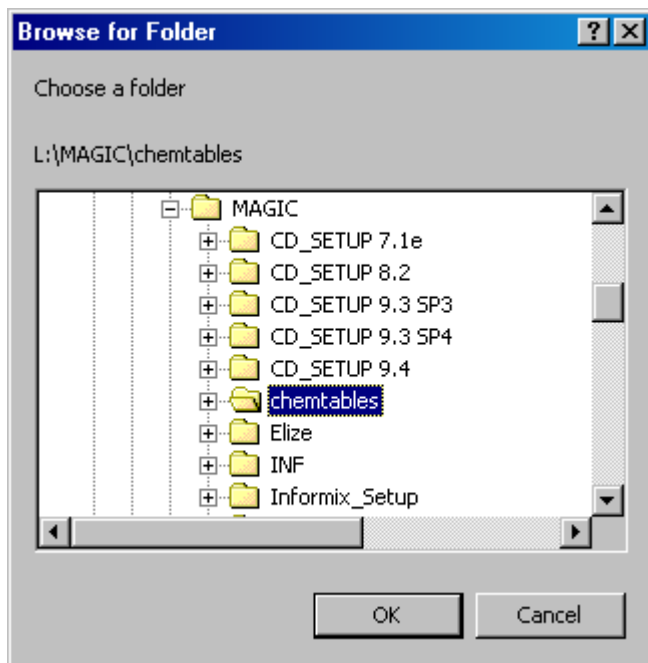
2.6 Select the applicable folder from a list provided and click on the **OK** button to return your selection. *Note: This is the directory where the Data to be imported is stored. This directory is only an example for the purpose of training. In your 'real' environment, the directory might be completely different.*

2.7 The **Import Directory Selection Wizard** will display with the selected directory.

2.8   Click on the **Next** button to continue, and if there is existing data in the import

directory, a confirmation screen will display asking you to overwrite the data. 🔖*Note: This screen displays when previously imported files exist in the import directory.*
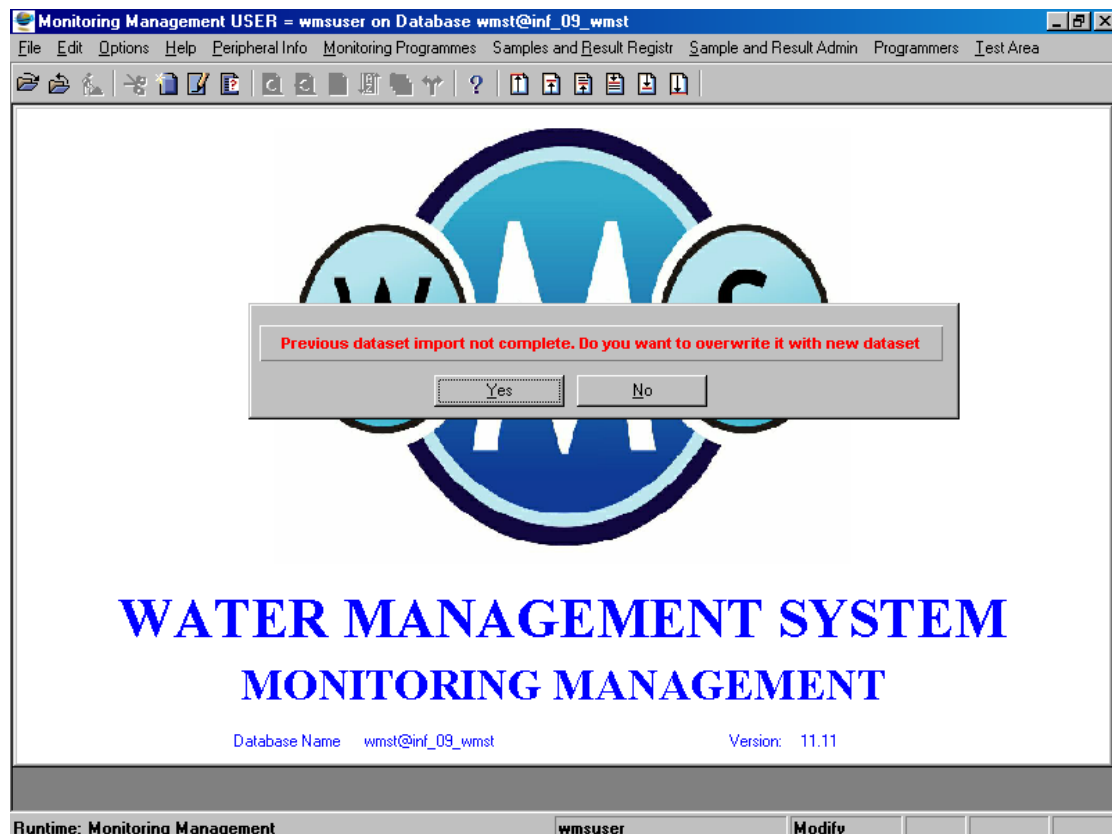
2.9   Click on the **Yes** option if you want to overwrite the data, and to activate the automatic

Update process. [?] *Note: The Update process is an automated process that is generated by the system. The system also validates the imported data id's during this process.*
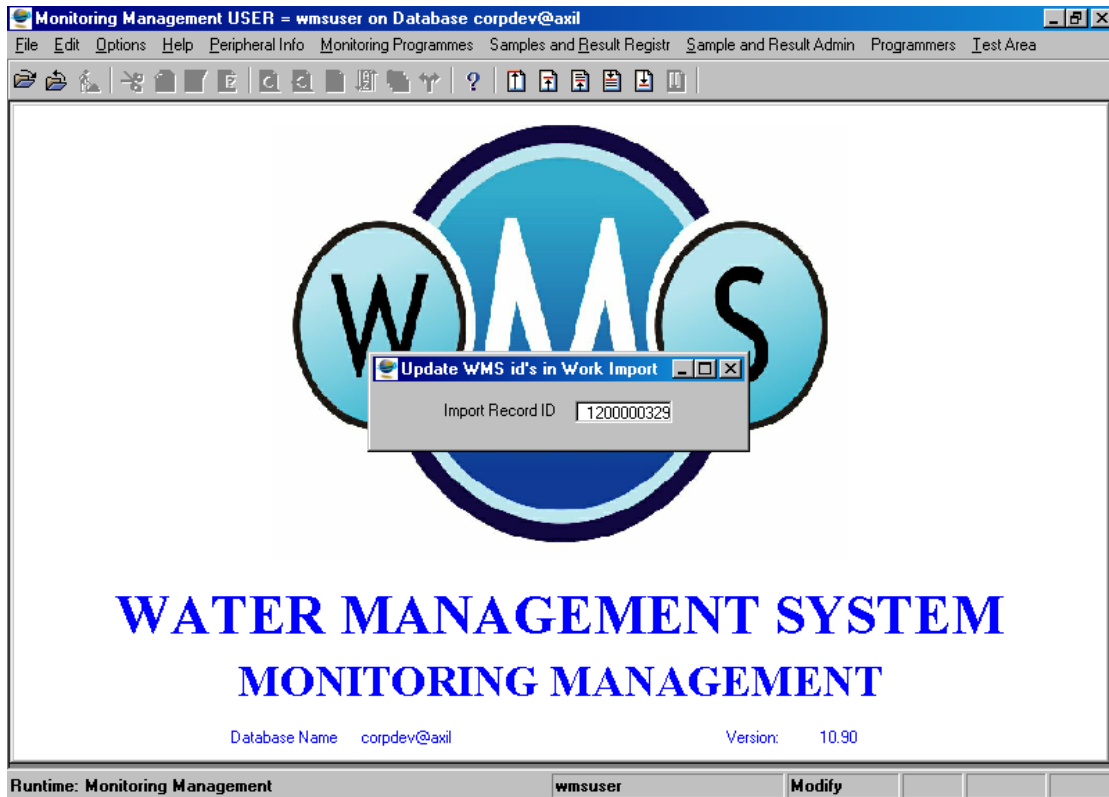
2.10   If you select the **No** option, the system will take you back to the **Import Directory Selection Wizard** screen so that you can re-select the directory where the data to be imported is stored.

2.11   On completion of the automatic **Update** process, the **Import Summary View** form will

be automatically displayed. [?] *Note: This form displays the number of samples and results transferred to the work import table, the number of result id's that have been updated, the number of results where defaults were used to update id's and the amount of results with problem id's.*

3.   How to View Imported Data

3.1   On the **Import Summary View** form, click on the **Import Data V** button.

3.2 This will open the **Import Data View** form.

3.3 Click on the **Exit** button to go to the previous screen.

Note: This form displays records of the physical data that was imported.

4. How to View Imported History:

4.1 On the **Import Summary View** form, click on the **History V** button.
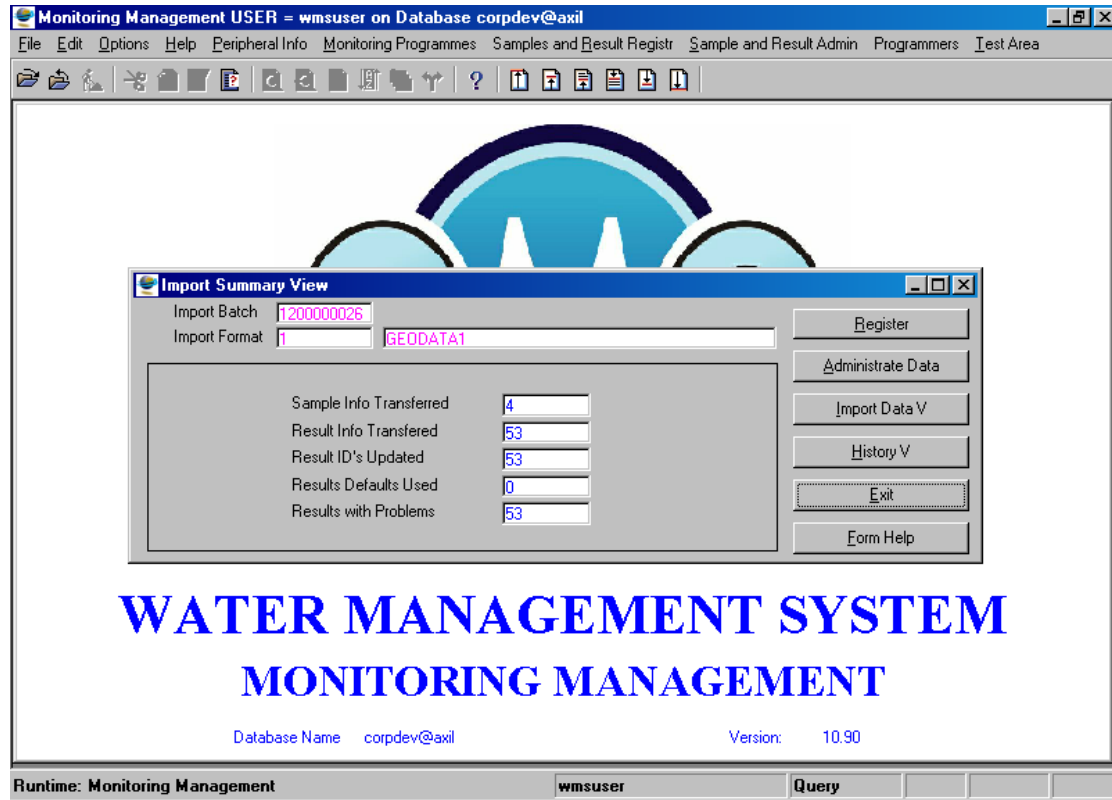
4.2   This will open the **History View Form**.
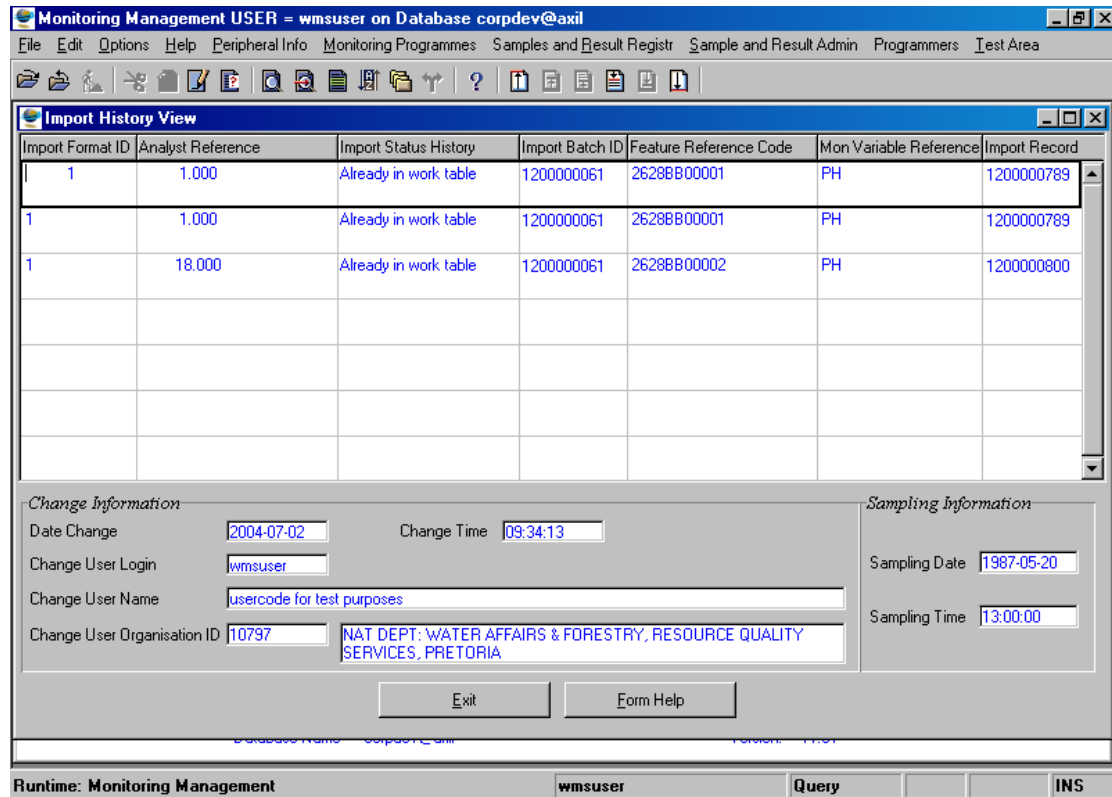
4.3   Click on the **Exit** button to go to the previous screen.

Note: *This form displays the history of the changes made to the Import Status of the imported data.*

5.   How to Administrate Imported Data

5.1   On the **Import Summary View** form, click on the **Administrate Data.**

5.2   This will open the **Import Batch Selection** form.

Note: *There are two ways to perform the Electronic Import Results Administration; by using the **Import Summary View** form (mentioned above), or using the **Electronic Imported Results Administration Path through** the menu.*

Electronic Imported Results Administration

Introduction:

Electronic Imported Results Administration is an essential function of the Results Electronic Import module. The purpose of this module is to complete and quality assure imported information to the WMS equivalent for the purpose of registration of samples, results and data releases.

Electronic Imported Results Administration takes place after a batch of data is imported.

Business Rules:

i.   All the missing ID's must be selected before Electronic Imported Results can be released onto WMS.

ii.   When selecting ID's, only valid ID's should be displayed in selection forms.

iii.   All Users have UPDATE and QUERY rights only.

1.   Path:

1.1   Select the **Sample and Result Registration** from the Monitoring Management menu bar.

1.2   Select the **Electronic Data Import** from the drop down menu.

1.3   Select the **Electronic Transfer Administration** from the sub-menu.

1.4   This will open the **Electronic Import Administration Wizard**.

2. How to Perform the Mapping Process:

2.1   On the **Electronic Import Administration Wizard**, click on the **Next** button to open a **Format Selection Wizard**.
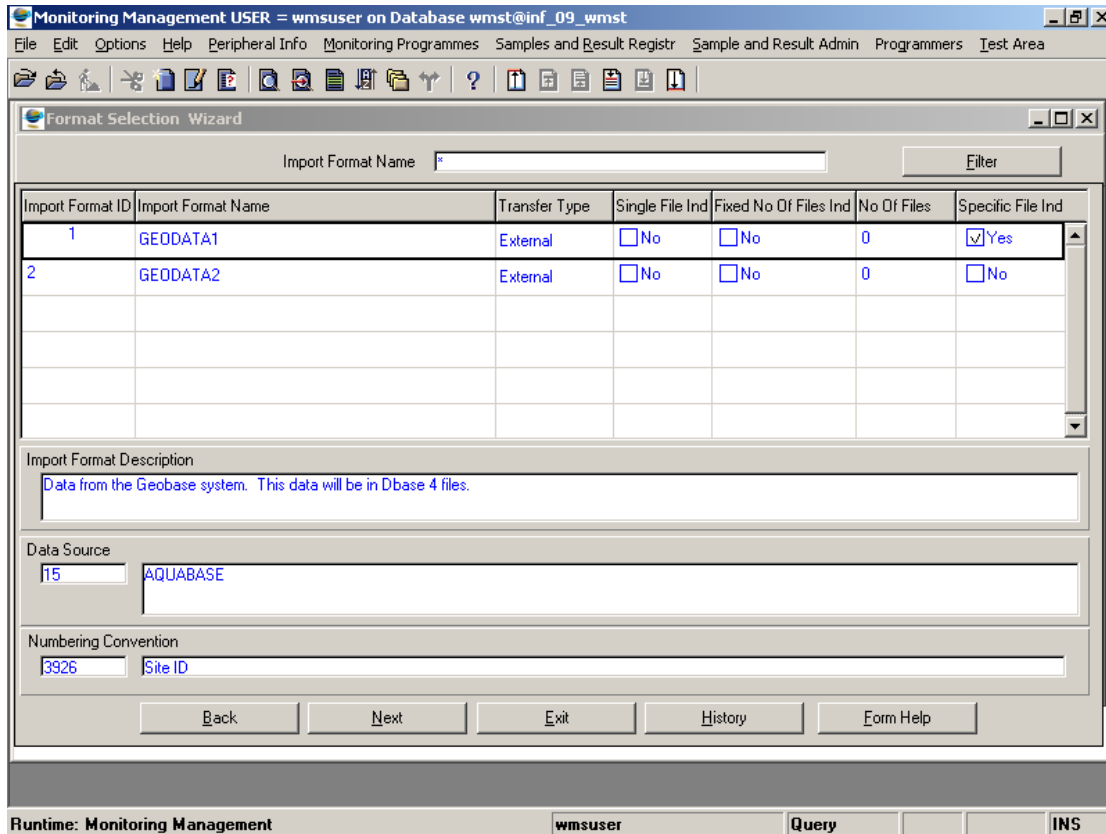
2.2   Select the applicable record and click on the **Next** button to open an **Import Batch Selection Wizard**.
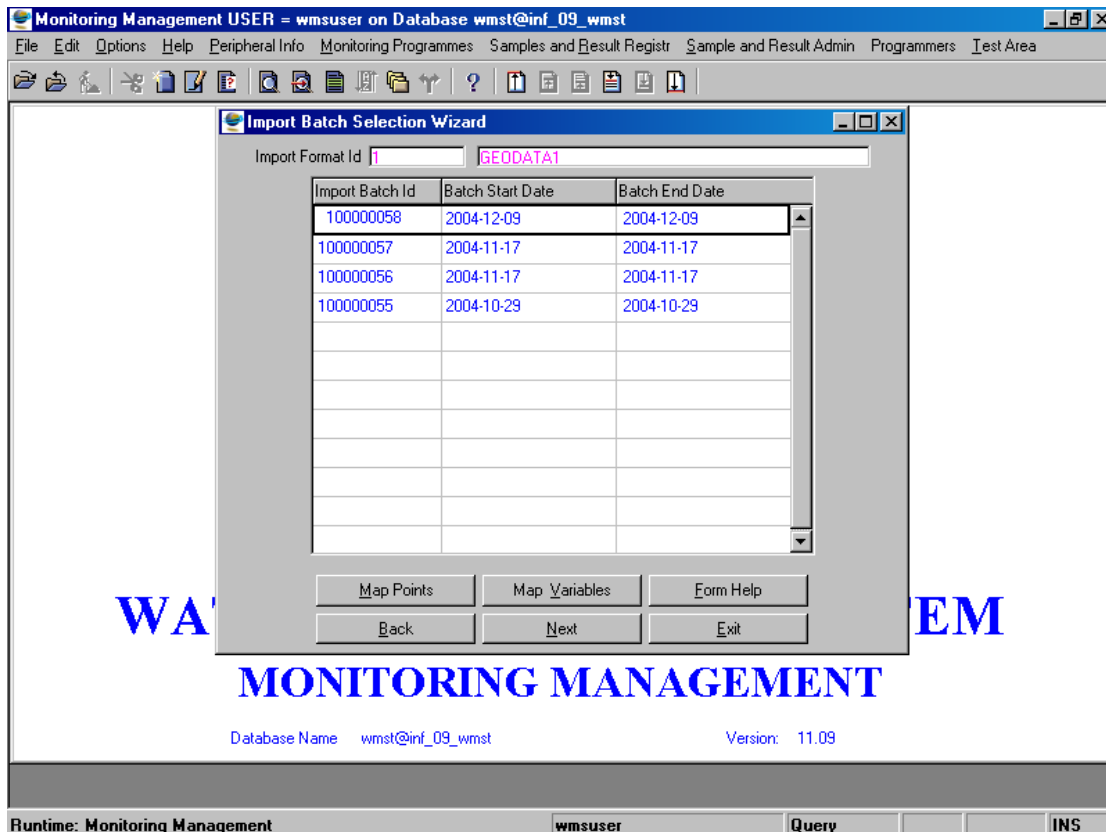
2.3   Click on the **Next** button to open the **Import Monitoring Point Wizard**. *Note: When all Monitoring Points are mapped, the Next button will take you to the Import Monitoring Variable Wizard.*
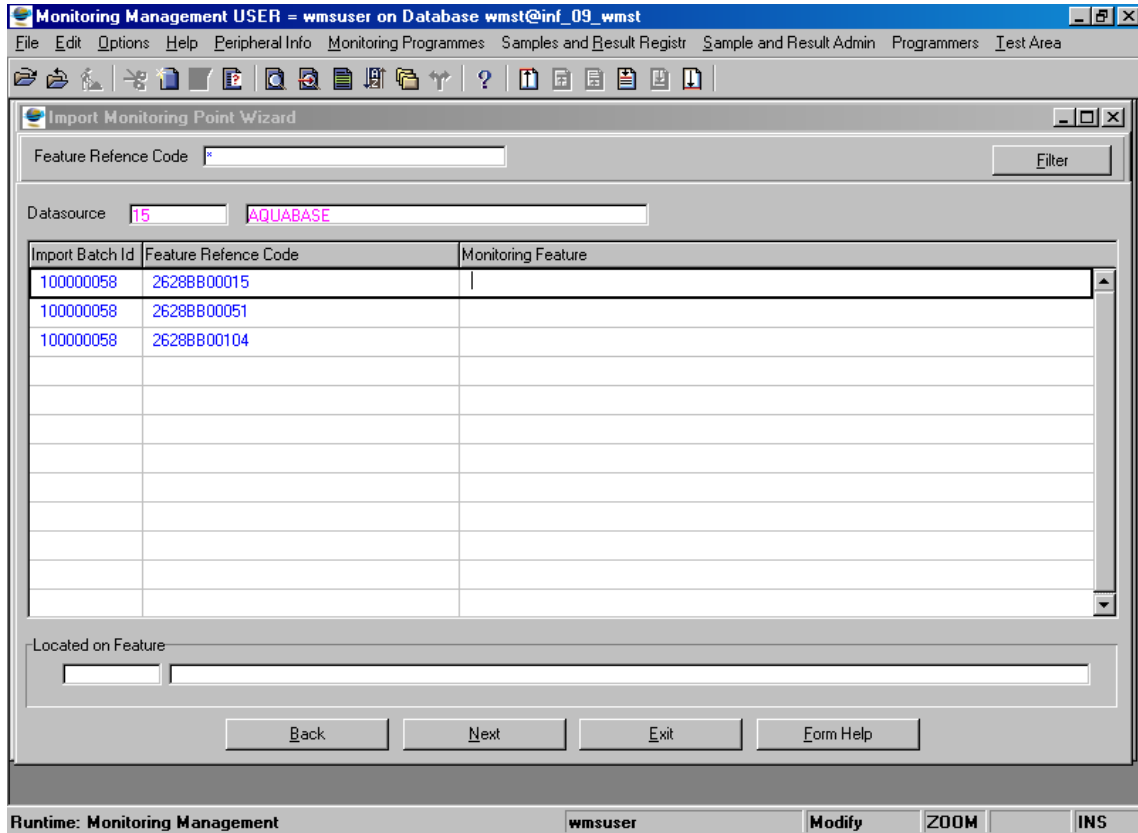
2.4   Enter the **Monitoring Feature ID**, or click on the **ZOOM** **Zoom** button to open the **Monitoring Point with External Reference Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
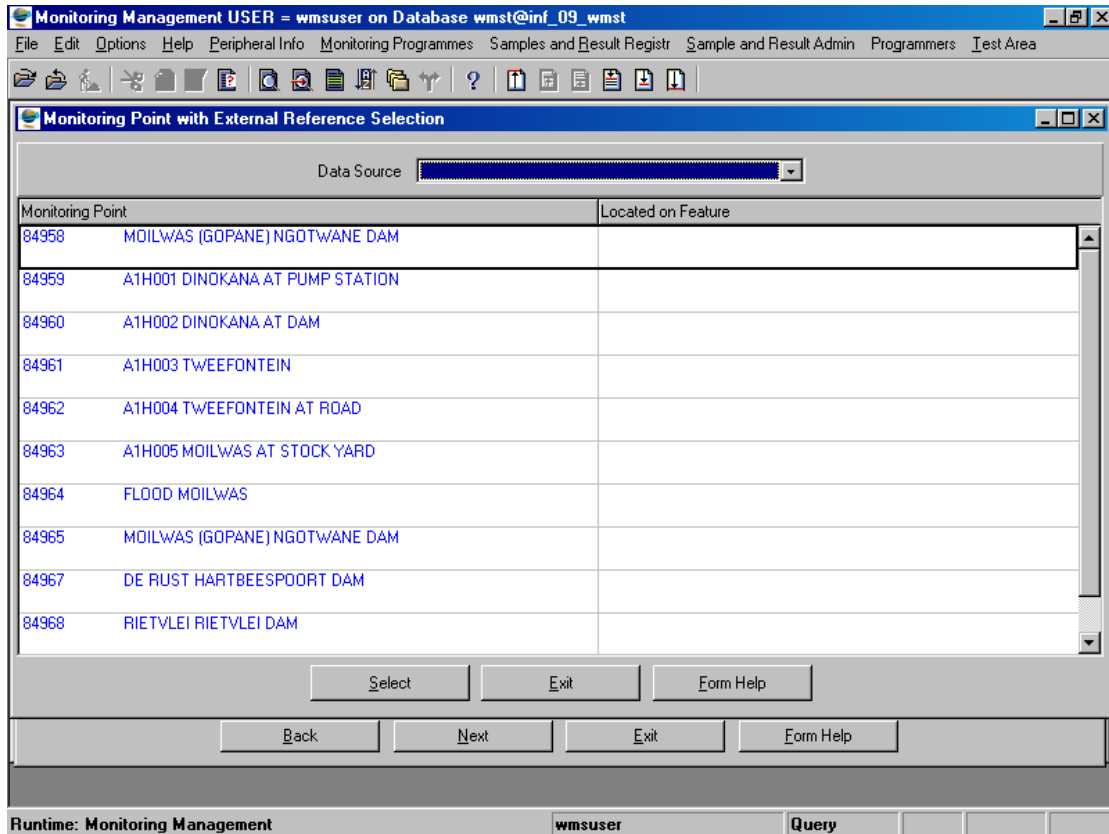
2.5 After Mapping all the Points, click on the **Next** button on the **Import Monitoring Point Wizard** to return to the **Import Batch Selection** form.
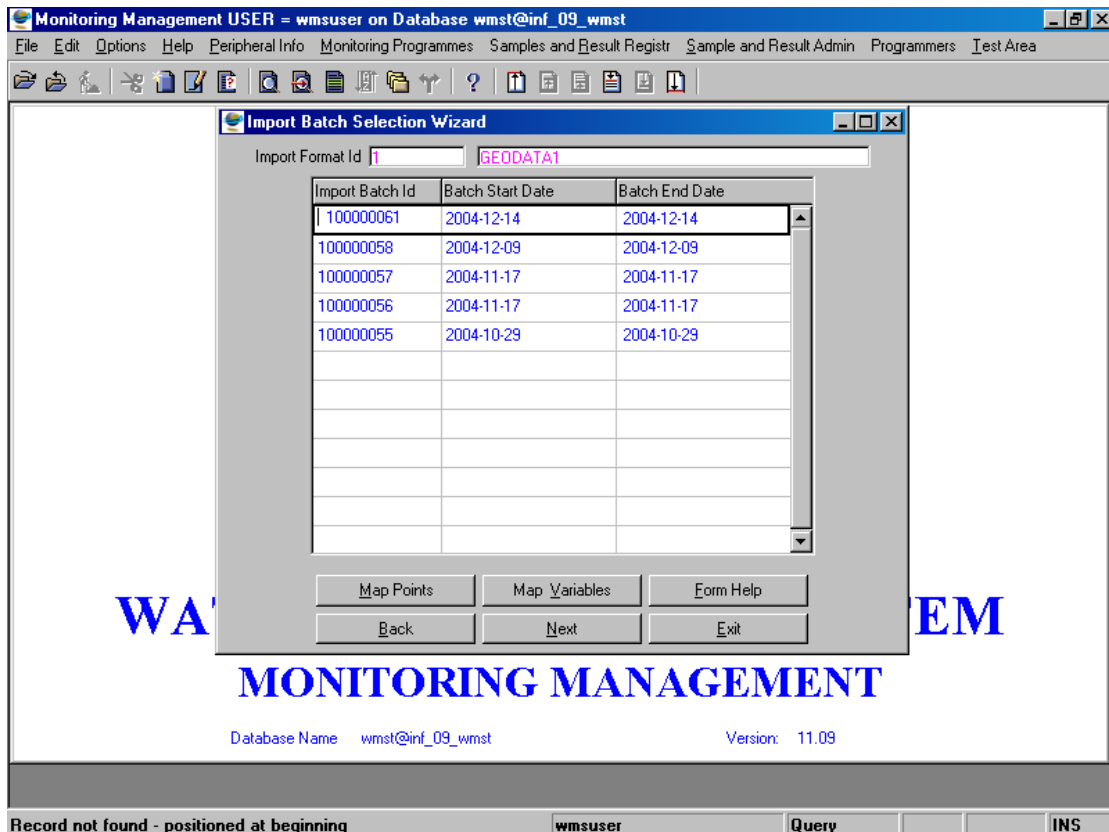
2.6 Click on the **Next** button to open the **Import Variables Wizard**.

Note: When all the Variables are mapped the Next button will take you to the Consolidated per Sample and Depth Wizard.
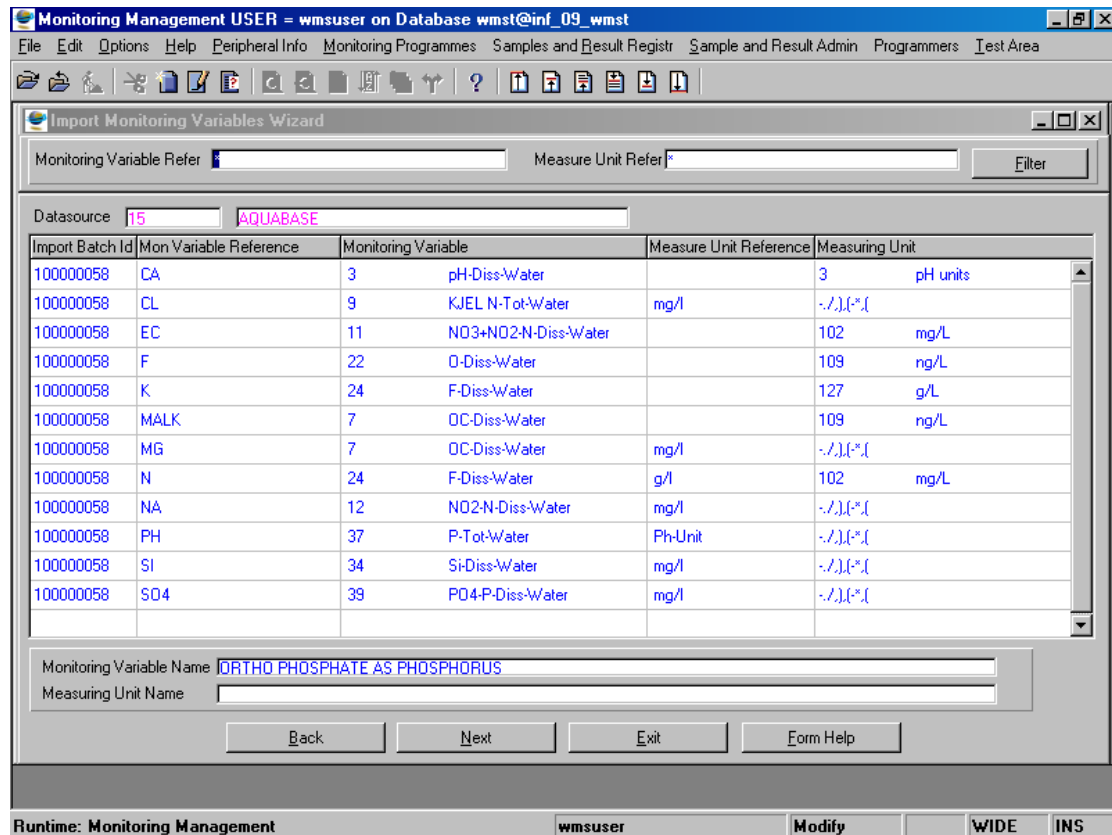
2.1 Enter the **Monitoring Variable ID** or click on the ZOOM **Zoom** button to open a **Monitoring Variable Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
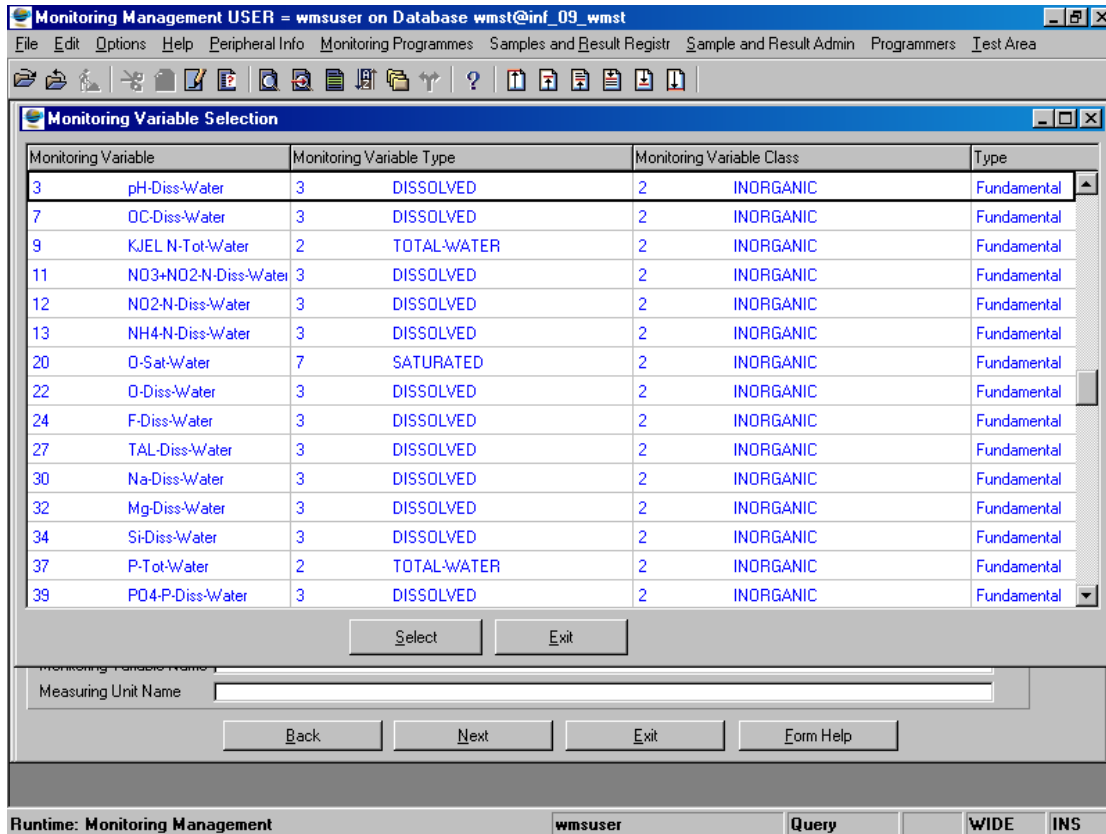
2.2 Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open a **Valid Measuring Units for Monitoring Variable Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
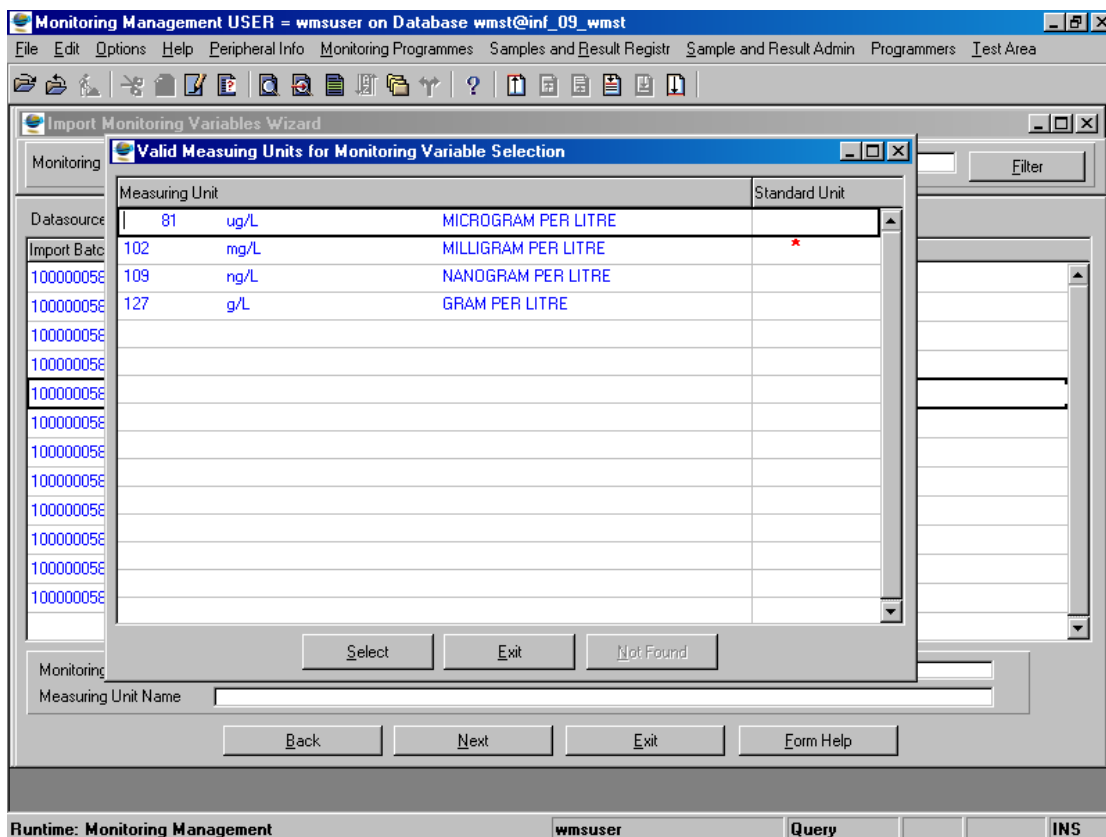
2.3 After Mapping all the Variables, click on the **Next** button on the Import Variables Wizard to return to the Import Batch Selection form.

2.4 On the **Import Batch Selection** form, click on the **Next** button to open the **Consolidated Samples per Point and Depth Wizard**, with the unmapped points only.

Note: This form will only open only when all the Variables and Points are mapped.

2.11 Select the applicable record and click Next to open **Consolidated Samples per WMS Sample Info Wizard.**

*Note: When the **Schedule/Non Schedule** Type is **Scheduled**, the **Monitoring Program Info** button will be active.*

2.12   Click on the **Next** button to open the **Import Results ID's Maintenance** form. The relevant buttons on fields for unmapped information will display.

2.1   Click on the **Update Programme Related Info** button to open a **Consolidated Analysis Filter Criteria** Wizard.
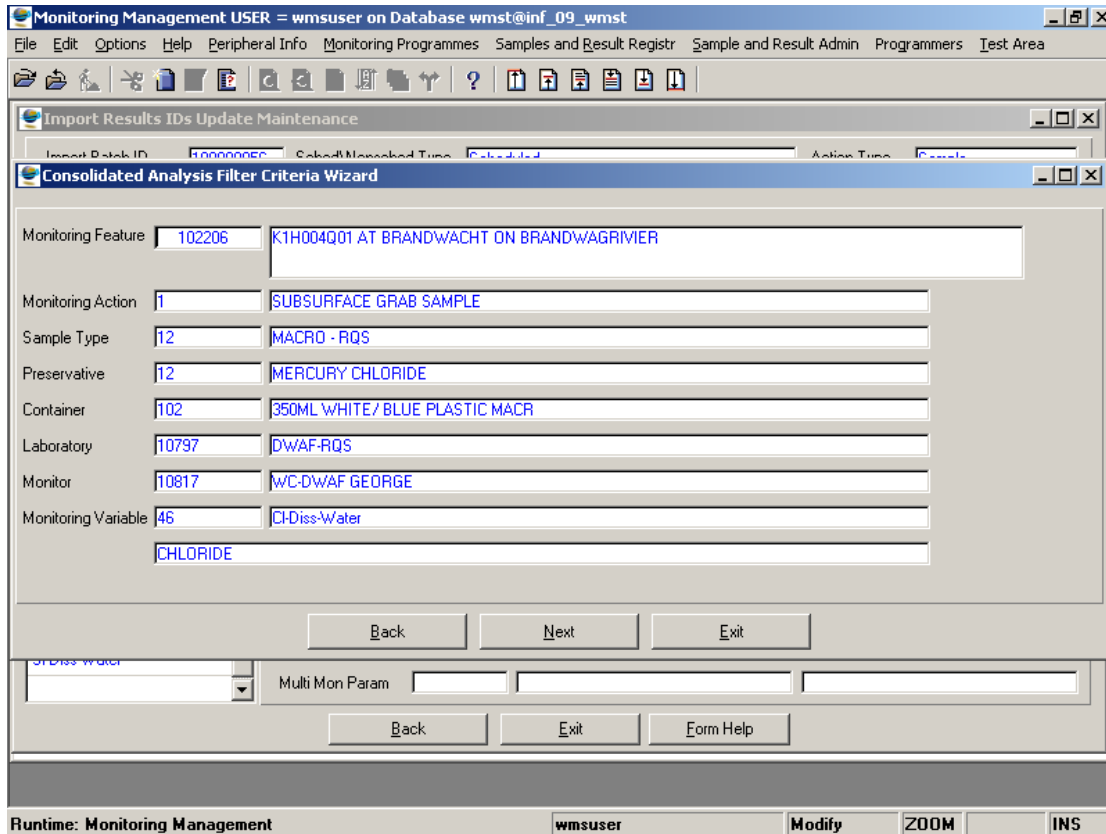
2.14   Click on the **Next** button to open the **Consolidated Analysis Selection** form.
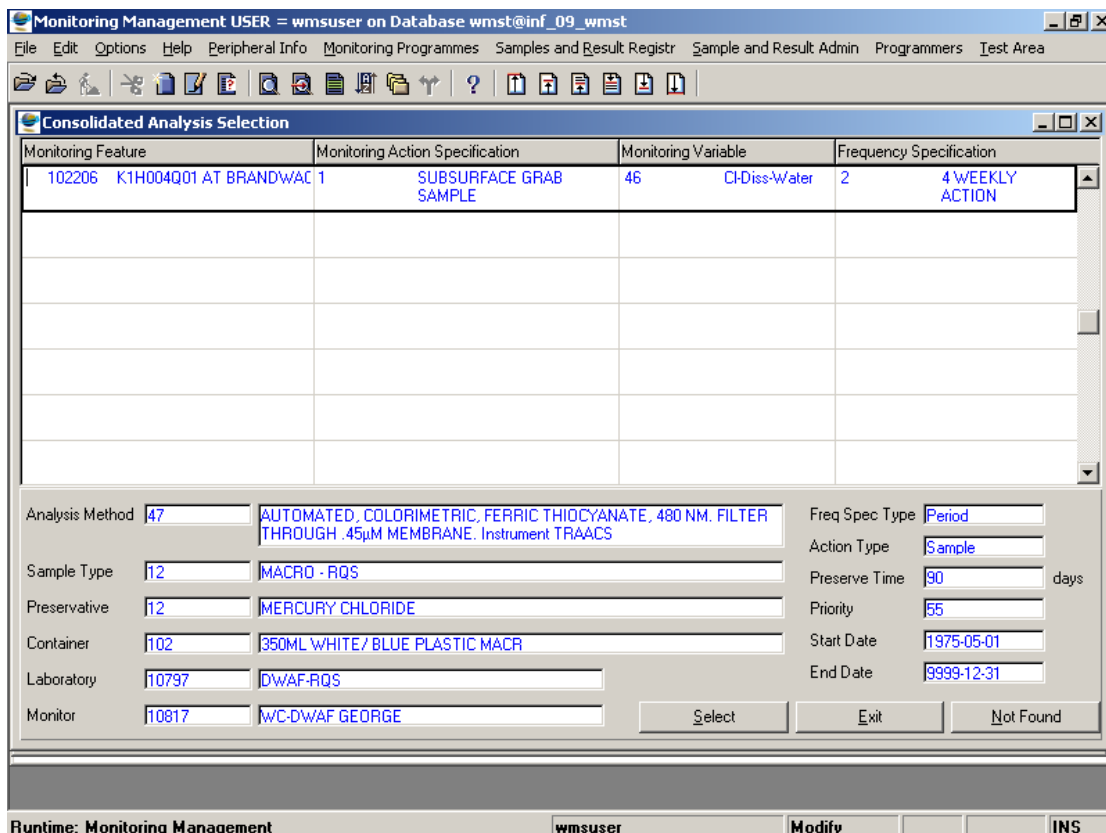
2.15   Click on the **Select** button to return your selection. This will take you back to the **Import Results ID's Maintenance** form with the updated (mapped) records.

2.16   After mapping all the **Program Related Info**, click on the **Back** button to return to the **Consolidated Sample per WMS Sample Info Wizard**.

2.17   When the **Schedule/Non Schedule** type is **Electronic**, click on the **WMS ID** that is marked in red to select the relevant ID. This takes place on the **Import Results ID's Maintenance** form.
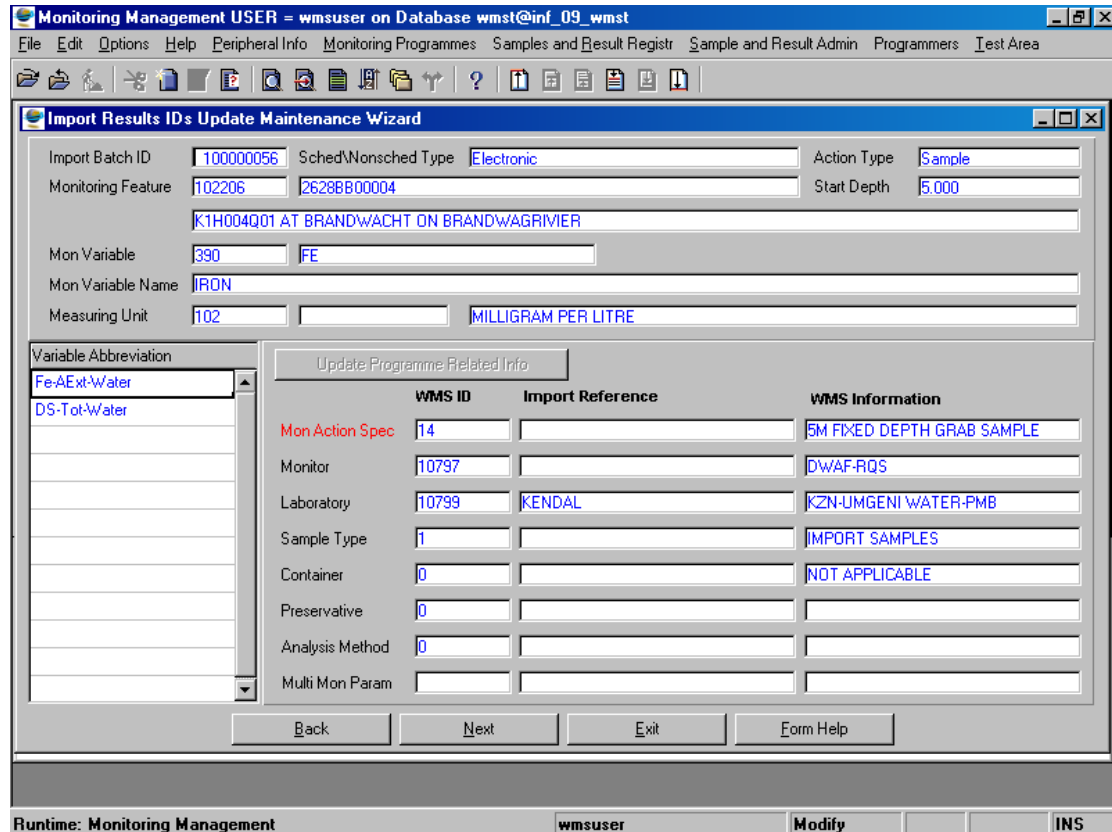
2.18   When the **Monitoring Action Specification – WMS ID** is Active (shown in Red), click on the ZOOM **Zoom** button to open the **Monitoring Action Specification Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
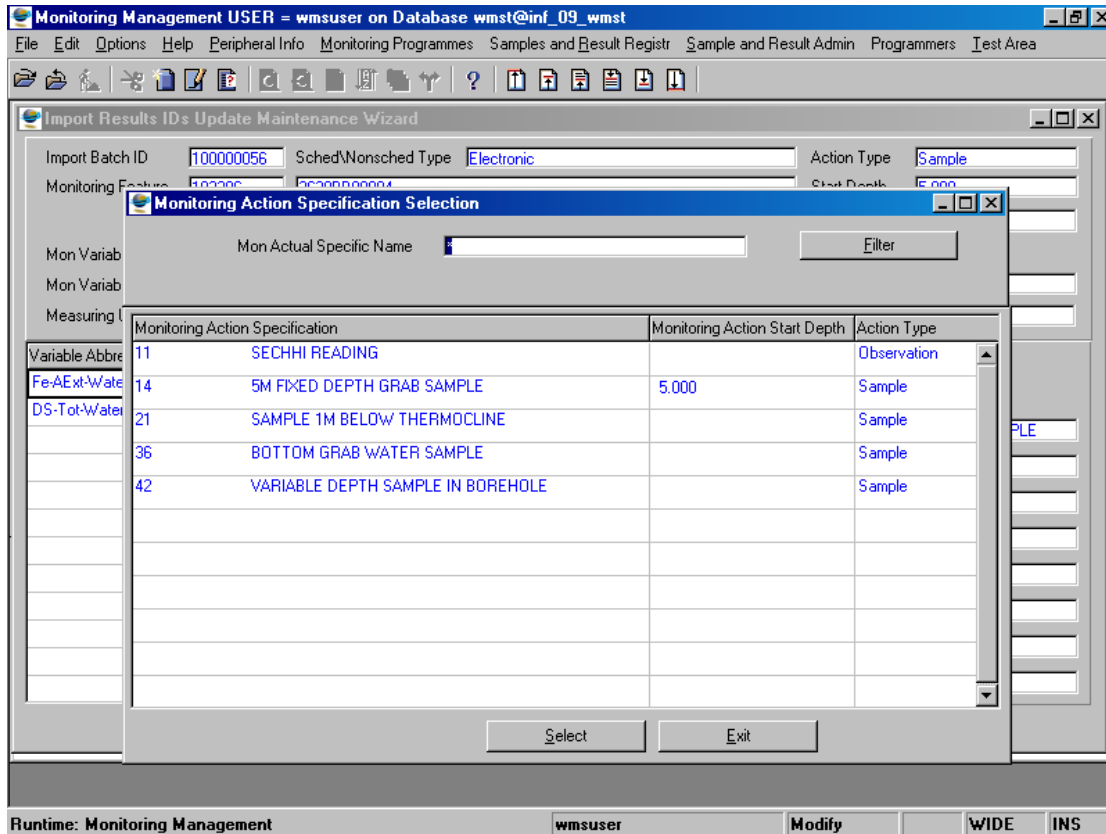
2.19   When the **Monitor – WMS ID** is Active (shown in Red), click on the **ZOOM** **Zoom** button to open the **Monitor Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
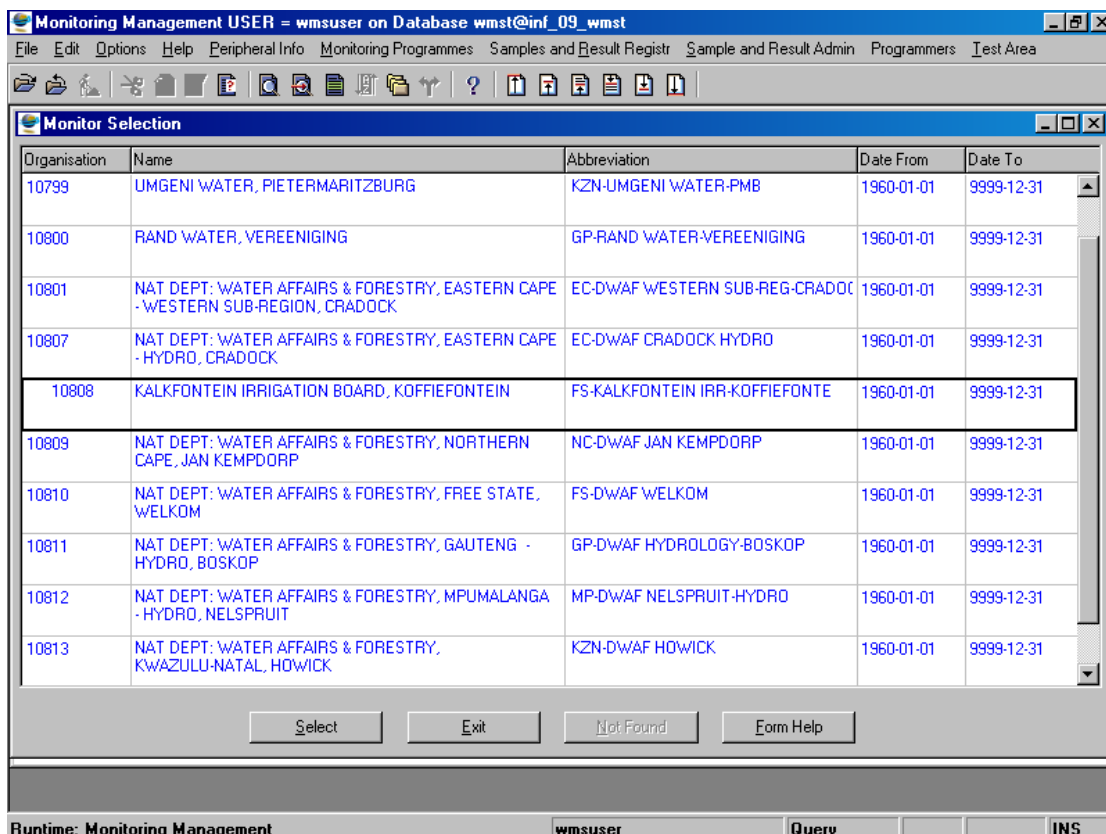
2.20 When the **Laboratory – WMS ID** is Active (shown in Red), click on the ZOOM **Zoom** button to open the **Laboratory Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.

Organisation	Name	Abbreviation	Date From	Date To
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES, PRETORIA	NAT DEPT: WATER AFFAIRS & FORE	1960-01-01	9999-12-31
10798	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH, PRETORIA	CSIR-PRETORIA	1960-01-01	9999-12-31
10799	UMGENI WATER, PIETERMARITZBURG	KZN-UMGENI WATER-PMB	1960-01-01	9999-12-31
10800	RAND WATER, VEREENIGING	GP-RAND WATER-VEREENIGING	1960-01-01	9999-12-31
10821	AMATOLA WATER, EAST LONDON	EC-AMATOLA WATER-EL	1960-01-01	9999-12-31
10856	WORCESTER MUNICIPALITY, WORCESTER	WC-WORCESTER MUN	1960-01-01	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LONDEN	EC-DWAF WQM-EAST LONDON	1960-01-01	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRETORIA	GP-DWAF SOUTH WQM	1960-01-01	9999-12-31
10902	RIETVLEI WATER WORKS, IRENE	GP-RIETVLEI WW-IRENE	1960-01-01	9999-12-31
10904	MAGALIES WATER, VAALKOP WATERWORKS, RUSTENBURG	NWP-MAGALIES WATER-WEST-VAALK[	1960-01-01	9999-12-31

Select   Exit   Not Found   Form Help

2.21 When the **Analysis Method – WMS ID** is Active (shown in Red), click on the ZOOM **Zoom** button to open the **Laboratory Analysis Method Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.
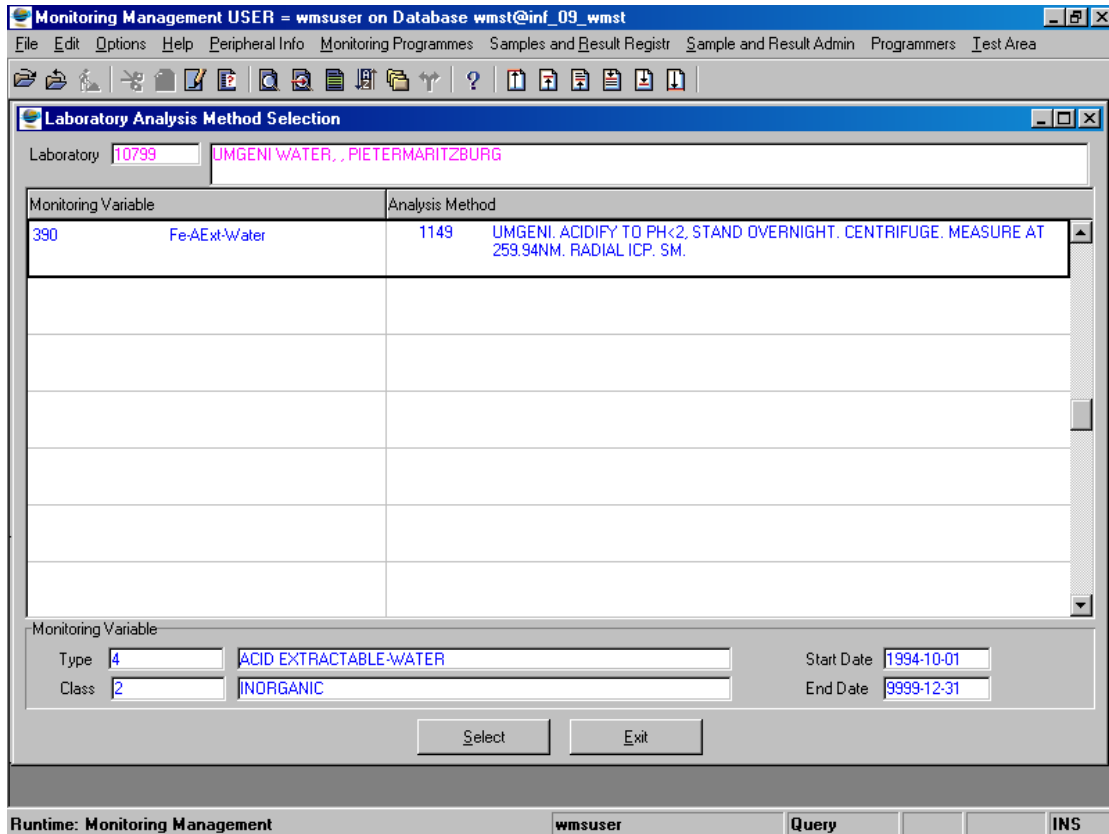
2.22   When the **Preservative – WMS ID** is Active (shown in Red), click on the ZOOM **Zoom** button to open the **Preservative Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
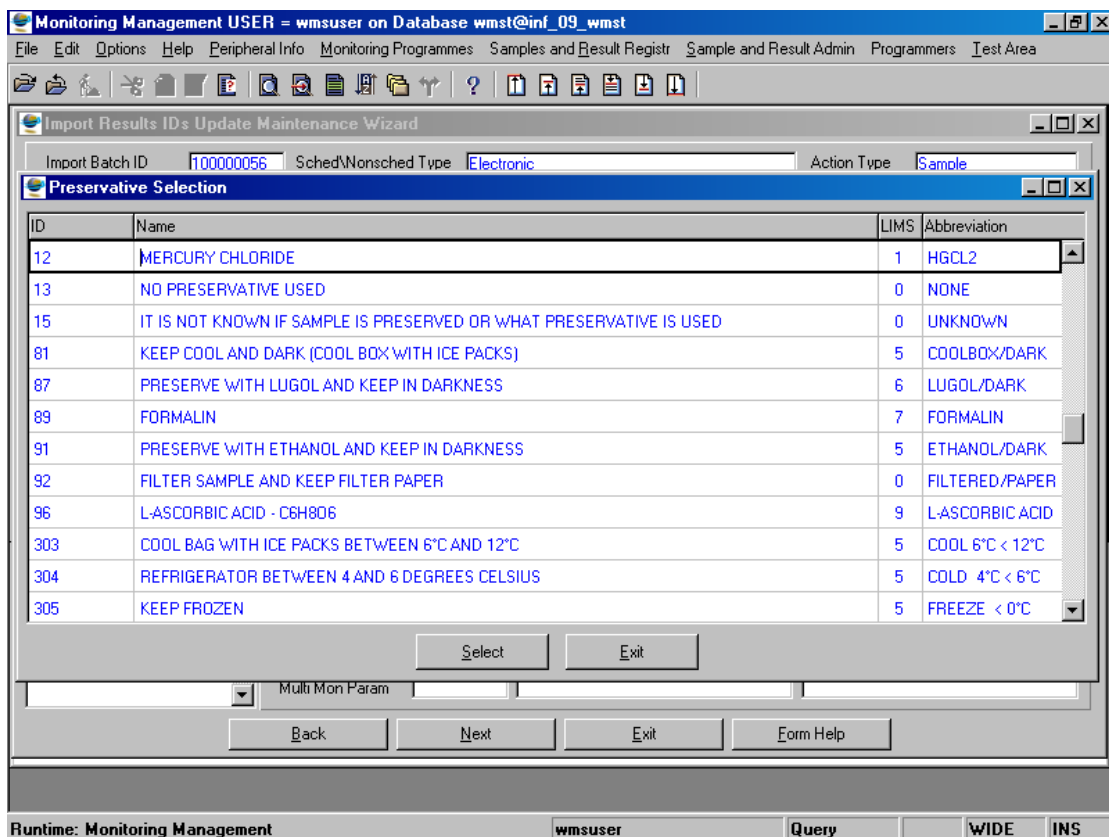
2.23 After Mapping all the WMS ID's click on the **Back** button to return to the **Consolidated Samples per WMS Sample Info Wizard.**
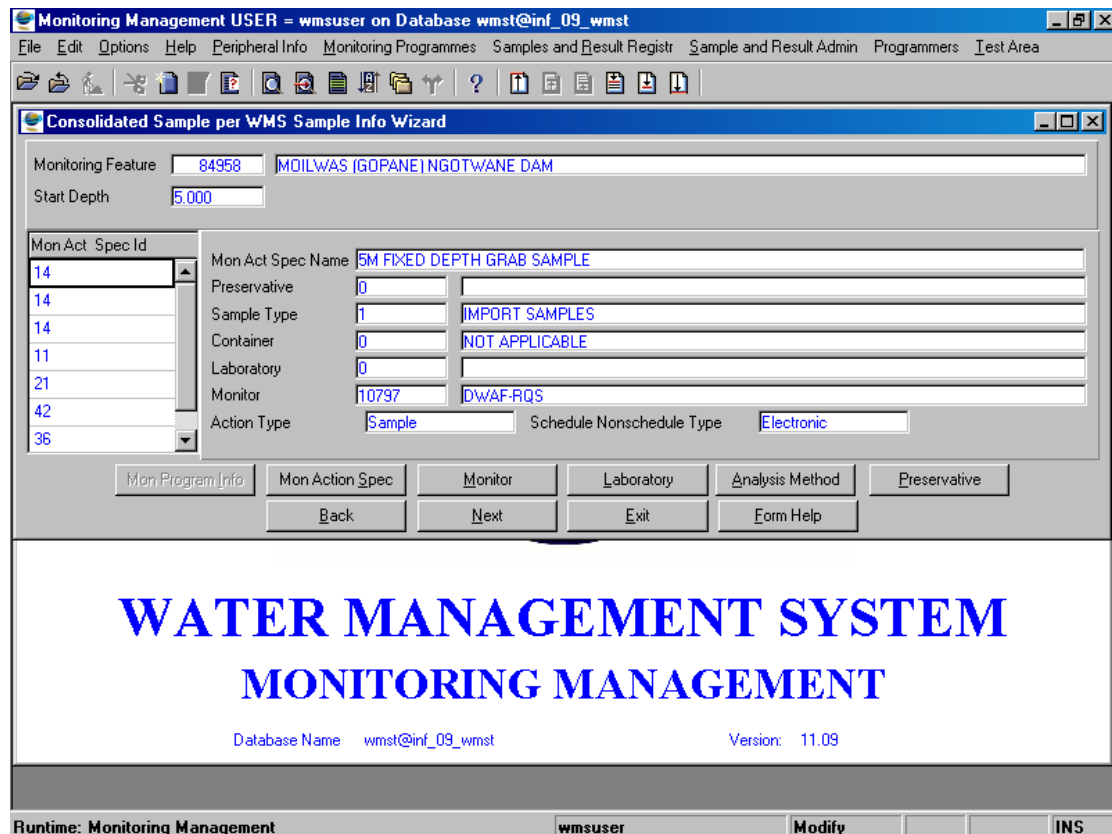
2.24 When all ID's are mapped click on the **Next** button to open the **Consolidated Sample per Point and Depth and Wizard**.

3.   How to Edit Mapped Information:

3.1   Select **Electronic Import Administration** form the **Electronic Import** menu.

3.2   This will open the **Electronic Administration Import Wizard**.

3.3   Click on the **Next** button to open the **Format Selection Wizard**.

3.4   Click on the **Next** button to open to open the **Import Batch Selection Wizard**.
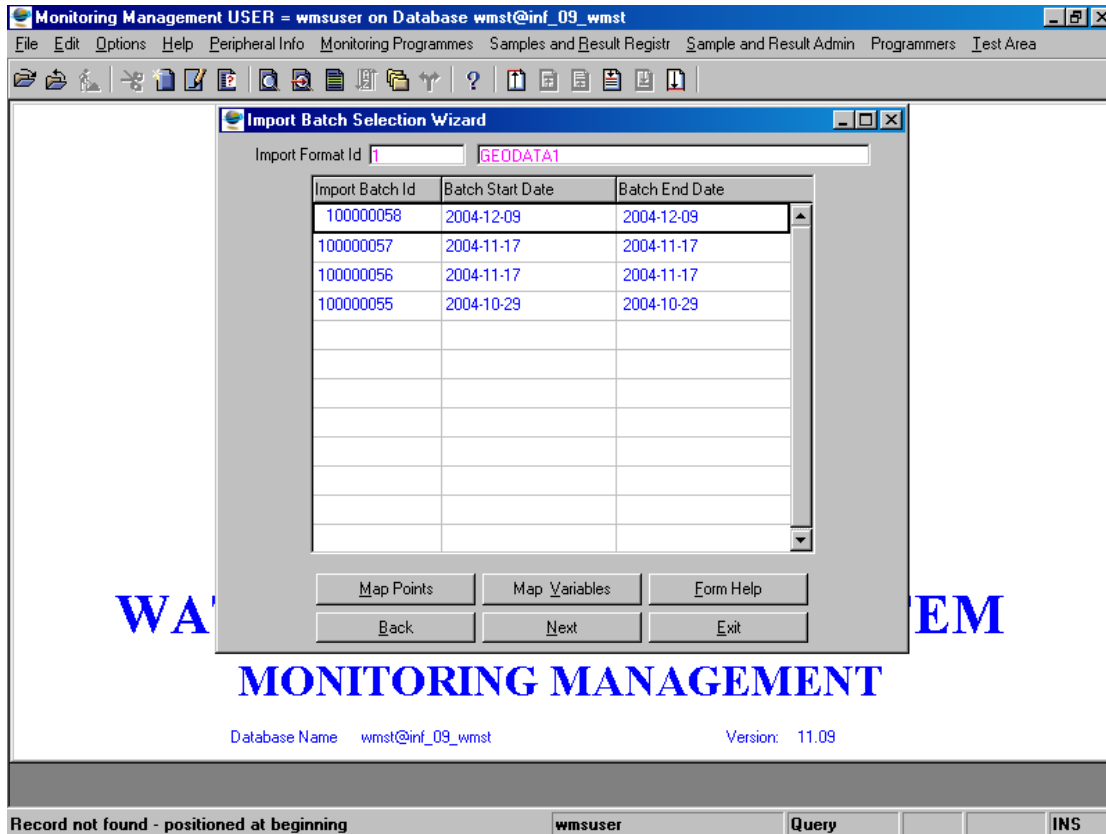
Note: All the information must be mapped.

3.5 Click on the **Map Points** button to open the **Import Monitoring Point Maintenance** form, where all the points will be mapped.
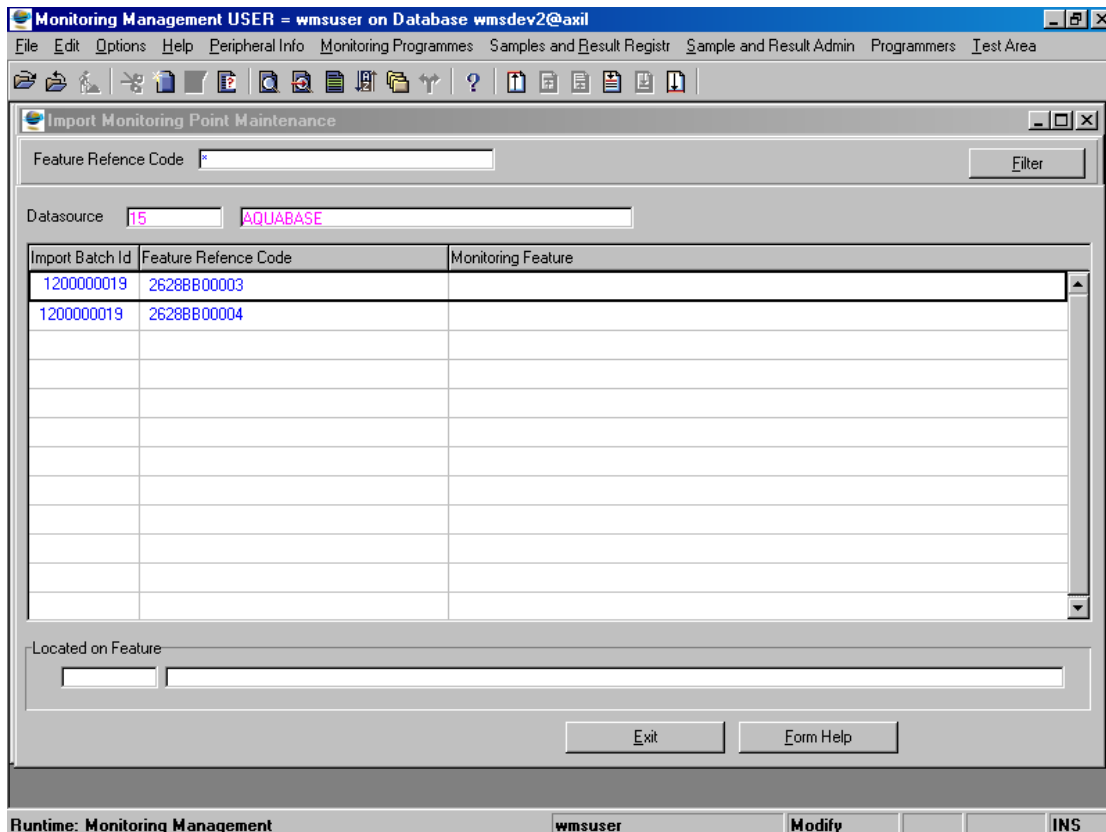
3.6   Edit the record(s) as required and click on the Exit button to return to the Import Batch Selection Wizard.

3.7   Click on the **Map Variables** button to open the **Import Monitoring Map Variables MAP** form, where all the Variables will be mapped.

3.8   Edit the record(s) as required and click on the Exit button to return to the Import Batch Selection Wizard.

3.9   Click on the **Next** button to open the **Consolidated Samples per Point and Depth Wizard**. *Note: All information must be mapped.*

3.10 Click on the **Next** button to go to the **Consolidated Sample per WMS Sample Info Wizard**.

4. How to Verify and View Mapped Information:

4.1 Select **Electronic Import Administration** form the **Electronic Import** menu.

4.3 This will open the **Electronic Administration Import Wizard**.

4.4 Click on the **Next** button to open the **Format Selection Wizard**.

4.5 Click on the **Next** button to open to open the **Import Batch Wizard**.

4.6 Click on the **Next** button to open the Consolidated **Samples per Point and Depth Wizard**.

4.7   Click on the **Import Data V** button to open the **Import Data View** form.

Note: You can view the Sample information by clicking on the **Sample Information** tab and the Variable information by clicking on the **Monitoring Variable** tab.

778

5. How to Register an Import Sample on WMS:

Note: *This form will be in Query mode only. When no records exist for the filter criteria, a warning message will be displayed that "No records exist for your selection".*
All the information must be mapped.

5.1 Open the **Consolidated Samples per Point and Depth Wizard**.

Note: *The Register button will only be active when all the ID's for a specific Feature Reference Code and Start Depth are correct. All the ID's must be mapped to External References. If there are unmapped ID's the system will automatically map them and whilst mapping, and there is more than one reference for the same ID, the **Import Conflicting References Decision Criteria form** will open. This is the form where you must decide whether a reference code is the current reference code or the old (history) reference code. Select the applicable **Reference Choice** option to determine whether the reference code is the current or an old reference for the selected ID. Click on the **Continue** button to update the reference choice.*
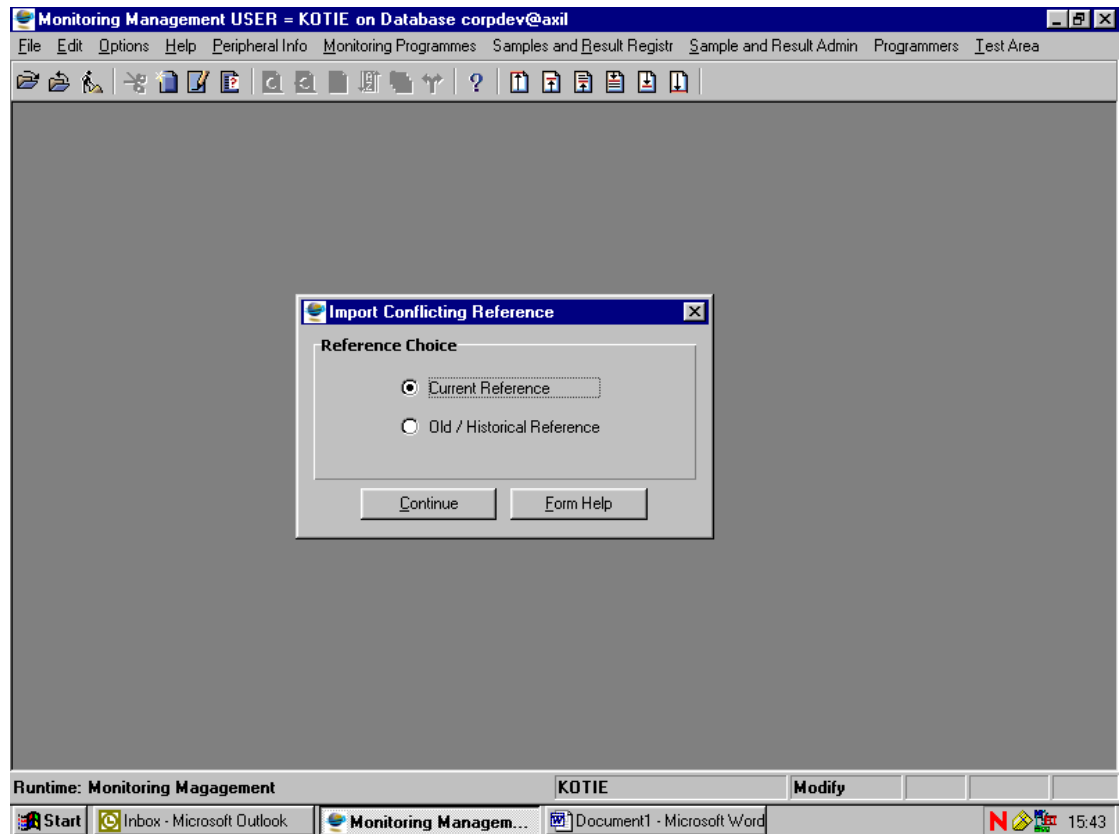
5.2   Click on the **Register** button to open the **Import Physical WMS Samples View** form.
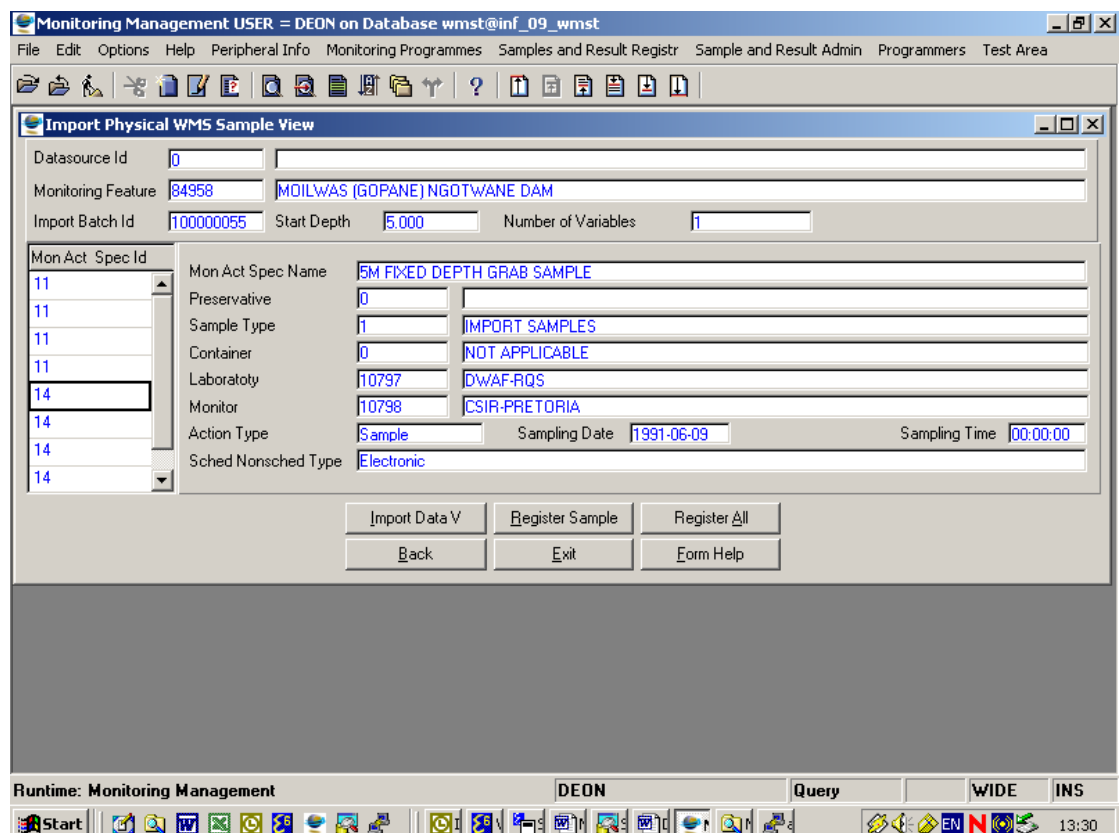
5.3   The **Import Batch ID** will be displayed.

5.4   The **Datasource ID** will be displayed.

5.5   The **Datasource Name** will be displayed.

5.6   The **Monitoring Feature ID** will be displayed.

5.7   The **Monitoring Feature Name** will be displayed.

5.8   The **Sample Start Depth** will be displayed.

5.9   The **Monitoring Action Specification ID** will be displayed.

5.10   The **Monitoring Action Specification Name** will be displayed.

5.11   The **Sample Type ID** will be displayed.

5.12   The **Sample Type Name** will be displayed.

5.13   The **Preservative ID** will be displayed.

5.14   The **Preservative Name** will be displayed.

5.15   The **Container ID** will be displayed.

5.16   The **Container Name** will be displayed.

5.17   The **Monitoring Liaison ID** will be displayed.

5.18   The **Monitor Abbreviation** will be displayed.

5.19   The **Laboratory Liaison ID** will be displayed.

5.20   The **Laboratory Abbreviation** will be displayed.

5.21   The **Sampling Date** will be displayed.

5.22   The **Sampling Time** will be displayed.

5.23   The **Action Type** will be displayed.

5.24   The **Scheduled Non Scheduled Type** will be displayed.

5.25   The **Number of Variables** will be displayed.

5.26   Click on the **Import Data View** button to open the Import **Physical WMS Analysis View** form in order view the imported result information.

5.27   Click on the **Register Sample** button to register the selected sample into WMS.
        Note: The Registration process takes place in the background.

5.28   Click on the **Register All** button to register all the WMS physical samples for the logical imported sample into WMS. *Note: The Registration process takes place in the background.*

5.29   Click on the **Back** button to return to the **Consolidated Sample per Point and Depth Wizard**.

5.30   Click on the **Exit** button to close the form and return to the main menu.

6. How to View the Imported Physical WMS Analysis:

Note: *This form will be in Query mode only. When no records exist for the filter criteria, a warning message will be displayed that "No records exist for your selection".*

6.1 Open the **Import Physical WMS Analysis View** form.

6.2 The **Import Batch ID** will be displayed.

6.3 The **Monitoring Feature ID** will be displayed.

6.4 The **Monitoring Feature Name** will be displayed.

6.5 The **Sample Start Depth** will be displayed.

6.6 The **Monitoring Variable ID** will be displayed.

6.7 The **Monitoring Variable Abbreviation** will be displayed.

6.8 The **Monitoring Action Specification ID** will be displayed.

6.9 The **Monitoring Action Specification Name** will be displayed.

6.10 The **Sample Type ID** will be displayed.

6.11 The **Sample Type Name** will be displayed.

6.12 The **Preservative ID** will be displayed.

6.13 The **Preservative Name** will be displayed.

6.14 The **Container ID** will be displayed.

6.15 The **Container Name** will be displayed.

6.16 The **Monitoring Liaison ID** will be displayed.

6.17 The **Monitor Abbreviation** will be displayed.

6.18 The **Laboratory Liaison ID** will be displayed.

6.19 The **Laboratory Abbreviation** will be displayed.

6.20 The **Analysis Method ID** will be displayed.

6.21 The **Analysis Method Description** will be displayed.

6.22 The **Measuring Unit ID** will be displayed.

6.23 The **Measuring Unit Name** will be displayed.

6.24 The **Multiple Monitoring Variable Parameter ID** will be displayed.

6.25 The **Multiple Monitoring Variable Parameter Name** will be displayed.

6.26 The **Action Type** will be displayed.

6.27 The **Scheduled Non Scheduled Type** will be displayed.

6.28 The **Sampling Date** will be displayed.

6.29 The **Sampling Time** will be displayed.

6.30 Click on the **Exit** button to close the form and return to the **Import Physical WMS Samples** form.

ERWAT Electronic Import

Introduction:

The ERWAT Electronic Import functionality is used to electronically transfer data from ERWAT laboratories into WMS and is also used to electronically transfer analysis schedules required in ERWAT laboratories.

Note: The ERWAT Electronic Import process can be done on a weekly basis (e.g. Every Friday afternoon)

Before the ERWAT Import process can take place, the following must take place:

i. The user responsible for the electronic transfer will receive an e-mail from ERWAT laboratories with an attached zip file called **samsched.zi_**

ii. Save this attached file in the **c:\erwat** directory.

iii. Rename the **samsched.zi_** file to **samsched.zip.**

iv. In the **c:\erwat** directory, find the **samsched.mdb** file and rename it to **samsched_DATE.mdb** . *Note: You must replace the "DATE" part of the file name to todays date. E.g samsched_**20060707**.mdb for backup purposes.*

v. Lastly, unzip/extract the new samsched.mdb file from the zip file.

1   Path:

1.1   Select **Sample and Result Registration** from the **Monitoring Management USER** menu-bar.

1.2   Select **Electronic Data Import** from the sub menu.

1.3   Select **Import ERWAT Data** from the **Electronic Data Import** sub-menu.

1.4   The data will be imported.

2   When Import is Complete then:

2.1   Select **Sample and Result Registration** from the **Monitoring Management USER** menu-bar.

2.2   Select **Electronic Data Import** from the sub menu.

2.3   Select **Export Schedules for ERWAT** from the **Electronic Data Import** sub-menu.
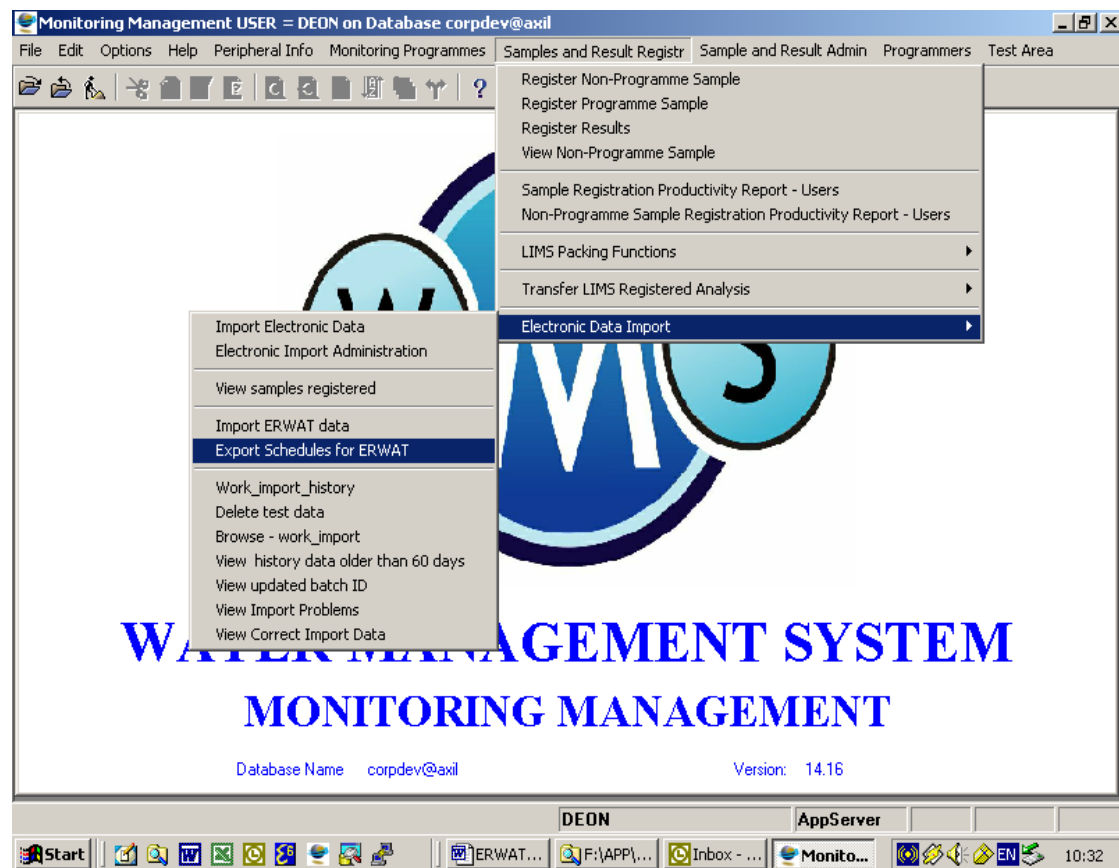
2.4   The schedule will be exported

3   After schedule is exported then:

3.1   Open Windows explorer.

3.2   Go to **c:\erwat**.

3.3   Delete **samsched.zip** file.
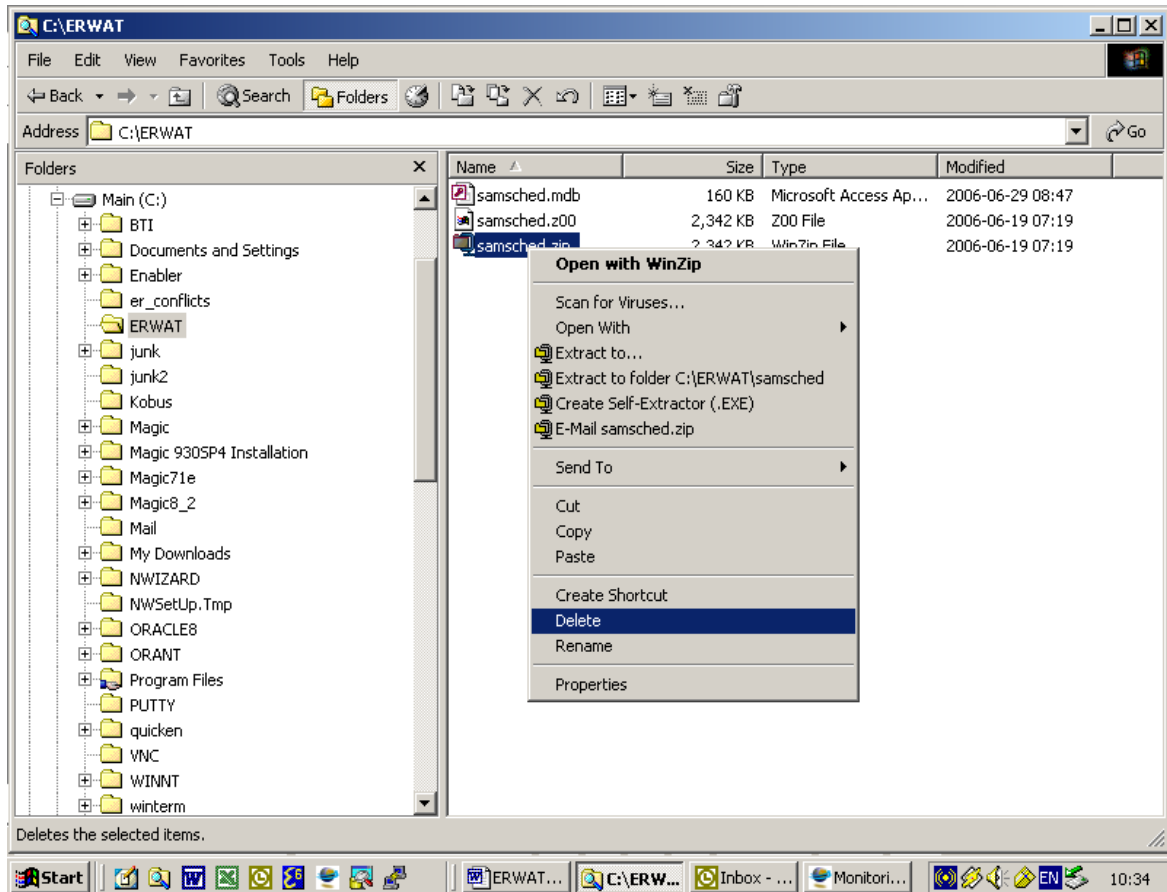
3.4 Zip the current samsched.mdb file.
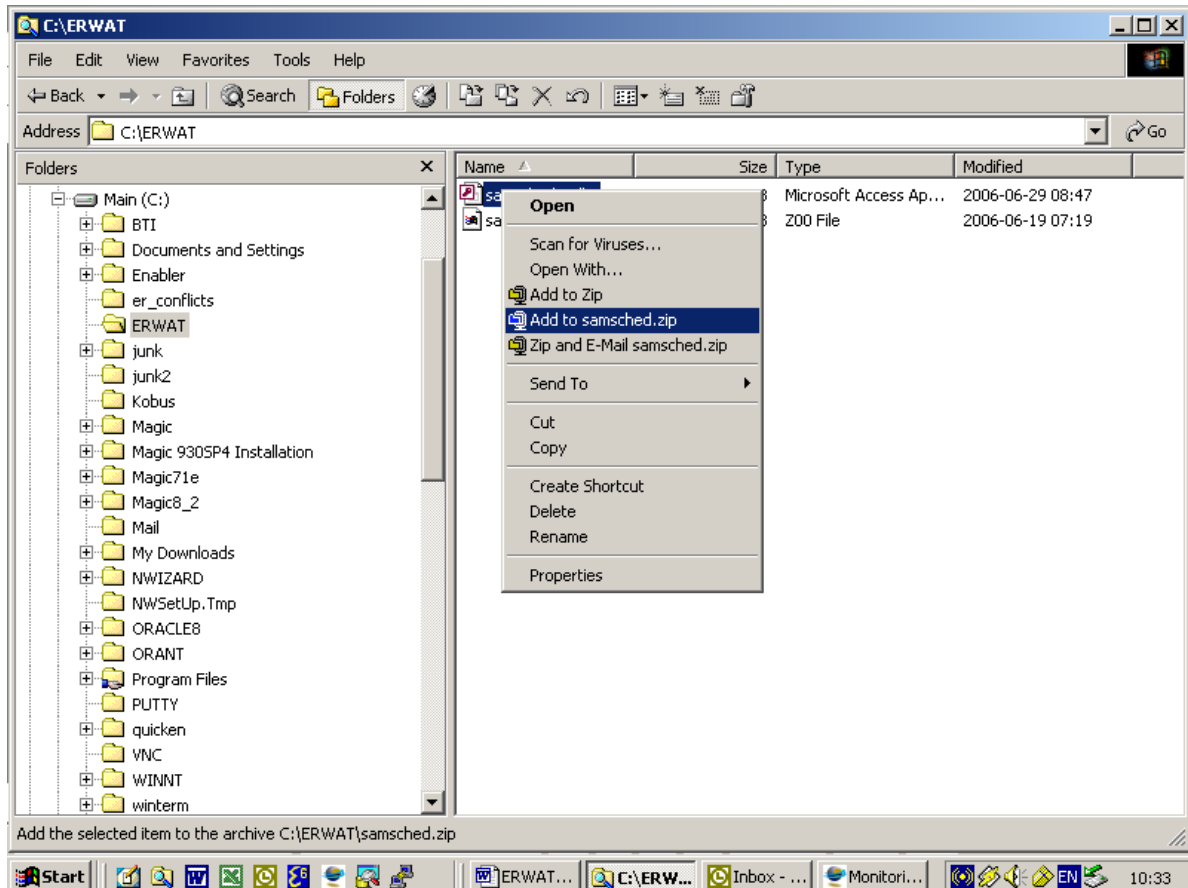
3.5   Rename samsched.zip to **samsched.zi_**
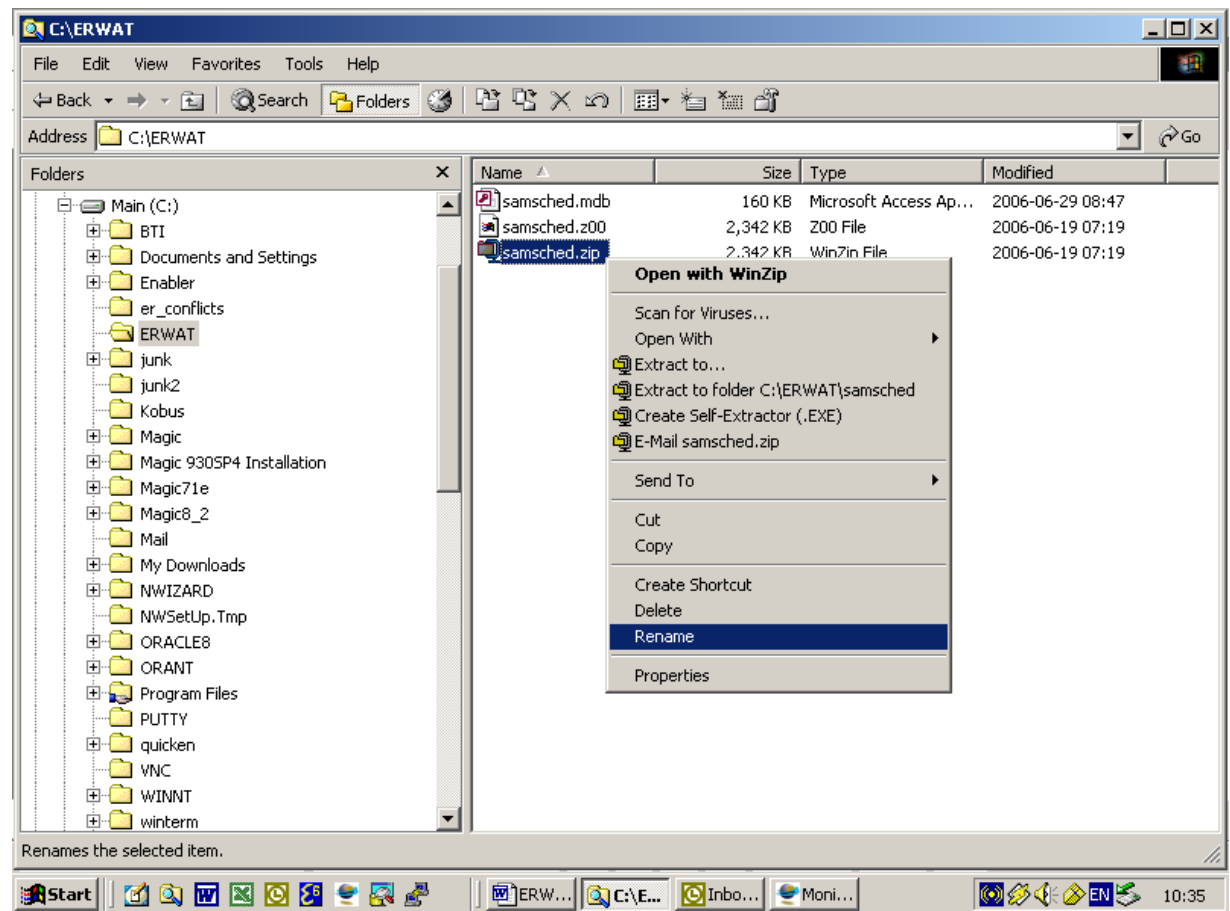
3.6   Send an E-mail with the file **samsched.zi_** attached to the ERWAT laboratories.
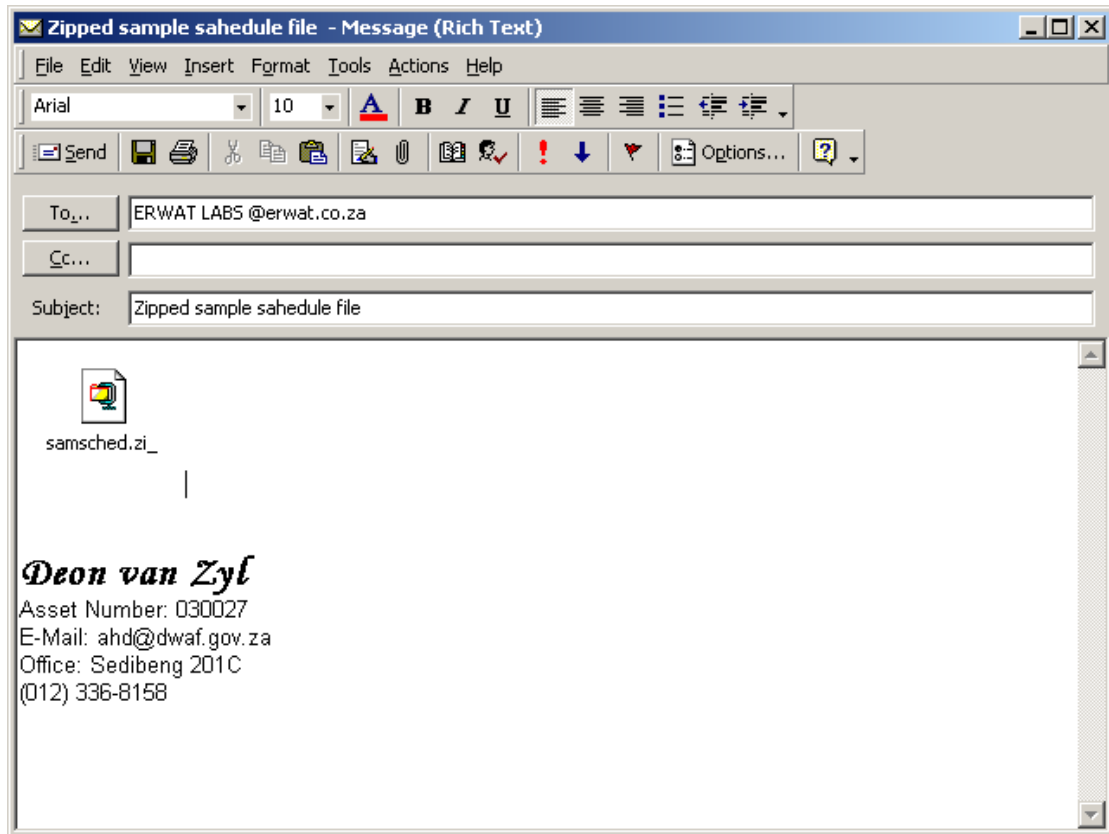
3.7   Wait for next E-mail. And repeat the procedures as described above.

Note: The imported samples must be administrated (Result Administration) to solve any sample or result problems and release the fixed samples.

4   Result Administration:

4.1   Select **Sample and Result Administration** from the Monitoring Management menu bar.

4.2   Select **Result Administration** from the sub menu.

4.3　　This will open the **Result Administration** form.
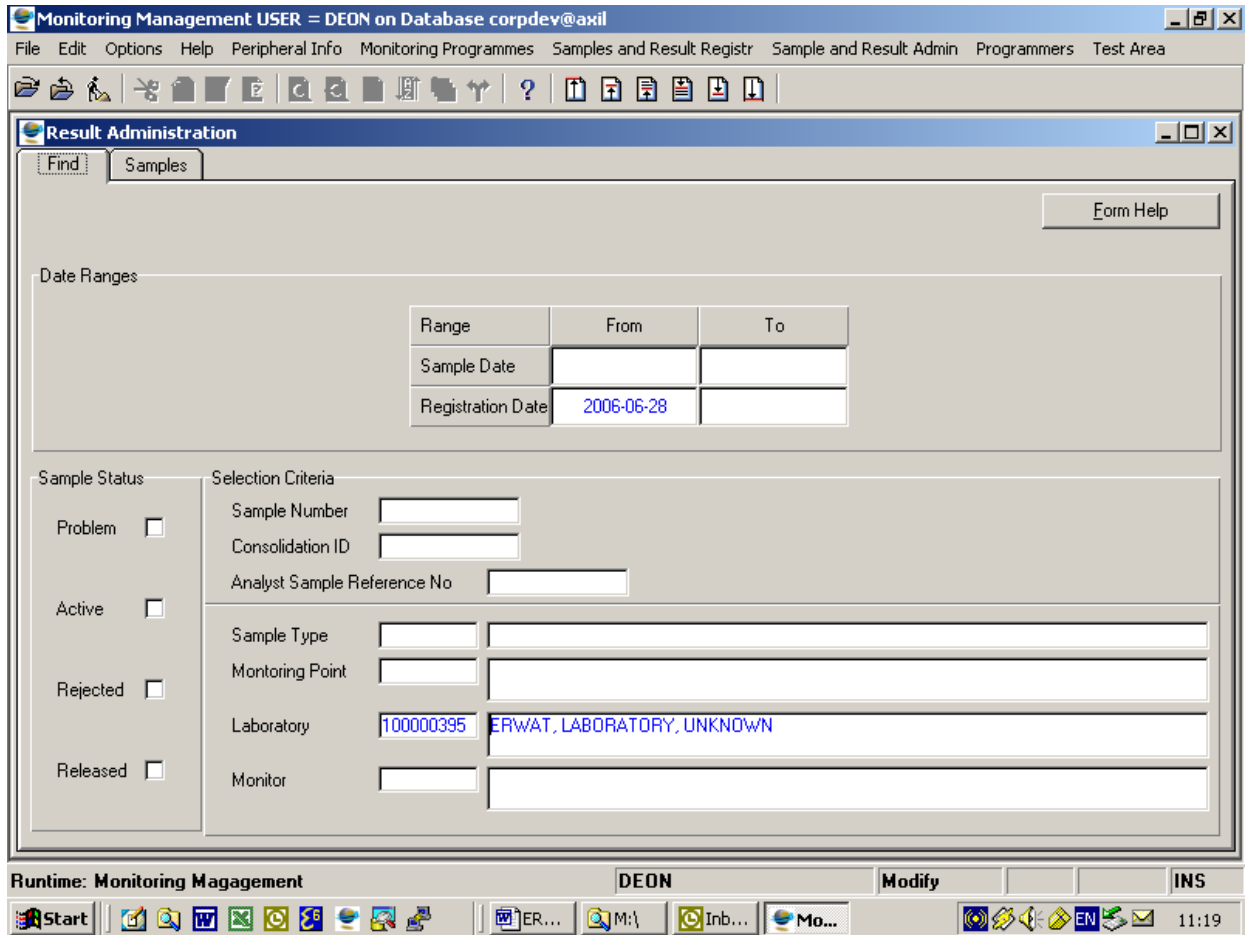
4.4   Enter the registration from date and/or the laboratory id.

External Reference Code Mapping

Introduction:

This is the second part of the fourth phase for the Electronic Import of data. This phase describes the changes to be made to existing functionality due to changes in the way external references are handled in the WMS system.

Business Rules:

i.   If the Login Organisation is the same as the Data Owner, you can select another Data Owner.

ii.   The Current Indicator must be Checked for the first record, and if you create another record, and mark it as Current, the first record must be unchecked.

1   Path:

1.1   Select **Peripheral Info** from the Monitoring management menu bar.

1.2   Select **External References** from the sub menu.

1.4   Select the applicable option from the drop-down menu.
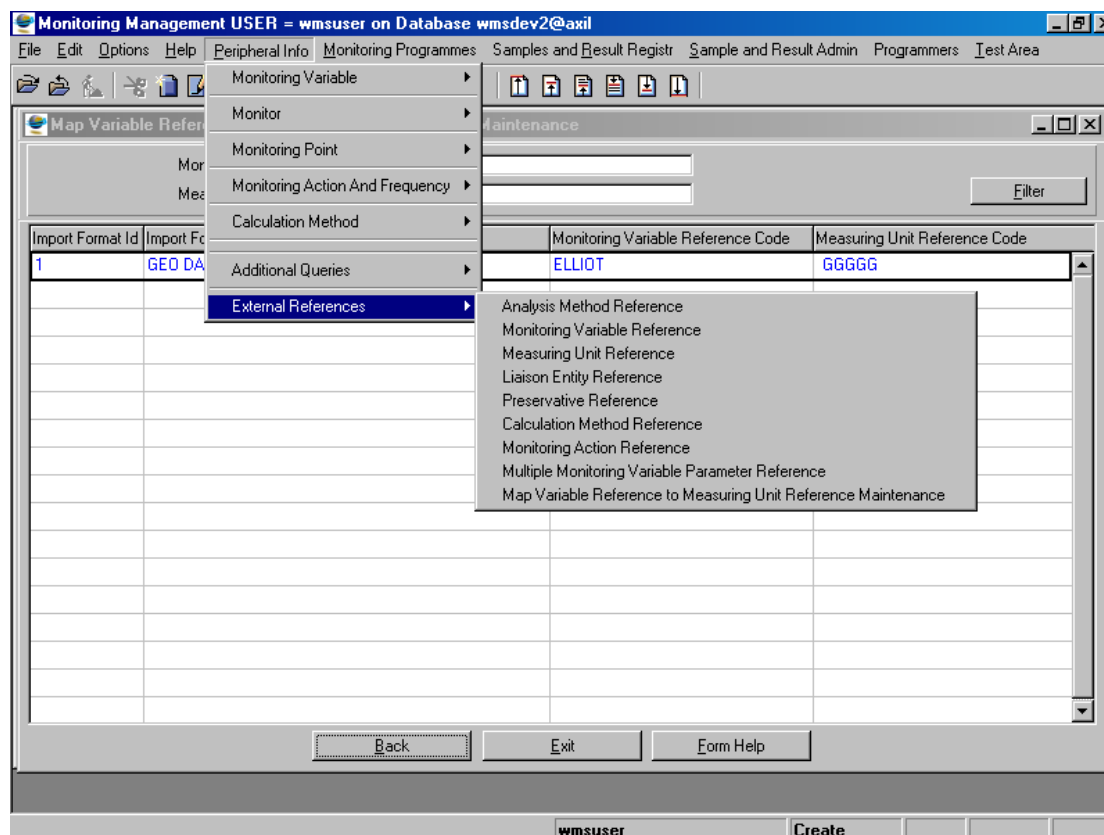
2.   How to Perform the Analysis Method External Reference:

2.1   Select **Analysis Method Reference** from the menu to open the **Analysis Method Reference Filter Criteria Wizard** form.

2.2   Enter the **Data Source** or click on the ZOOM **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
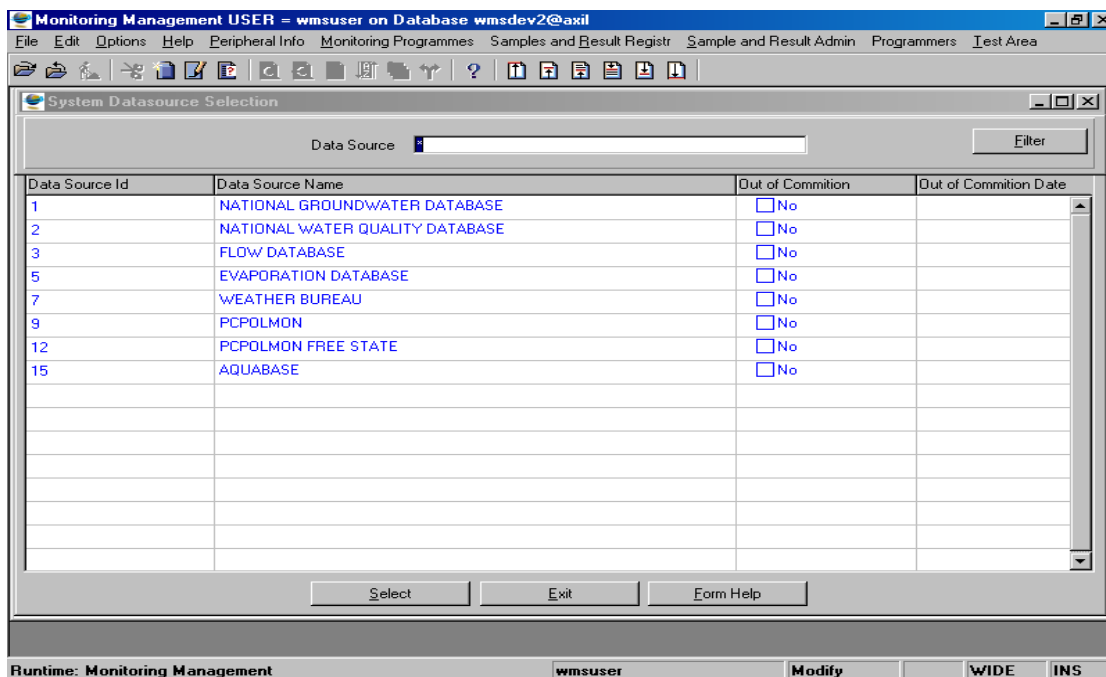
2.3   The **Datasource Name** will be automatically displayed.

2.4   Enter the **Analysis Method** or click on the ZOOM **Zoom** button to open the
       Analysis Method Selection form, select the applicable record and click on the
       Select **Select** button to return your selection.
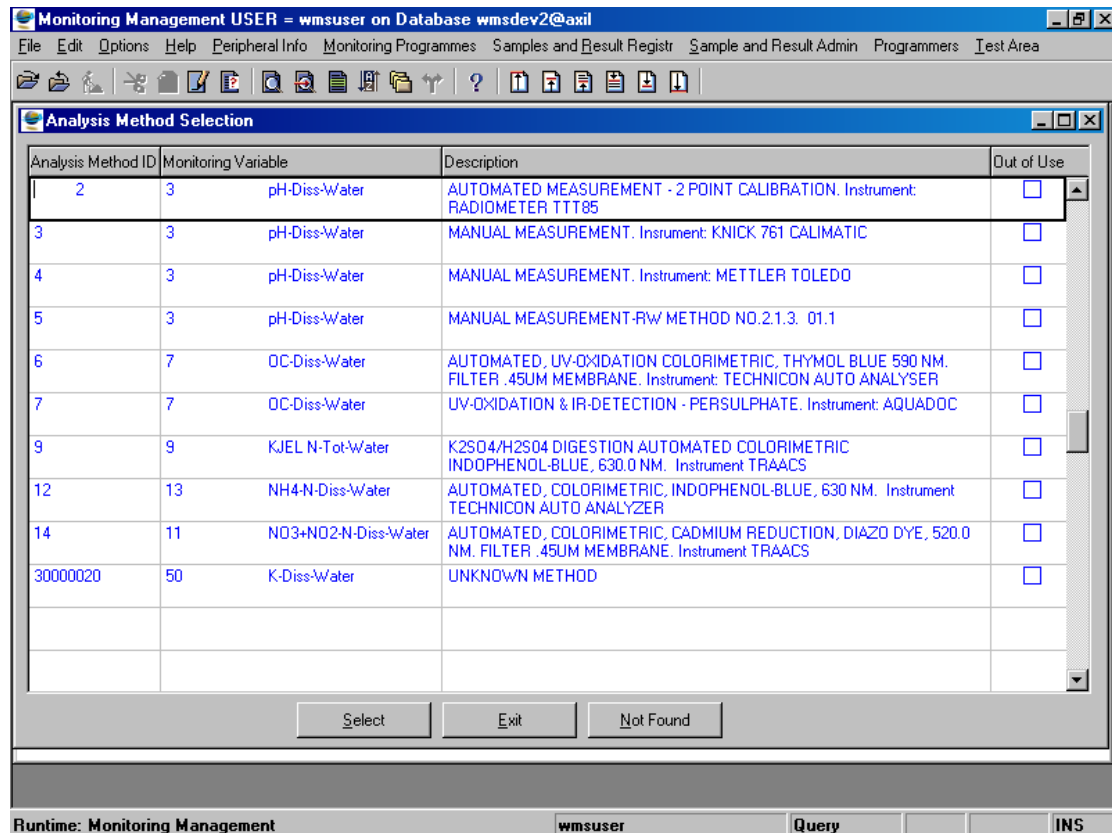
2.5   The **Analysis Method Name** will be automatically displayed.

2.6   Enter the **Data Owner** or click on the ZOOM **Zoom** button to open the **Login
       Organisation Selection** form, select the applicable record and click on the
       Select **Select** button to return your selection.
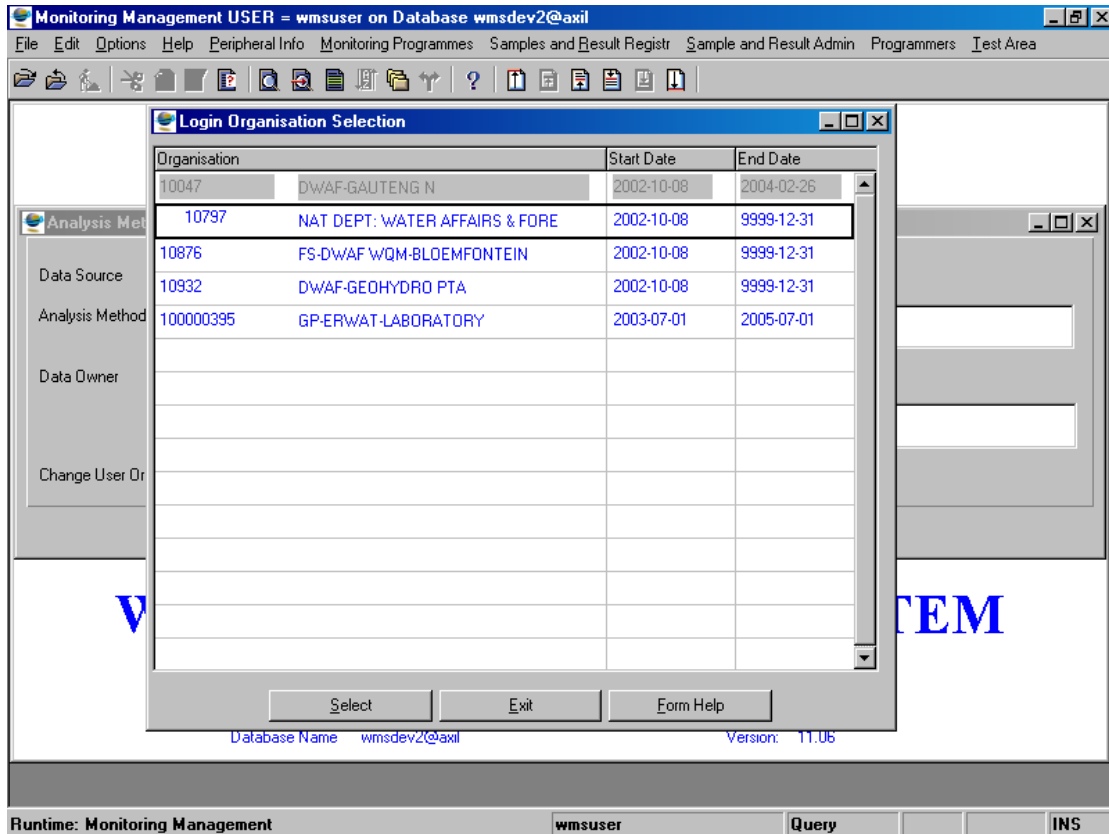
2.7 The **Data Owner Name** will be automatically displayed.

2.8 Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
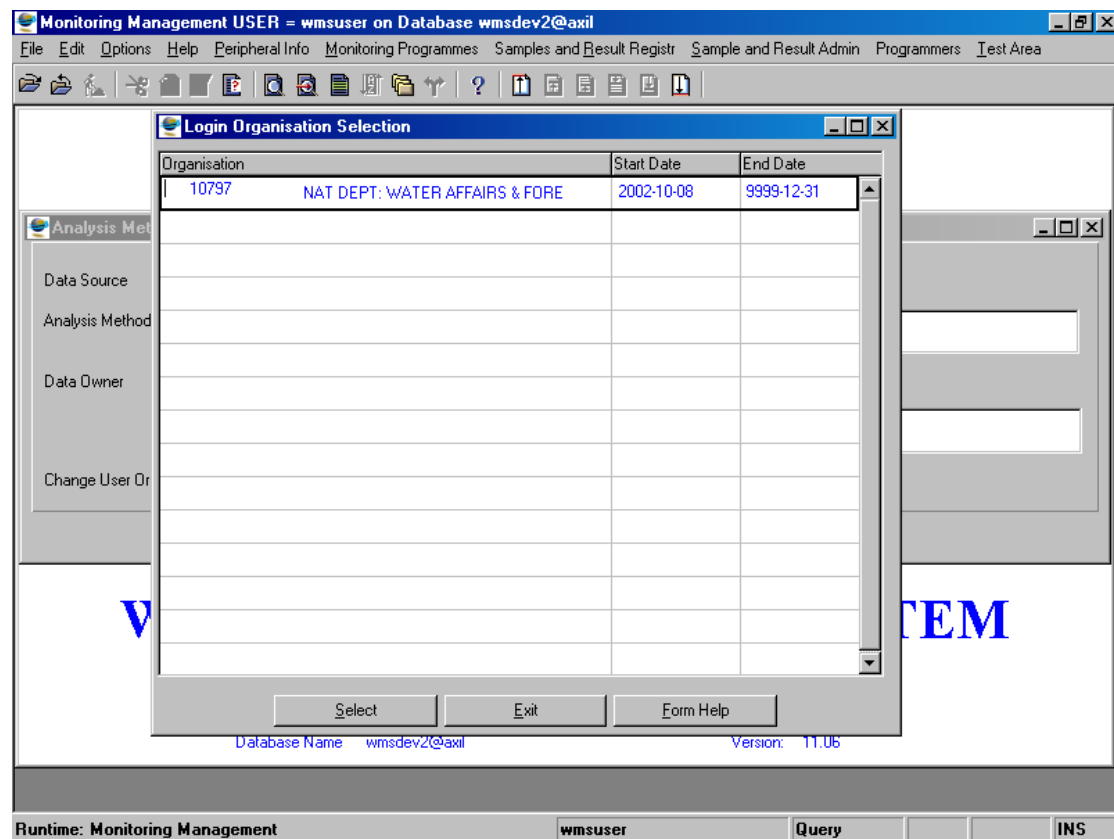
2.9   The **Change User Organisation Name** will be automatically displayed.

2.10   Click on the **Next** button to open the **Analysis Method Reference Maintenance** form. *Note: Records displayed will be filtered as specified on the Filter Criteria form.*

2.11 To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

2.12 Click on the **Create** button.

2.13 A new line displays to allow the addition of a new record.

2.14 Enter the **Data Source ID** or click on the **ZOOM** **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
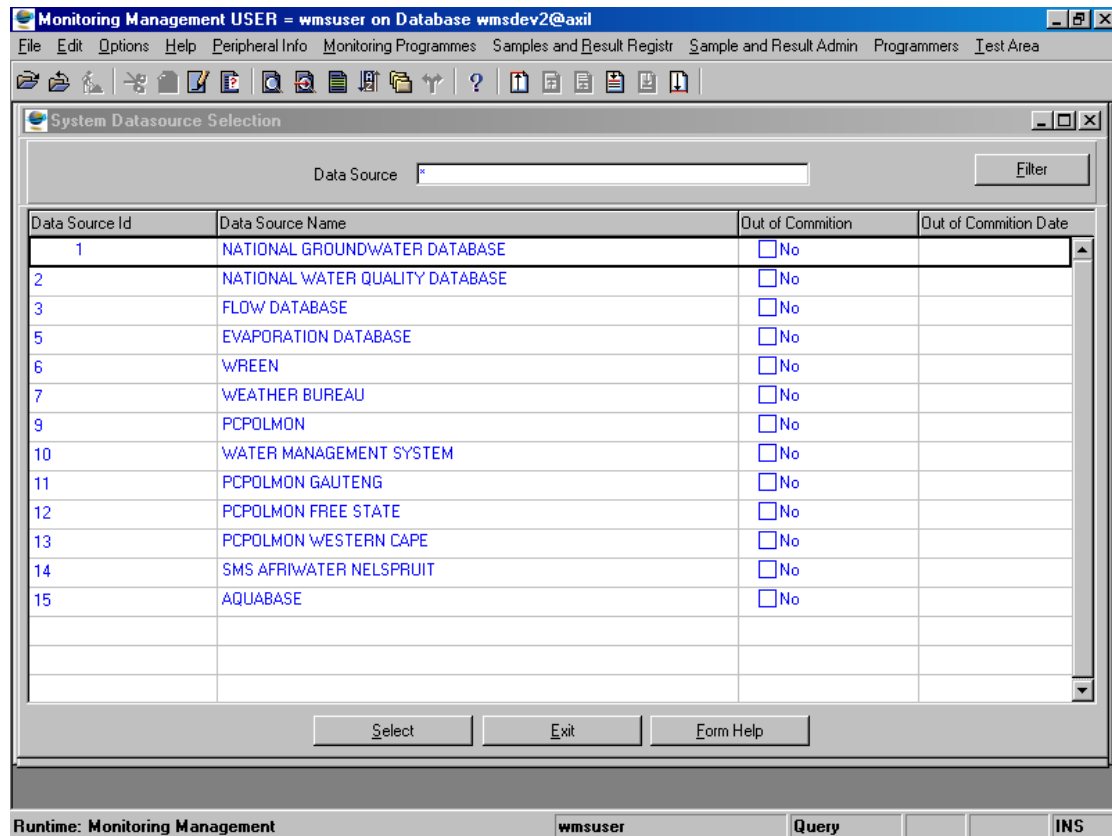
2.15   The **Data Source Name** will be automatically displayed.

2.16   Enter the **Reference Code**.

2.17   Enter the **Method ID** or click on the **ZOOM** **Zoom** button to open the **Analysis Method Selection** form, select the applicable record and click on the **Select** button to return your selection.

2.18   The **Analysis Method Description** will be automatically displayed.

2.19   The **Data Owner Organisation ID** will be automatically updated with the Login Organisation ID. *Note: The Data Owner Organisation ID can be changed by entering the ID or clicking on the Zoom button to open the Login Organisation Selection form, and selecting the applicable record by clicking on the Select button.*

2.20   Check the **Current Indicator** to indicate that the variable is being currently used.

2.21   The **Used Indicator** will be automatically updated when the record is used.

2.22   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. *Note: The **Change Date**, **Change User** and the **Change Organisation** will be automatically updated by the system.*

2.23   Click on the **Back** button to go to the previous form.

2.24   Click on the **Exit** button to exit the form.

3. How to Perform the Monitoring Variable External Reference:

3.1 Select **Monitoring Variable Reference** from the menu to open the **Monitoring Variable Reference Filter Criteria** Wizard.

3.2 Enter the **Data Source** or click on the `ZOOM` **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the `Select` **Select** button to return your selection.
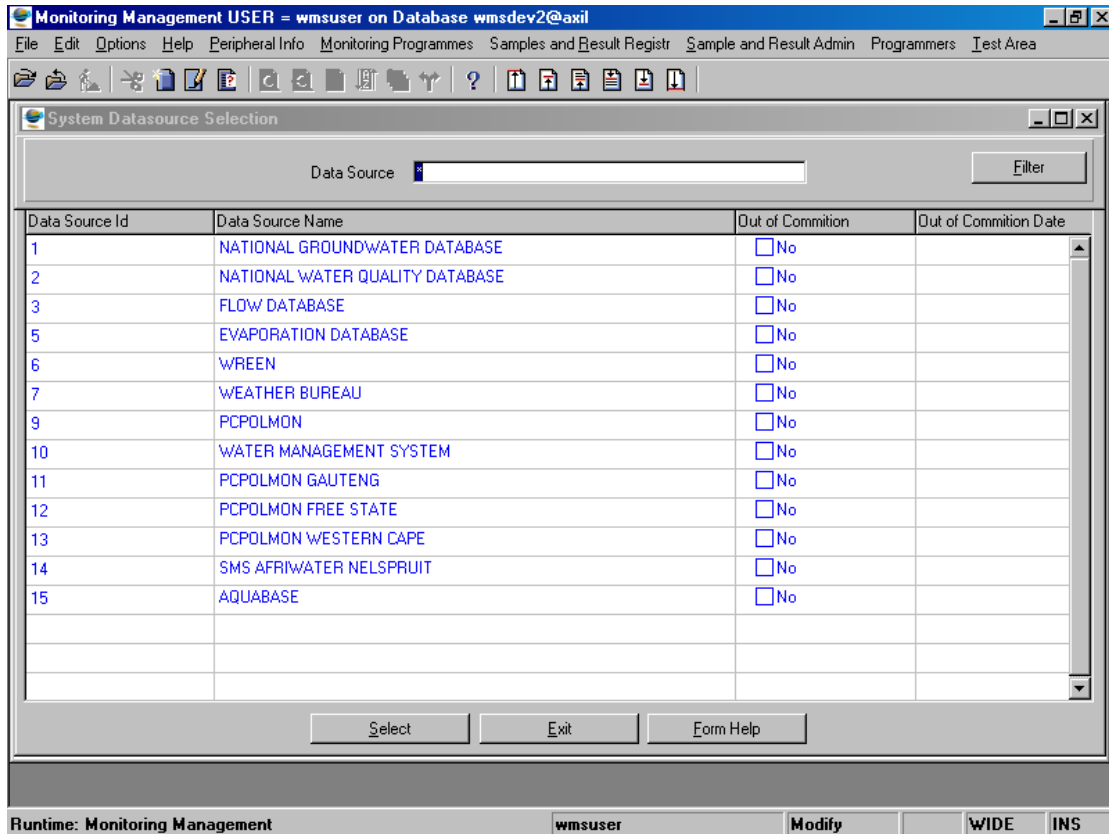
3.3 The **Data source Name** will be automatically displayed.

3.4 Enter the **Monitoring Variable** or click on the **ZOOM** **Zoom** button to open the
Monitoring Variable Selection form, select the applicable record and click on the
Select **Select** button to return your selection.
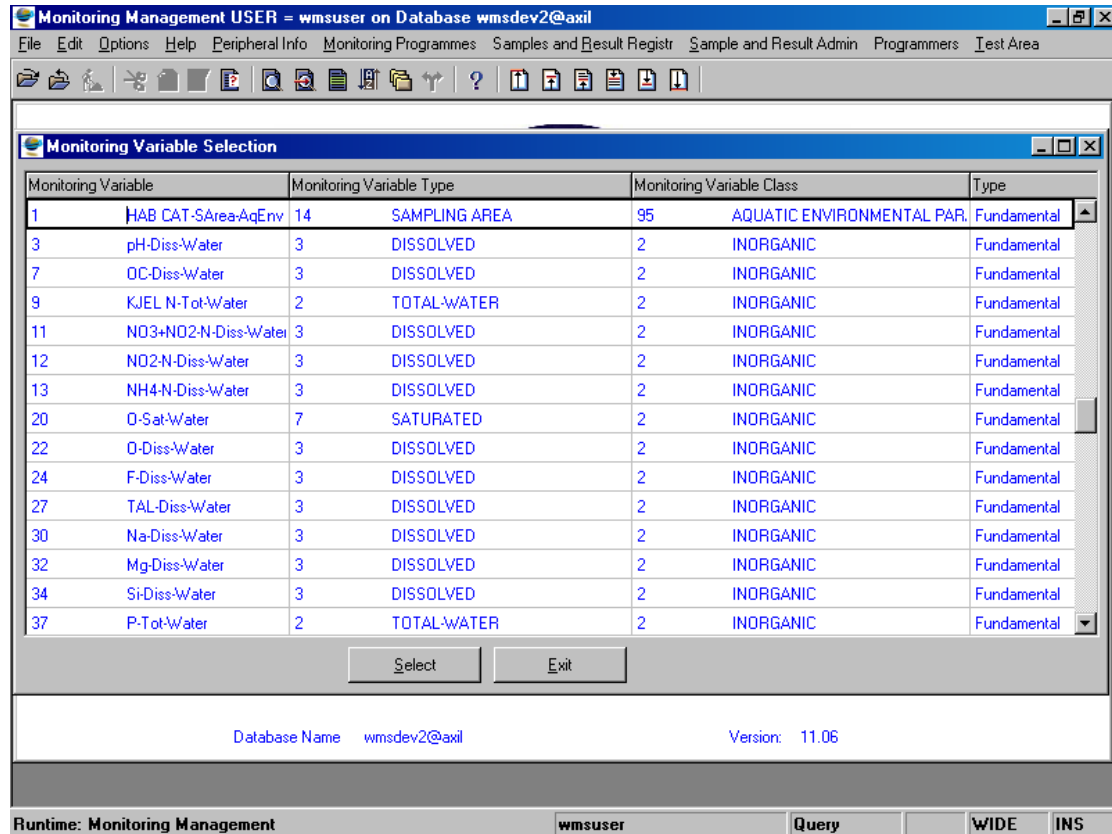
3.5 The **Monitoring Variable Name** will be automatically displayed.

3.6 Enter the **Data Owner** or click on the [ZOOM] **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.
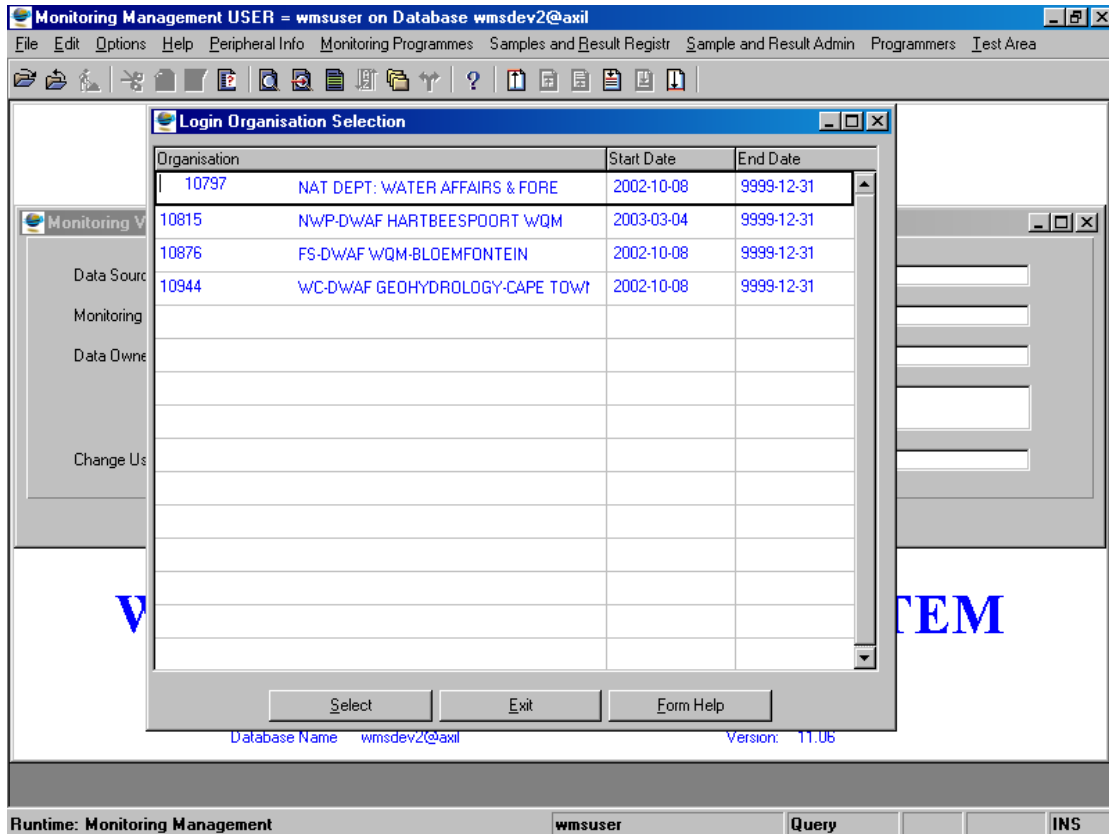
3.7   The **Data Owner Name** and the **Data Owner Name Abbreviation** will be automatically displayed.

3.8   Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open a **Login Organisation Selection** form, select the applicable record and click on the **Select** button to return your selection.
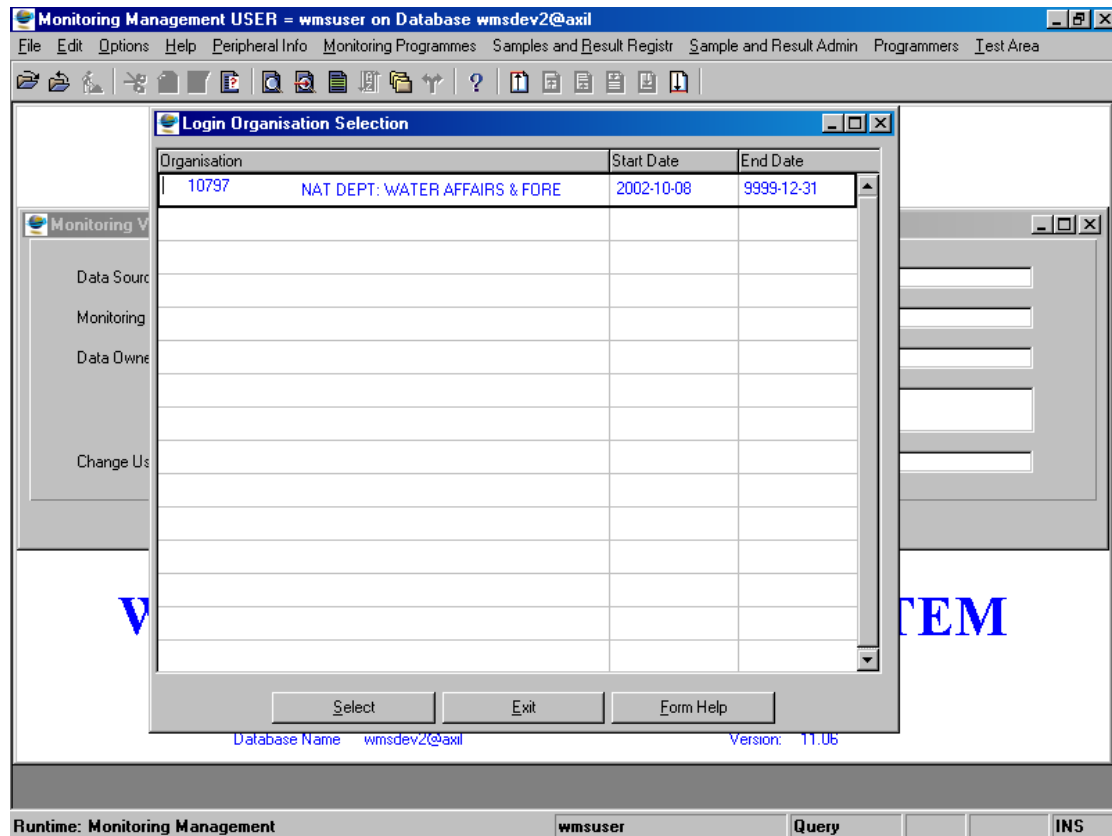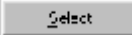
3.9   The **Change User Organisation Name** will be automatically displayed.

3.10   Click on the **Next** button to open the **Monitoring Variable Reference Maintenance** form.
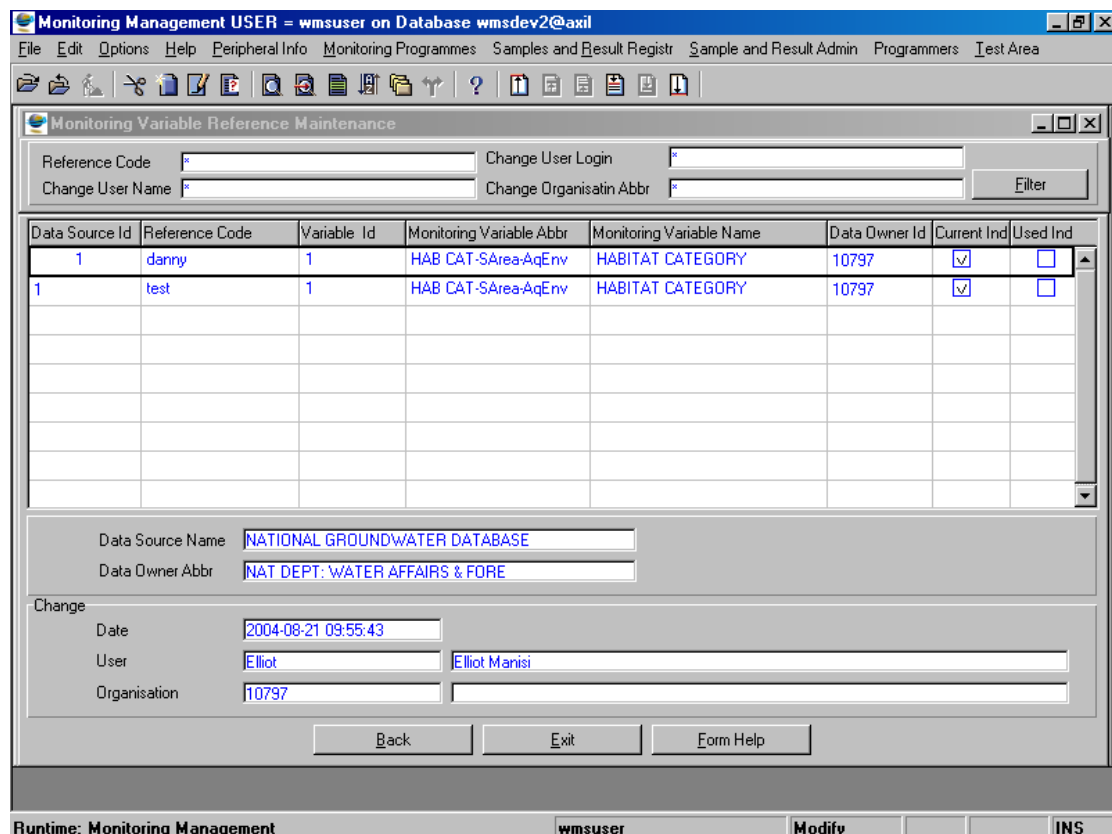
3.11 To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

3.12 Click on the **Create** button.

3.13 A new line displays to allow the addition of a new record.

3.14 Enter the **Data Source ID** or click on the **ZOOM** **Zoom** button to open a **System Datasource Selection** form, select the applicable record and click on the **Select** button to return your selection.
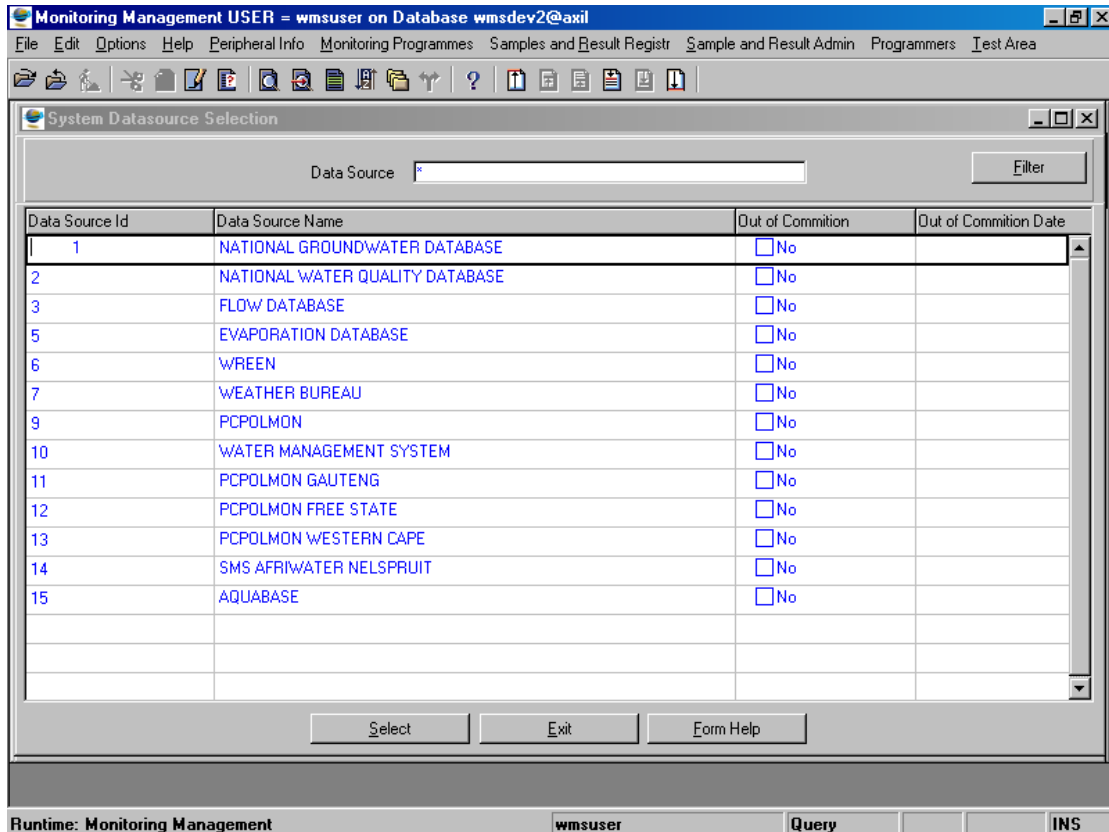
3.15 The **Data Source Name** will be automatically displayed.

3.16 Enter the **Reference Code**.

3.17 Enter the **Variable ID** or click on the **ZOOM** **Zoom** button to open the **Monitoring Variable Selection** form, select the applicable record and click on the **Select** button to return your selection.
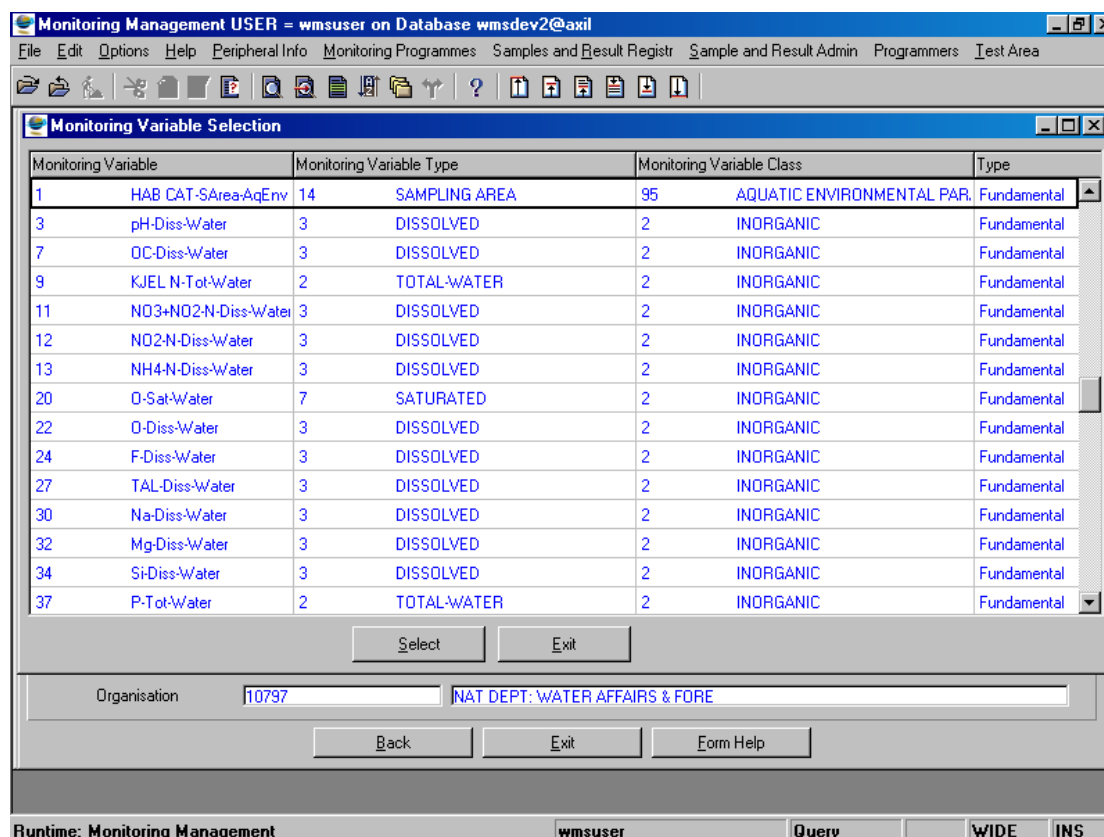
3.18   The **Monitoring variable Name** will be automatically displayed.

3.19   The **Data Owner Organisation ID** will be automatically updated with the Login Organisation ID. *Note: The Data Owner Organisation ID can be changed by entering the ID or clicking on the Zoom button to open the Login Organisation Selection form, and selecting the applicable record by clicking on the Select button.*

3.20   Check the **Current Indicator** to indicate that the variable is being currently used.

3.21   The **Used Indicator** will be automatically updated when the last record is used.

3.22   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. *Note: The **Change Date**, **Change User** and the **Change Organisation** will be automatically updated by the system.*

3.23   Click on the **Back** button to go to the previous form.

3.24   Click on the **Exit** button to exit the form.

4.   How to Perform the Measuring Unit External Reference:

4.1   Select **Measuring Unit Reference** from the menu to open the **Measuring Unit Reference Filter Criteria** Wizard.

4.2   Enter the **Data Source** or click on the ZOOM **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

4.1   The **Datasource Name** will be automatically displayed.

4.2   Enter the **Measuring Unit ID** or click on the ZOOM **Zoom** button to open the **Valid Measuring Units for Monitoring Variable Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
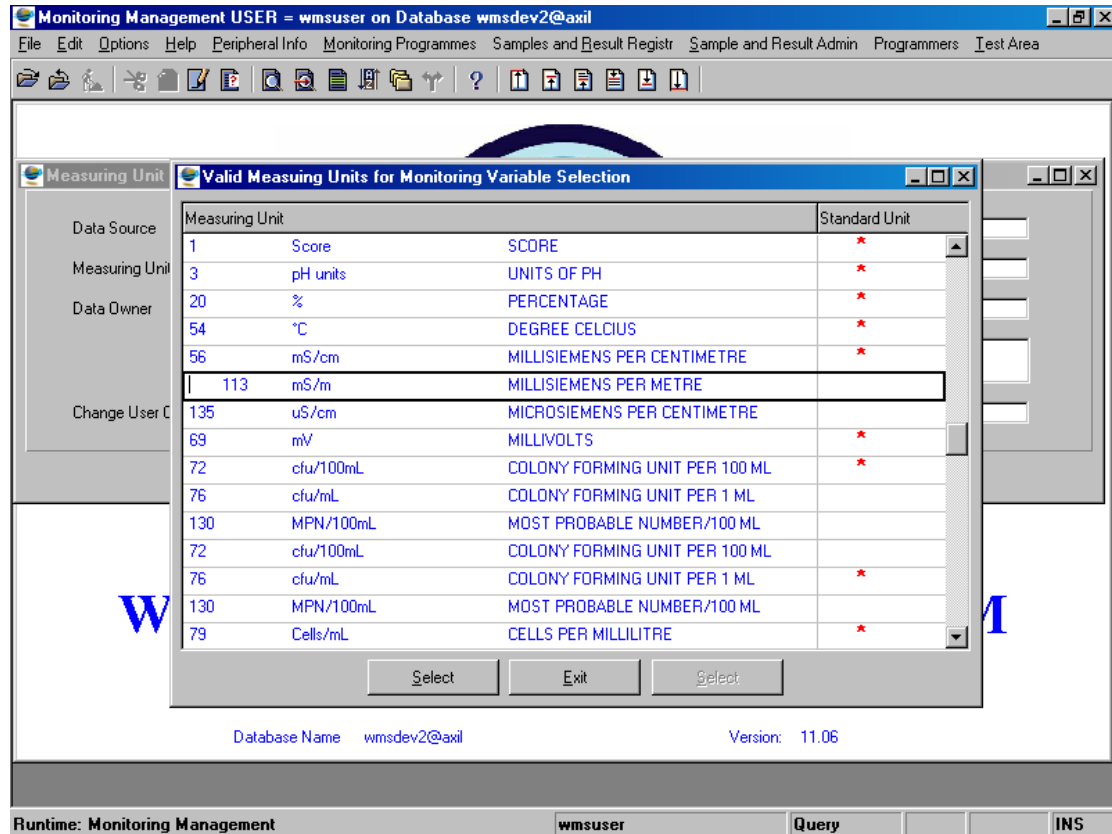
4.3   The **Measuring Unit Name** will be automatically displayed.

4.4   Enter the **Data Owner** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the ⬚ Select **Select** button to return your selection.
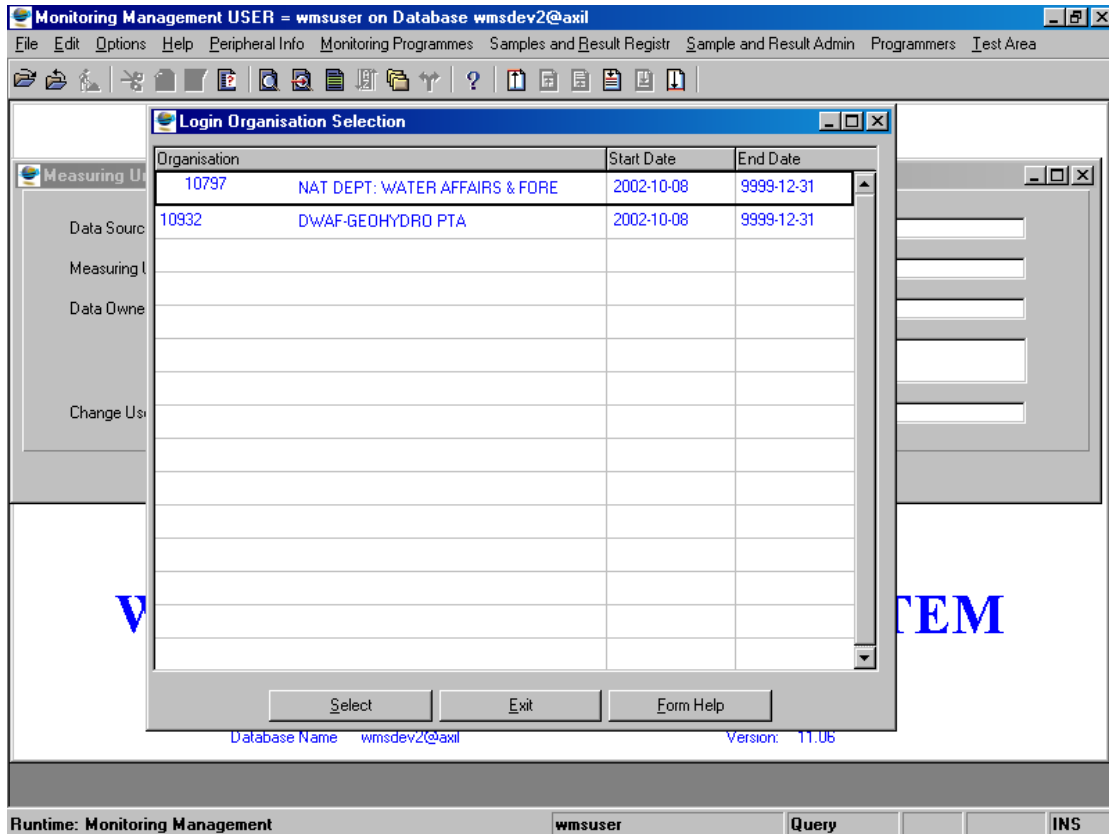
4.5   The **Data Owner Name** will be automatically displayed.

4.6   Enter the **Change User Organisation** click on the [ZOOM] **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.
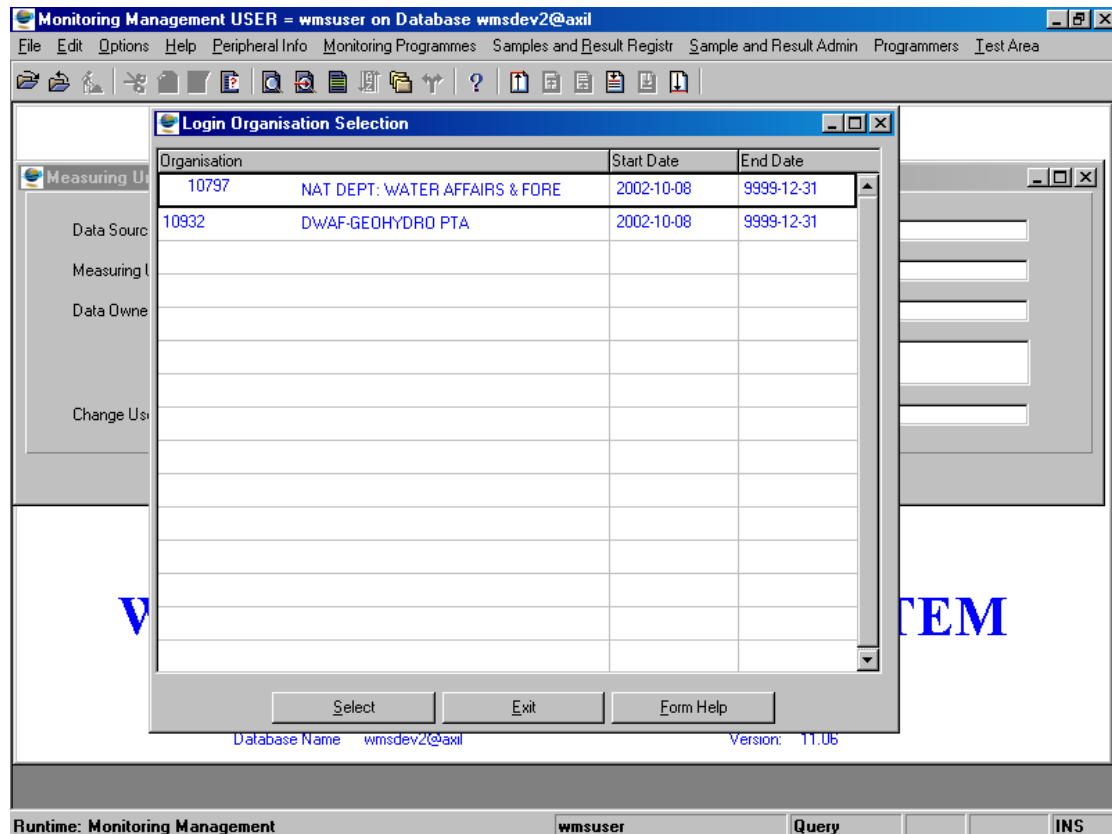
4.7   The **Change User Name** will be automatically displayed.

4.8   Click on the **Next** button to open the **Monitoring Variable Reference Maintenance** form.
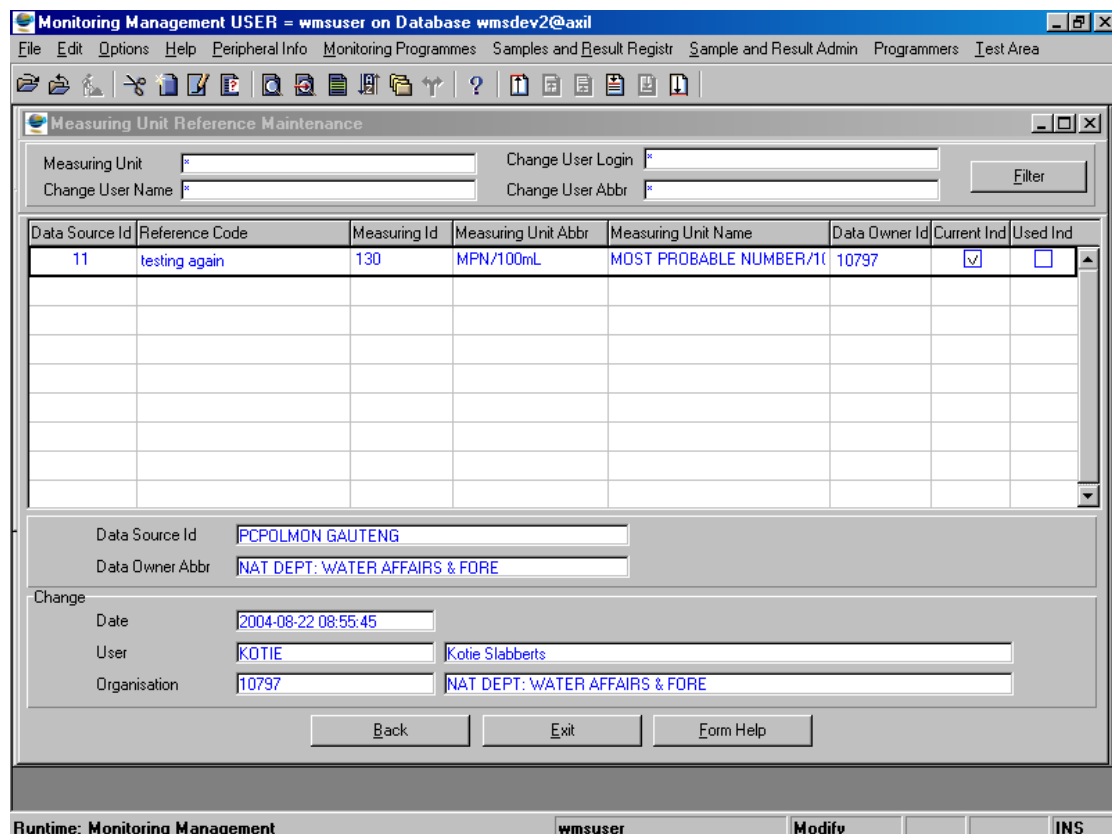
4.9   To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

4.10   Click on the ☐**Create** button.

4.11   A new line displays to allow the addition of a new record.

4.12   Enter the **Data Source ID** or click on the **ZOOM** **Zoom** button to open a **System Datasource Selection** form, select the applicable record and click on the **Select** button to return your selection.

4.13   The **Data Source Name** will be automatically displayed.

4.14   Enter the **Reference Code**.

4.15   Enter the **Measuring Unit ID** or click on the **ZOOM** **Zoom** button to open the **Valid Measuring Units for Monitoring Variable Selection** form, select the applicable record and click on the **Select** button to return your selection.
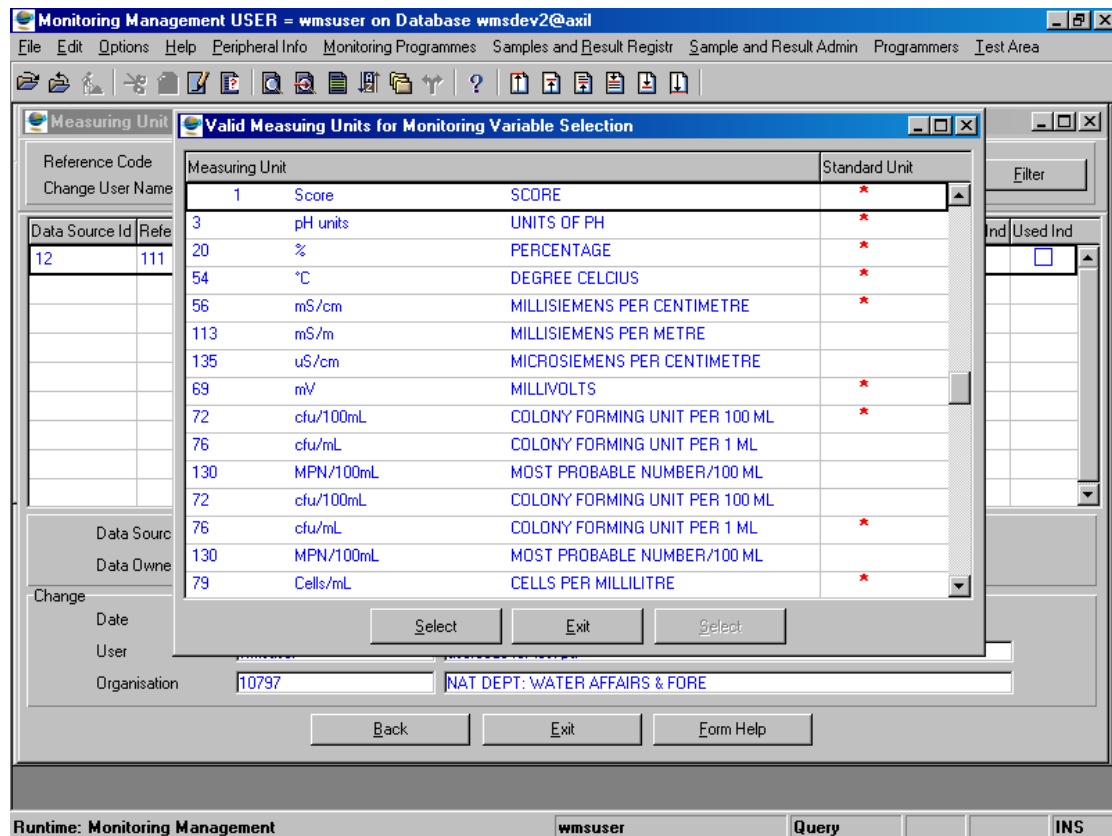
4.16   The **Measuring Unit Abbreviation** will be automatically displayed.

4.17   The **Data Owner Organisation ID** will be automatically updated with the Login ID.

        Note: The Data Owner Organisation ID can be changed.

4.18   Check the **Current Indicator** to indicate that the variable is being currently used.

4.19   The **Used Indicator** will be automatically updated when the record is used.

4.20   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. ![?] *Note: The Change Date, Change User and the Change Organisation will be automatically updated by the system.*

4.21   Click on the **Back** button to go to the previous form.

4.22   Click on the **Exit** button to exit the form.

5.   How to Perform the Liaison Entity External Reference:

5.1   Select **Liaison Entity Reference** from the menu to open **Liaison Entity Reference Filter Criteria** Wizard form.
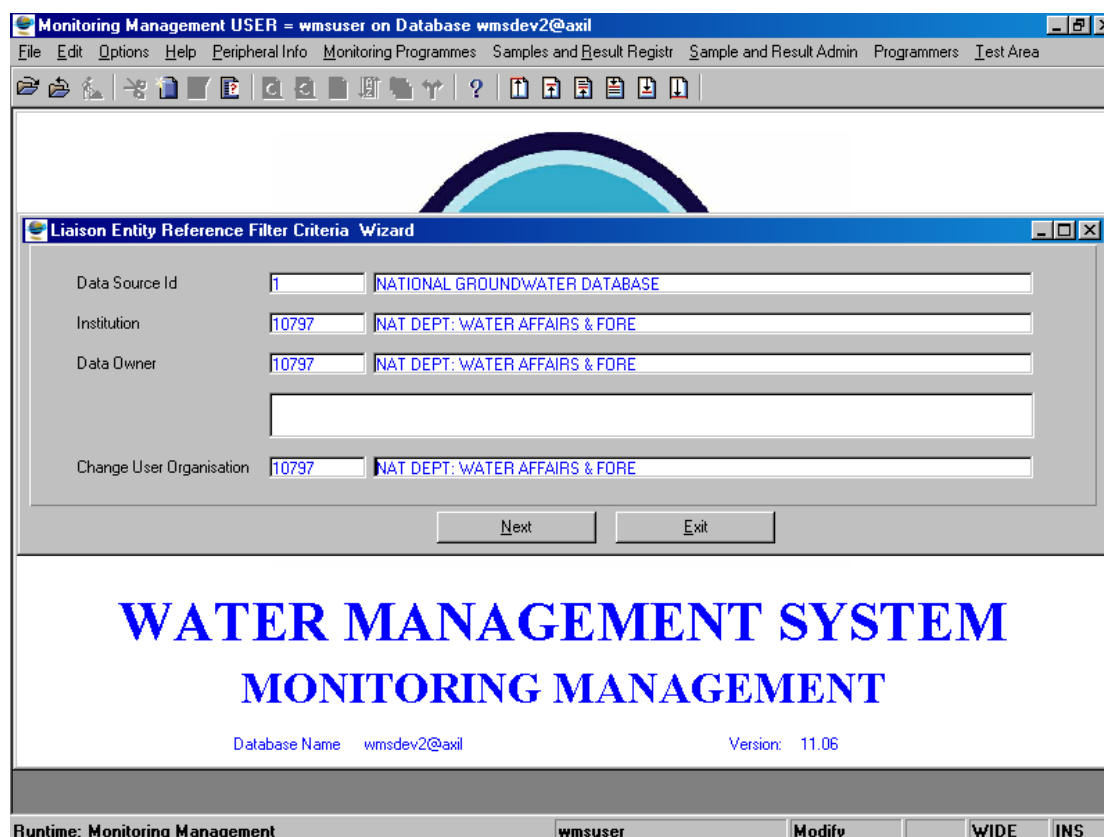
5.2   Enter the **Data Source** or click on the ![ZOOM] **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the ![Select] **Select** button to return your selection.
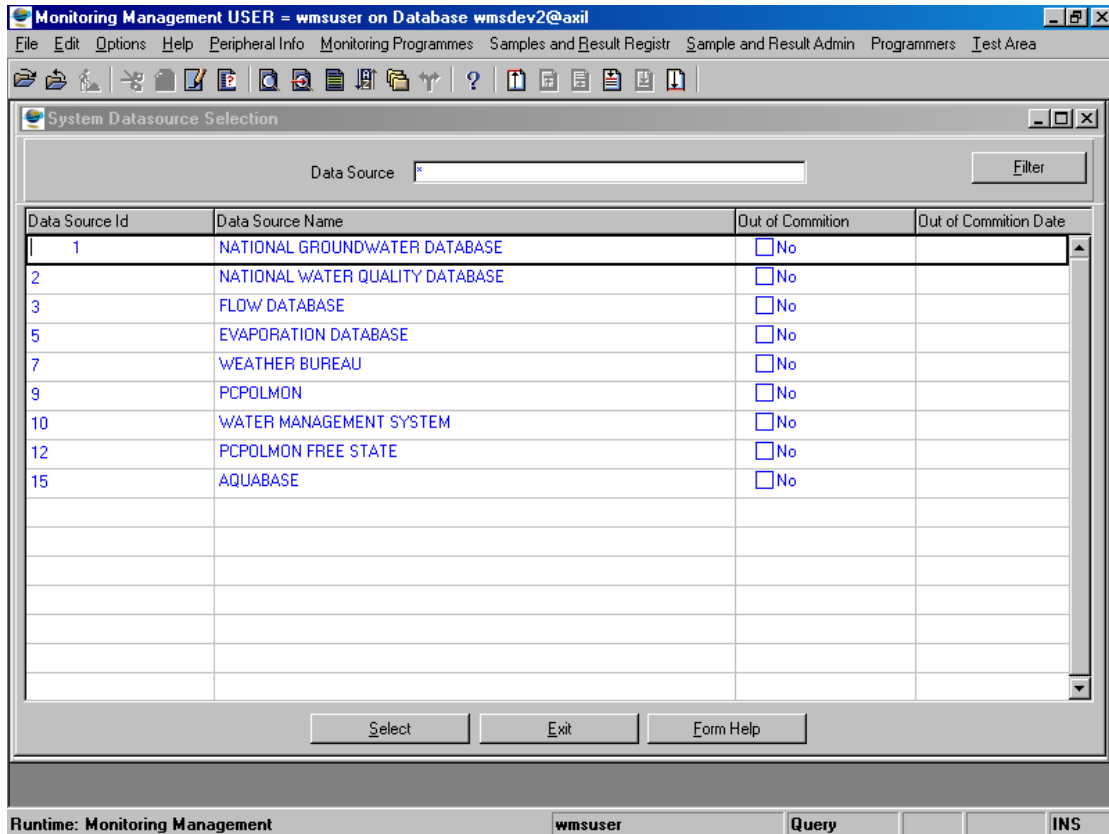
5.3 The **Datasource Name** will be automatically displayed.

5.4 Enter the **Institution** or click on the **ZOOM** **Zoom** button to open the **Analyst Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
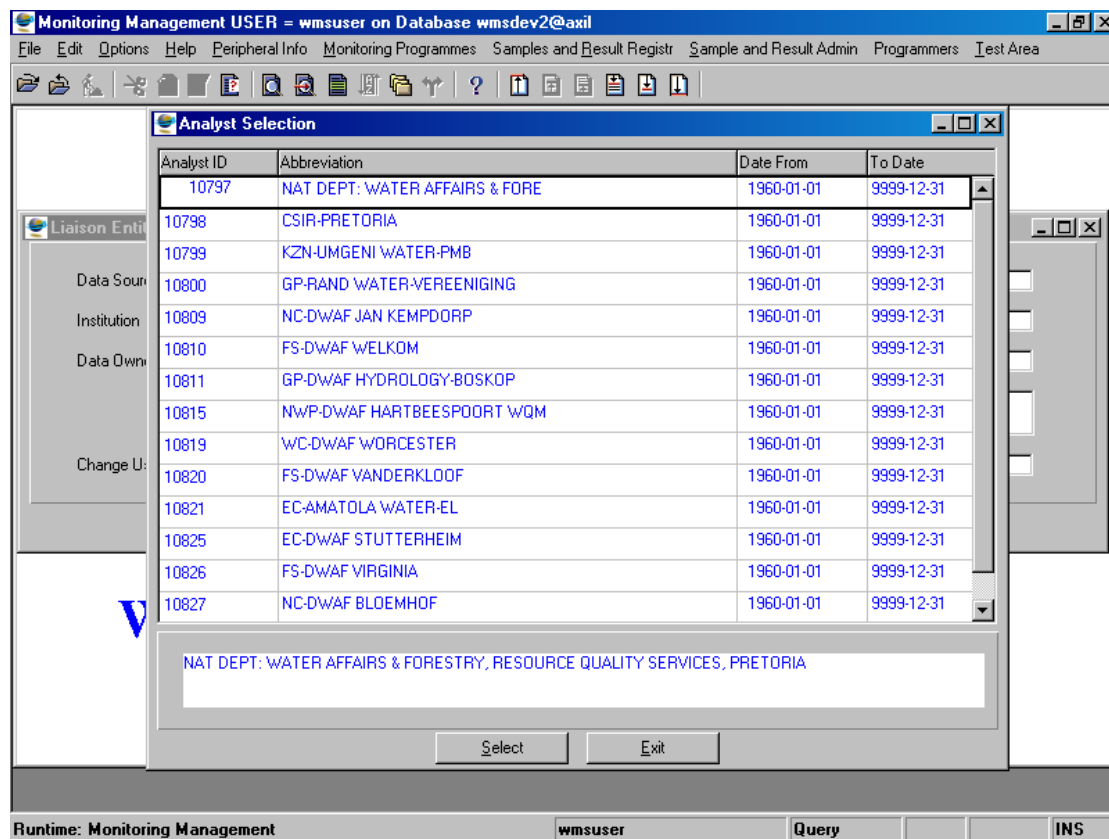
5.5　　The **Institution Name** will be automatically displayed.

5.6　　Enter the **Data Owner** or click on the [ZOOM] **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.
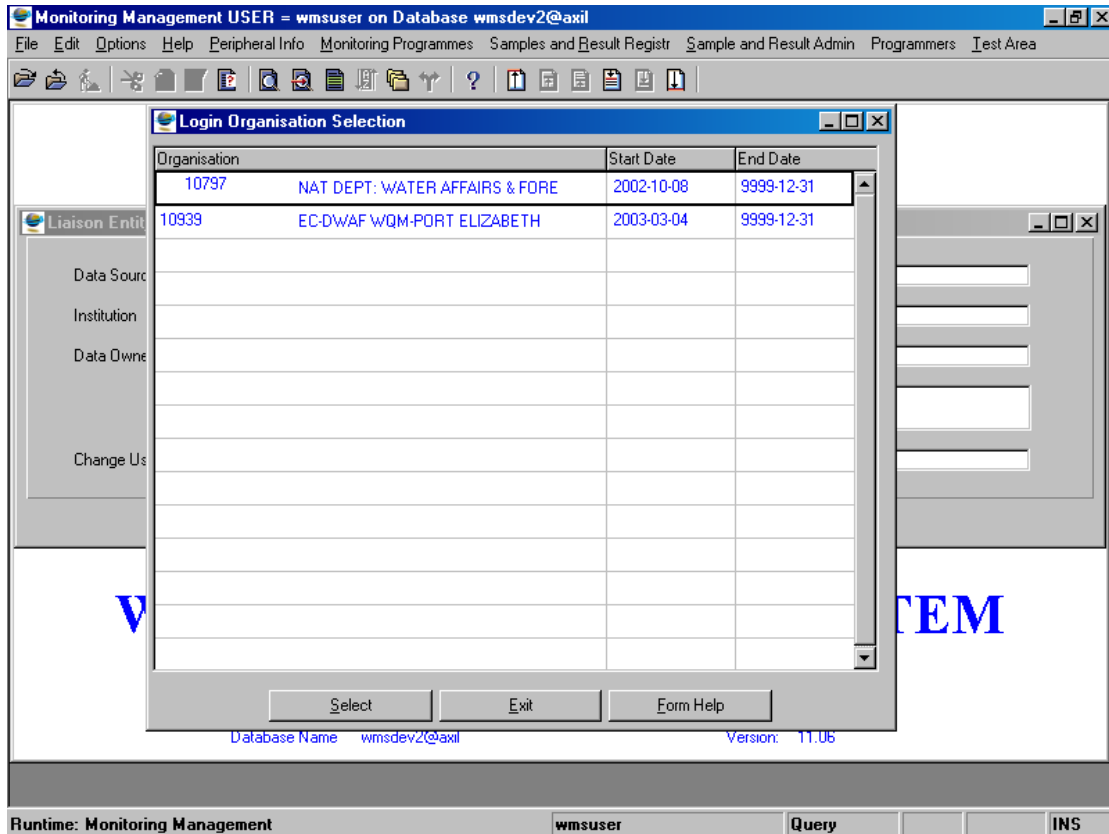
5.7   The **Data Owner Name** will be automatically displayed.

5.8   Enter the **Change User Organisation** or click on the ZOOM **Zoom** button to open the
         Login Organisation Selection form, select the applicable record and click on the
         Select **Select** button to return your selection.
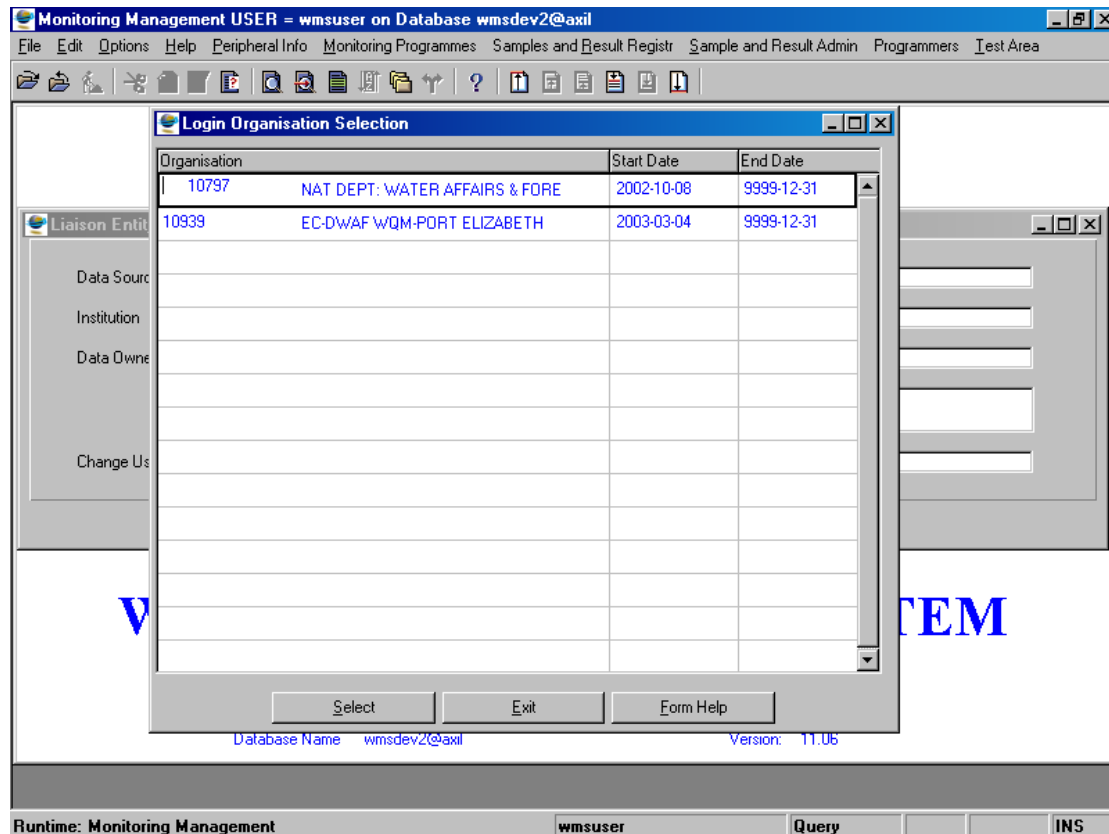
5.9   The **Change User Organisation Name** will be automatically displayed.

5.10   Click on the **Next** button to open the **Liaison Entity Reference Maintenance** form.
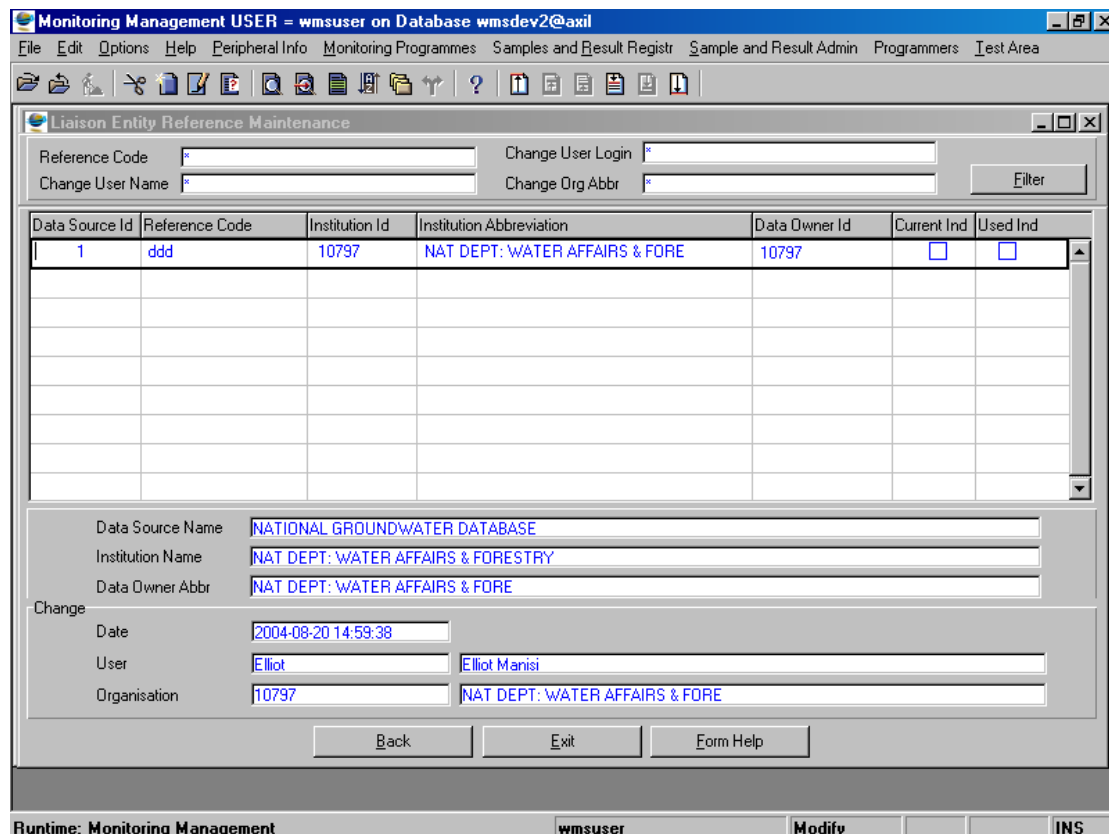
5.11   To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

5.12   Click on the **Create** button.

5.13   A new line displays to allow the addition of a new record.

5.14   Enter the **Data Owner ID** or click on the **ZOOM** **Zoom** button to open a **System Data Source Selection** form, select the applicable record and click on the **Select** button to return your selection.

5.15   The **Data Owner Name** will be automatically displayed.

5.16   Enter the **Reference Code**.

5.17   Enter the **Institution ID** or click on the **ZOOM** **Zoom** button to open the **Analyst Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
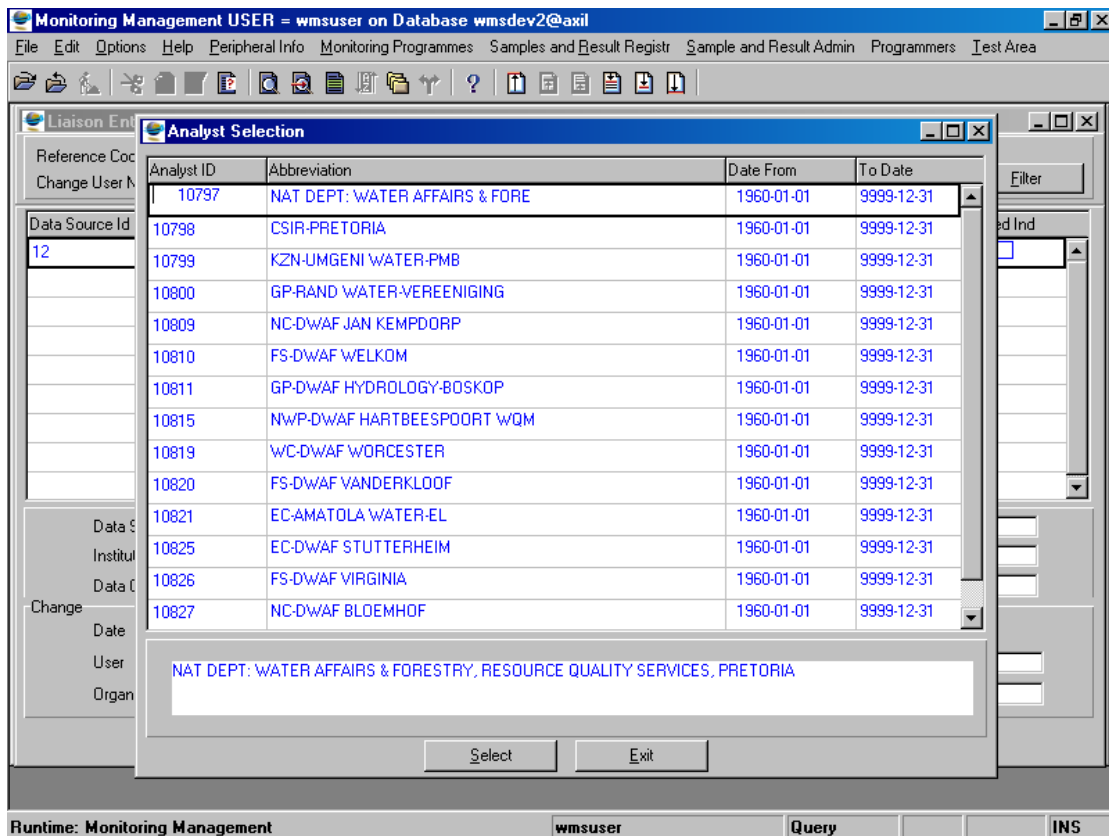
5.18   The **Institution Abbreviation** will be automatically displayed.

5.19   The **Data Owner Organisation ID** will be automatically updated with the Login Organisation ID. *Note: The Data Owner Organisation ID can be changed by entering the ID or clicking on the Zoom button to open the Login Organisation Selection form, and selecting the applicable record by clicking on the Select button.*

5.20   Check the **Current Indicator** to indicate that the variable is being currently used.

5.21   The **Used Indicator** will be automatically updated when the record is used.

817

5.22   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. *Note: The **Change Date**, **Change User** and the **Change Organisation** will be automatically updated by the system.*

5.23   Click on the **Back** button to go to the previous form.

5.24   Click on the **Exit** button to exit the form.

6.   How to Perform the Preservative External Reference:

6.1   Select **Preservative Reference** from the menu to open the **Preservative External Reference Filter Criteria Wizard** form.

6.2   Enter the **Data Source** or click on the ZOOM **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

819

6.3 The **Datasource Name** will be automatically displayed.

6.4 Enter the **Preservative** or click on the **ZOOM** **Zoom** button to open the **Preservative Selection** form, select the applicable record and click on the [**Select**] **Select** button to return your selection.
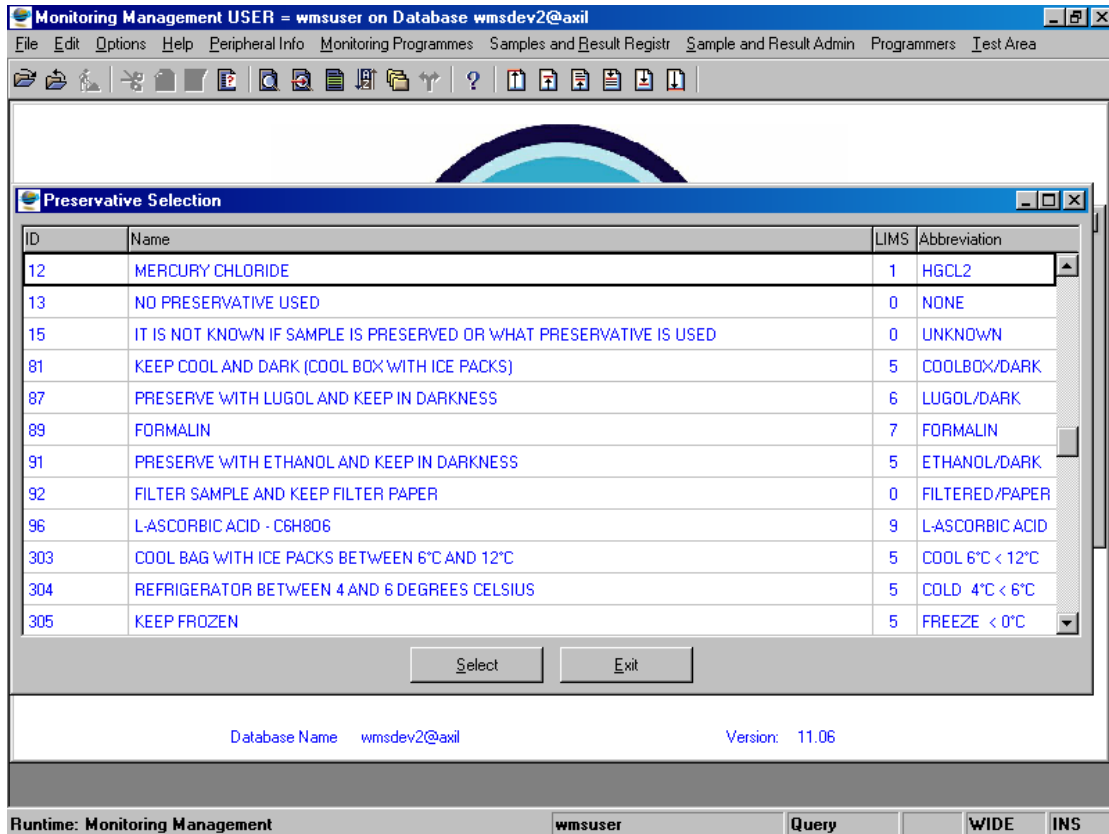
6.5   The **Preservative Name** will be automatically displayed.

6.6   Enter the **Data Owner** or click on the [ZOOM] **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.
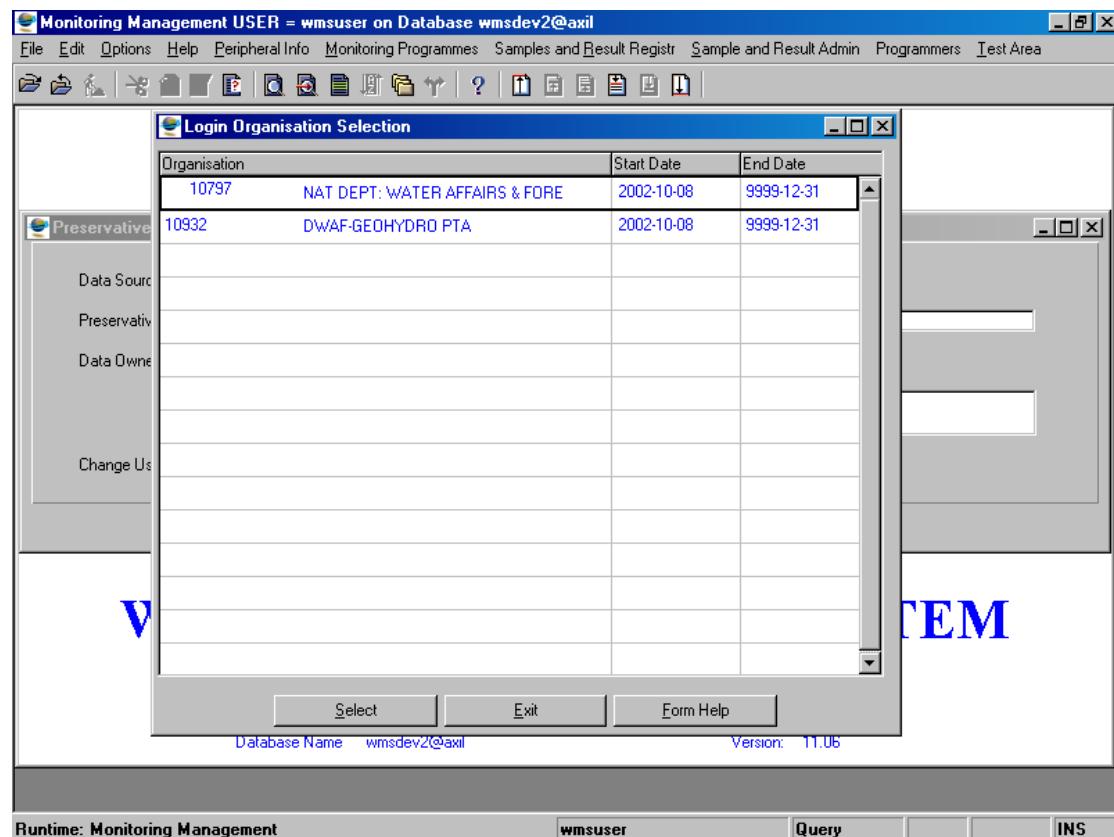
6.7 The **Data Owner Name** will be automatically displayed.

6.8 Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

6.9 The **Change User Organisation Name** will be automatically displayed.

6.10 Click on the **Next** button to open the **Preservative Reference Maintenance** form.

6.11 To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

6.12 Click on the **Create** button.

6.13 A new line displays to allow the addition of a new record.

6.14 Enter the **Data Source ID** or click on the **ZOOM** **Zoom** button to open a **System Datasource Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

6.15 The **Data Source Name** will be automatically displayed.

6.16 Enter the **Reference Code**.

6.17 Enter the **Preservative ID** or click on the **ZOOM** **Zoom** button to open the **Preservative Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
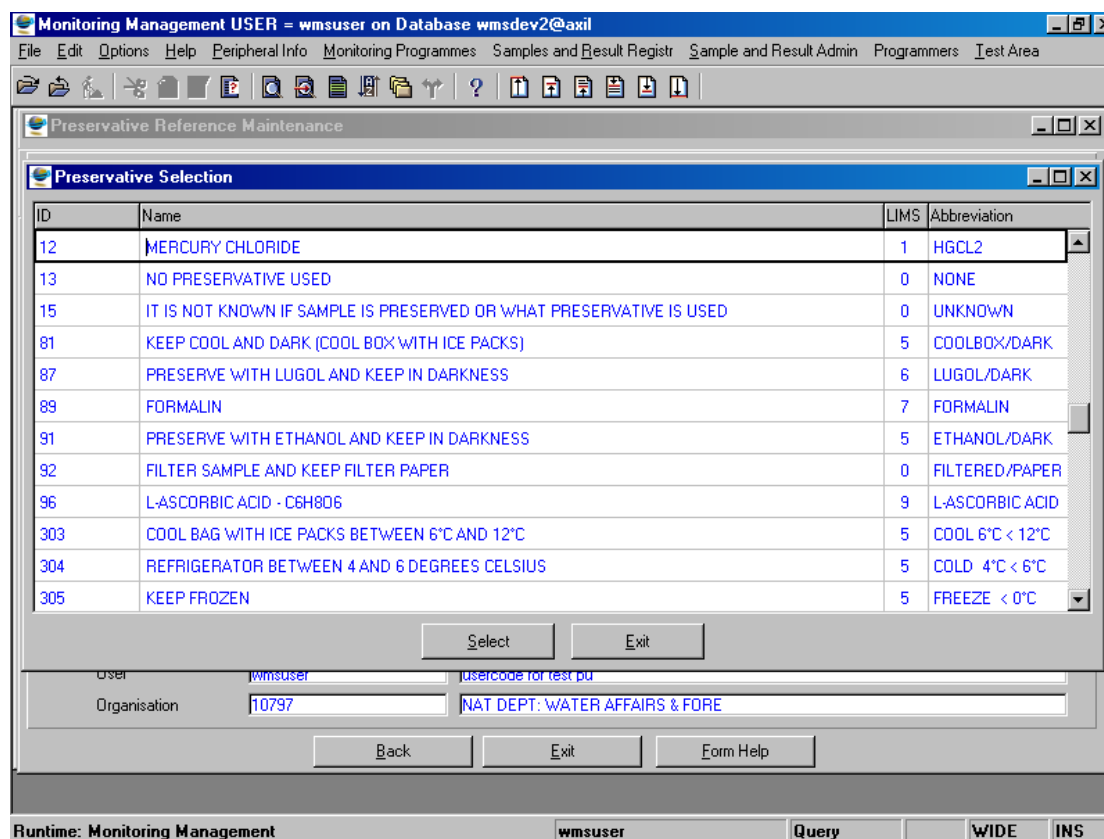
6.18   The **Preservative Abbreviation** and **Preservative Name** will be automatically displayed.

6.19   The **Data Owner Organisation ID** will be automatically updated with the Login Organisation ID. *Note: The Data Owner Organisation ID can be changed by entering the ID or clicking on the Zoom button to open the Login Organisation Selection form, and selecting the applicable record by clicking on the Select button.*

6.20   Check the **Current Indicator** to indicate that the variable is being currently used.

6.21   The **Used Indicator** will be automatically updated when the record is used.

6.22   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. *Note: The Change Date, Change User and the Change Organisation will be automatically updated by the system.*

6.23   Click on the **Back** button to go to the previous form.

6.24   Click on the **Exit** button to exit the form.

7. How to Perform the Calculation Method External Reference:

7.1 Select Calculation Method Reference from the menu to open the Calculation Method Reference Filter Criteria Wizard form.

7.2 Enter the **Data Source** or click on the ZOOM **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

7.3   The **Datasource Name** will be automatically displayed.

7.4   Enter the **Calculation Method** or click on the **ZOOM** **Zoom** button to open the
       Calculation Method Selection form, select the applicable record and click on the
       Select **Select** button to return your selection.
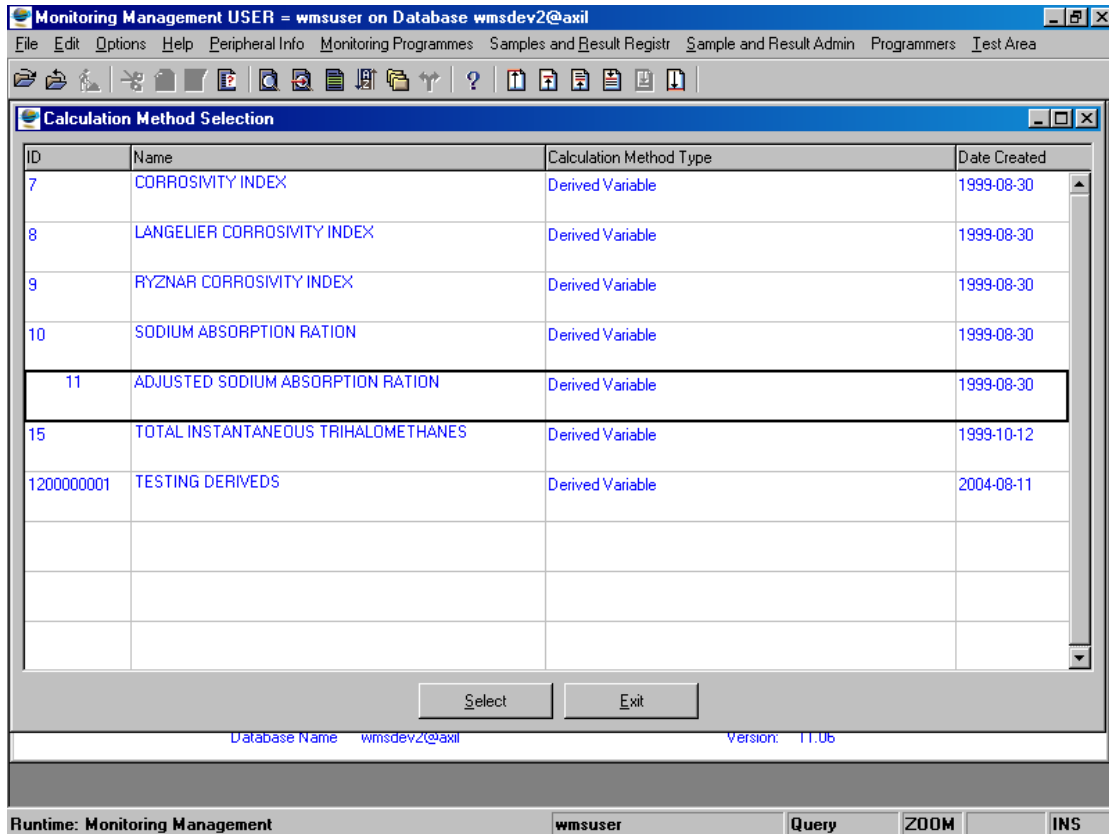
7.5   The **Calculation Method Name** will be automatically displayed.

7.6   Enter the **Data Owner** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
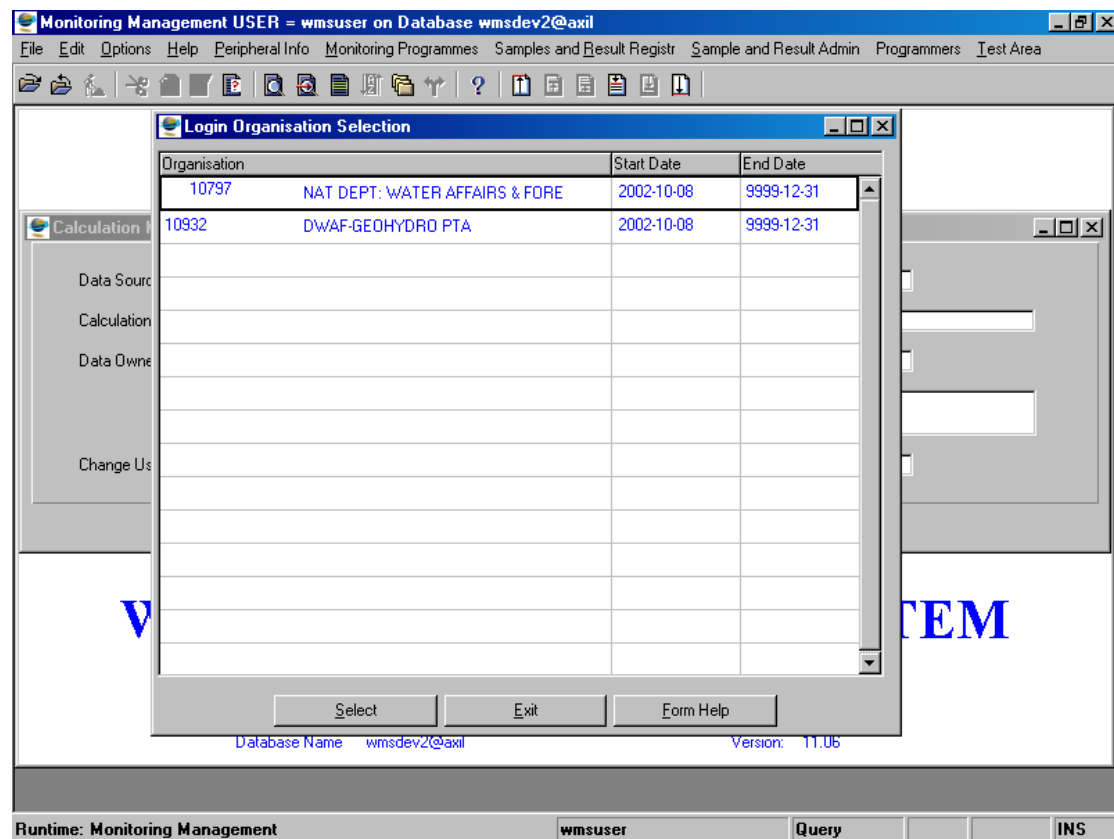
7.7   The **Data Owner Name** will be automatically displayed.

7.8   Enter the **Change User Organisation** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

7.9   The **Change User Name** will be automatically displayed.

7.10   Click on the **Next** button to open the **Calculation Method Reference Maintenance** form.

7.11   To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

7.12   Click on the **Create** button.

7.13   A new line displays to allow the addition of a new record.

7.14   Enter the **Data Source ID** or click on the **ZOOM** **Zoom** button to open a **System Datasource Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

7.15   The **Data Source Name** will be automatically updated.

7.16   Enter the **Reference Code**.

7.17   Enter the **Calculation Method ID** or click on the **ZOOM** **Zoom** button to open the **Calculation Method Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
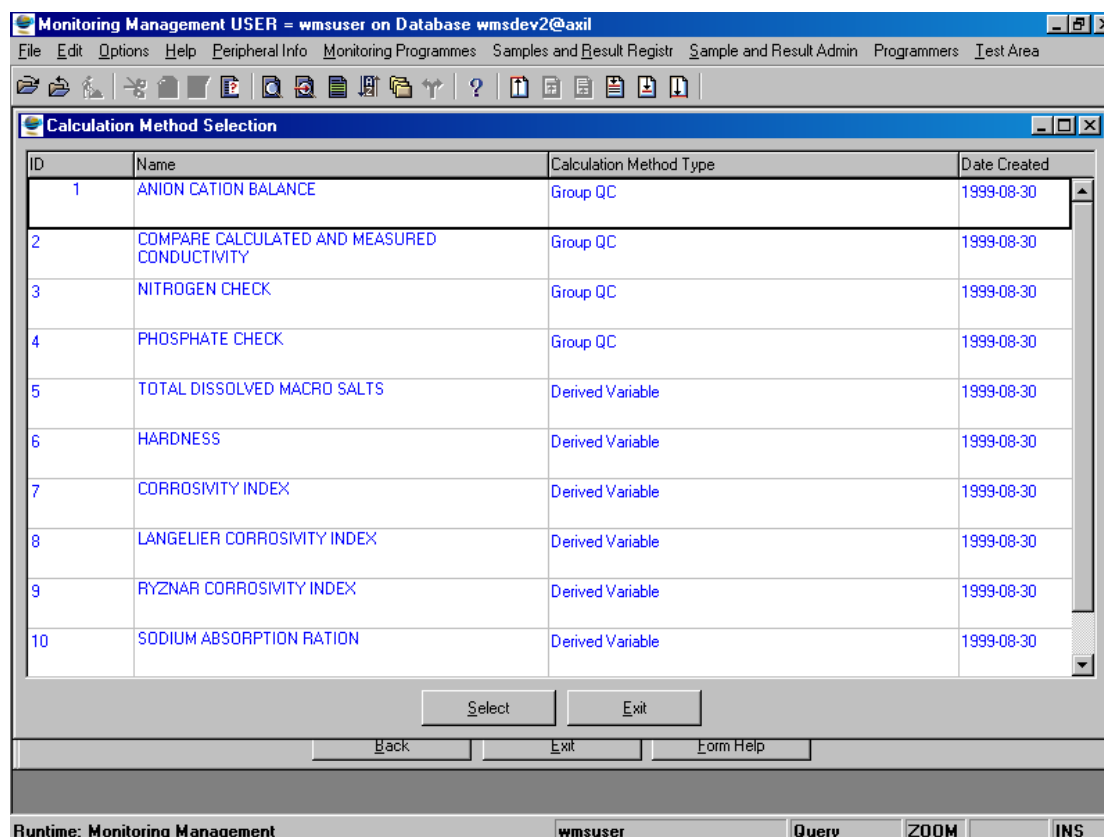
7.18 The **Calculation Method Description** will be automatically displayed.

7.19 The **Data Owner Organisation ID** will be automatically updated with the Login Organisation ID. *Note: The Data Owner Organisation ID can be changed by entering the ID or clicking on the Zoom button to open the Login Organisation Selection form, and selecting the applicable record by clicking on the Select button.*

7.20 Check the **Current Indicator** to indicate that the variable is being currently used.

7.21 The **Used Indicator** will be automatically updated with the record used.

7.22 The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. *Note: The Change Date, Change User and the Change Organisation will be automatically updated by the system.*

7.23 Click on the **Back** button to go to the previous form.

7.24 Click on the **Exit** button to exit the form.

8.   How to Perform the Monitoring Action External Reference:

8.1   Select **Monitoring Action Reference** from the menu to open the **Monitoring Action Reference Filter Criteria Wizard** form.

8.2   Enter the **Data Source** or click on the ZOOM **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

8.3 The **Datasource Name** will be automatically displayed.

8.4 Enter the **Monitoring Action** or click on the **ZOOM** **Zoom** button to open the **Monitoring Action Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
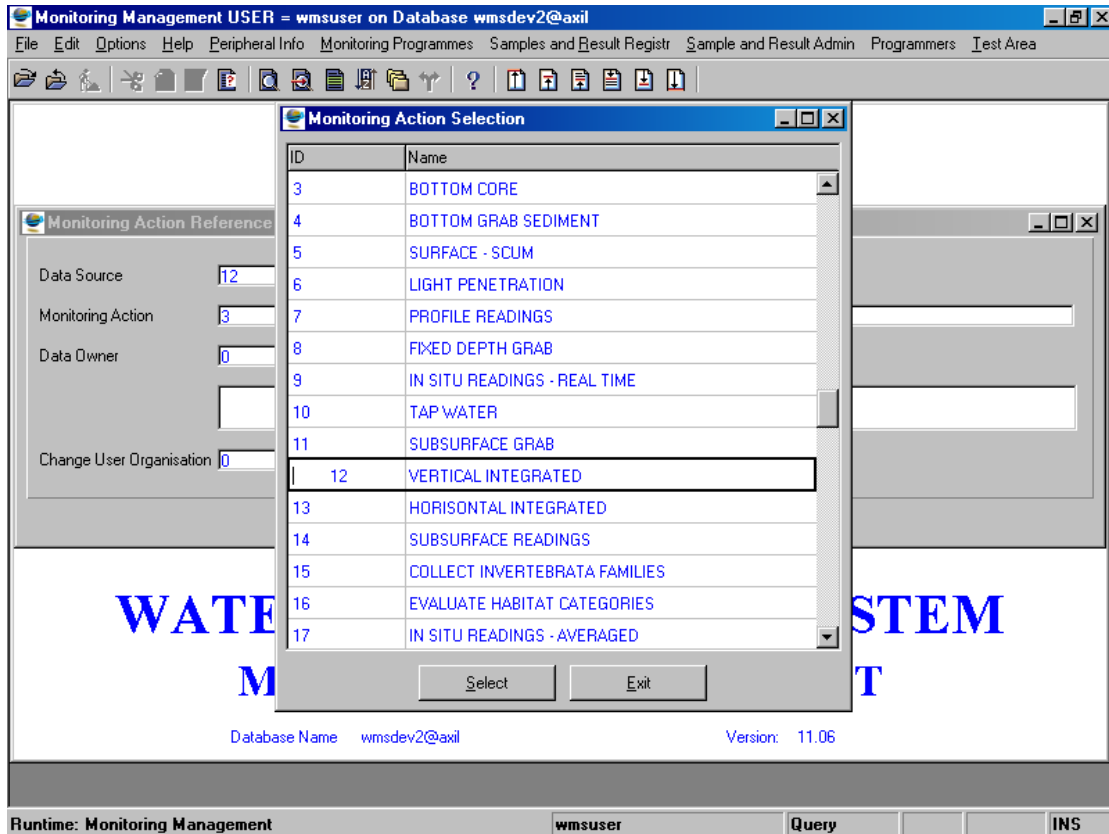
8.5   The **Monitoring Action Name** will be automatically displayed.

8.6   Enter the **Data Owner** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
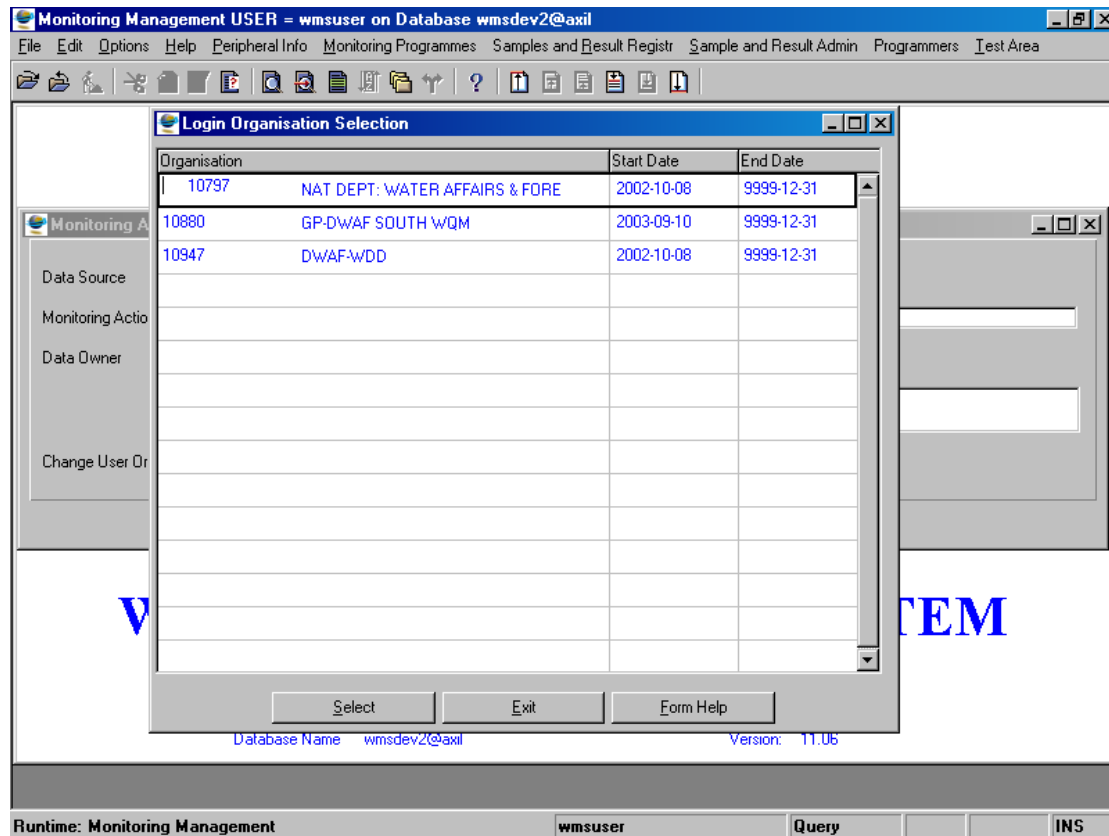
8.7   The **Data Owner Name** will be automatically displayed.

8.8   Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

8.9   The **Change User Name** will be automatically updated.

8.10   Click on the **Next** button to open the **Monitoring Action Reference Maintenance** form.

8.11 To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

8.12 Click on the 🗋**Create** button.

8.13 A new line displays to allow the addition of a new record.

8.14 Enter the **Data Source ID** or click on the ZOOM **Zoom** button to open a **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

8.15 The **Data Source Name** will be automatically displayed.

8.16 Enter the **Reference Code**.

8.17 Enter the **Monitoring Action ID** or click on the ZOOM **Zoom** button to open the **Monitoring Action Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
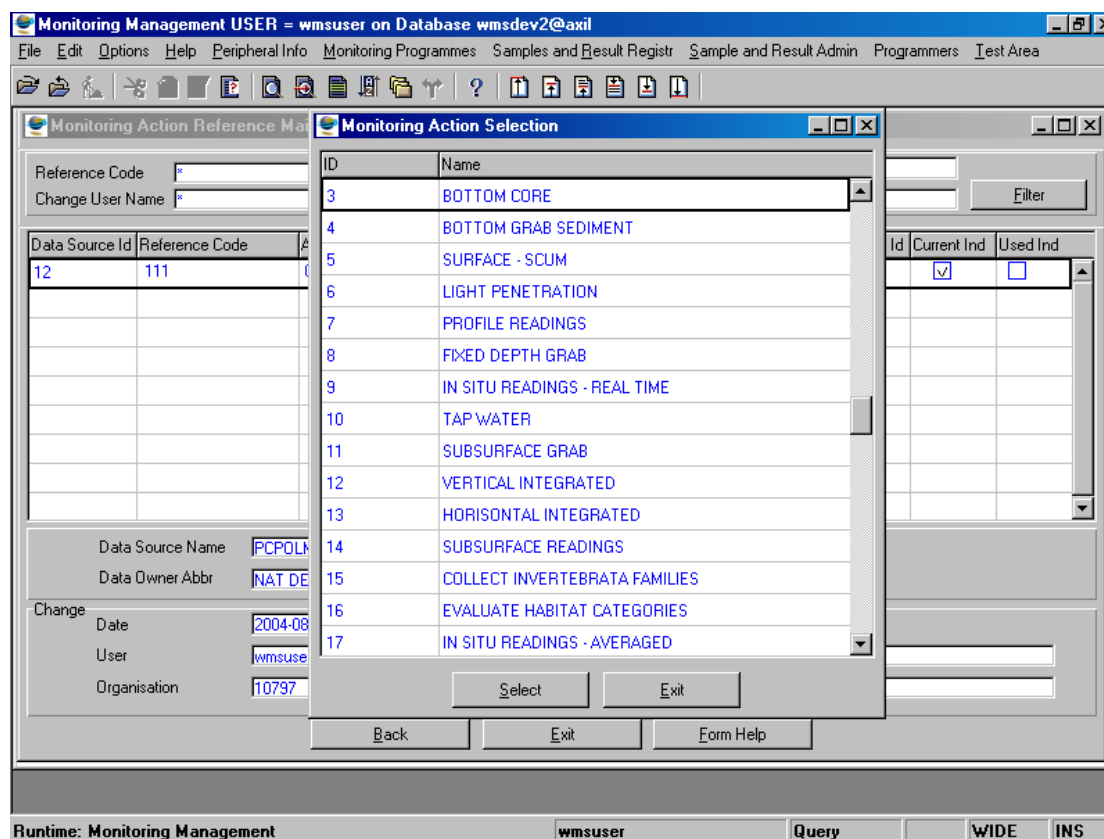
8.18   The **Monitoring Action Name** will be automatically displayed.

8.19   The **Data Owner Organisation ID** will be automatically updated with the Login
        Organisation ID. *Note: The Data Owner Organisation ID can be changed by
        entering the ID or clicking on the Zoom button to open the Login Organisation
        Selection form, and selecting the applicable record by clicking on the Select button.*

8.20   Check the **Current Indicator** to indicate that the variable is being currently used.

8.21   Check the **Used Indicator** checkbox to indicate that the variable has been used
        already.

8.22   The **Used Indicator** will be automatically updated when the record is used.

8.23   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically
        displayed. *Note: The **Change Date**, **Change User** and the **Change Organisation**
        will be automatically updated by the system.*

8.24   Click on the **Back** button to go to the previous form.

8.25   Click on the **Exit** button to exit the form.

9. How to Perform the Multiple Monitoring Variable Parameter External Reference:

9.1   Select **Multiple Monitoring Variable Parameter Reference** from the menu to open the **Multiple Monitoring Variable Reference Filter Criteria Wizard** form.

9.2   Enter the **Data Source** or click on the ZOOM **Zoom** button to open the **System Datasource Selection** form, select the applicable record and click on the Select **Select** button to return your selection.

9.3   The **Datasource Name** will be automatically displayed.

9.4   Enter the **Multiple Monitoring Variable Parameter** or click on the **ZOOM** **Zoom**
        button to open the **Multiple Monitoring Parameter Selection** form, select the
        applicable record and click on the [Select] **Select** button to return your selection.
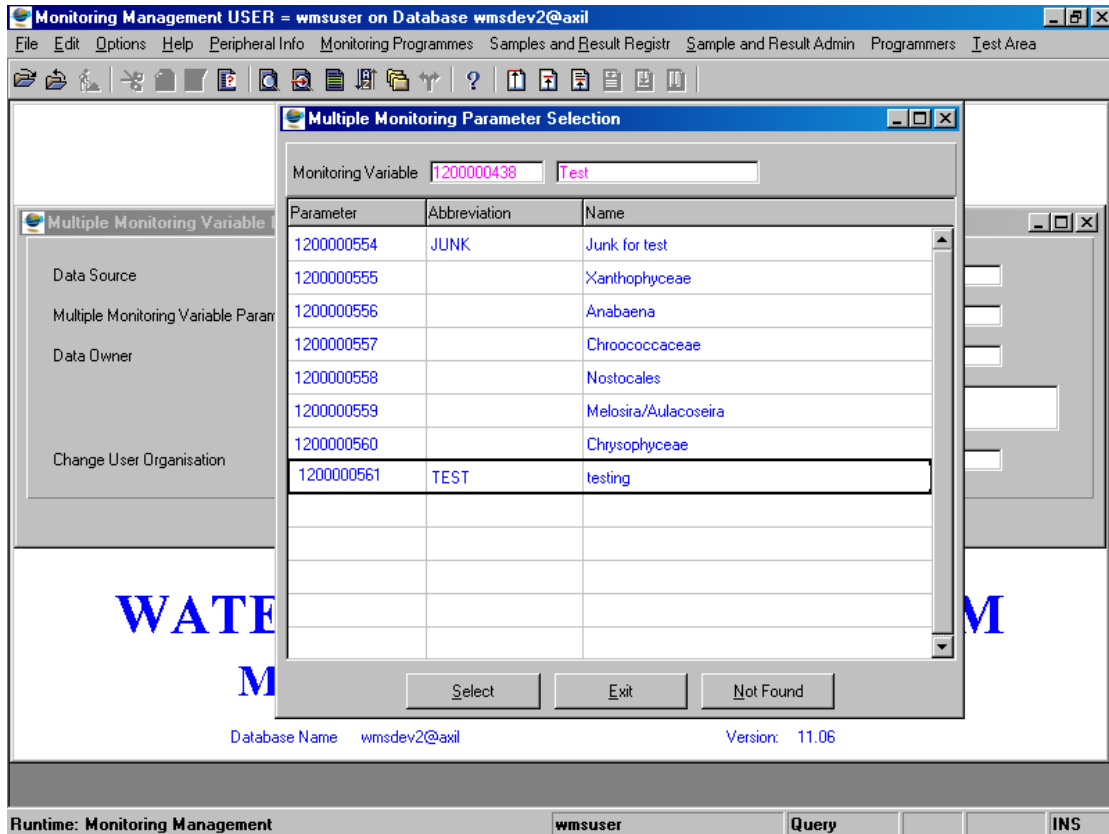
9.5 The **Multiple Monitoring Variable Parameter Name** will be automatically displayed.

9.6 Enter the **Data Owner** or click on the `ZOOM` **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the `Select` **Select** button to return your selection.

839
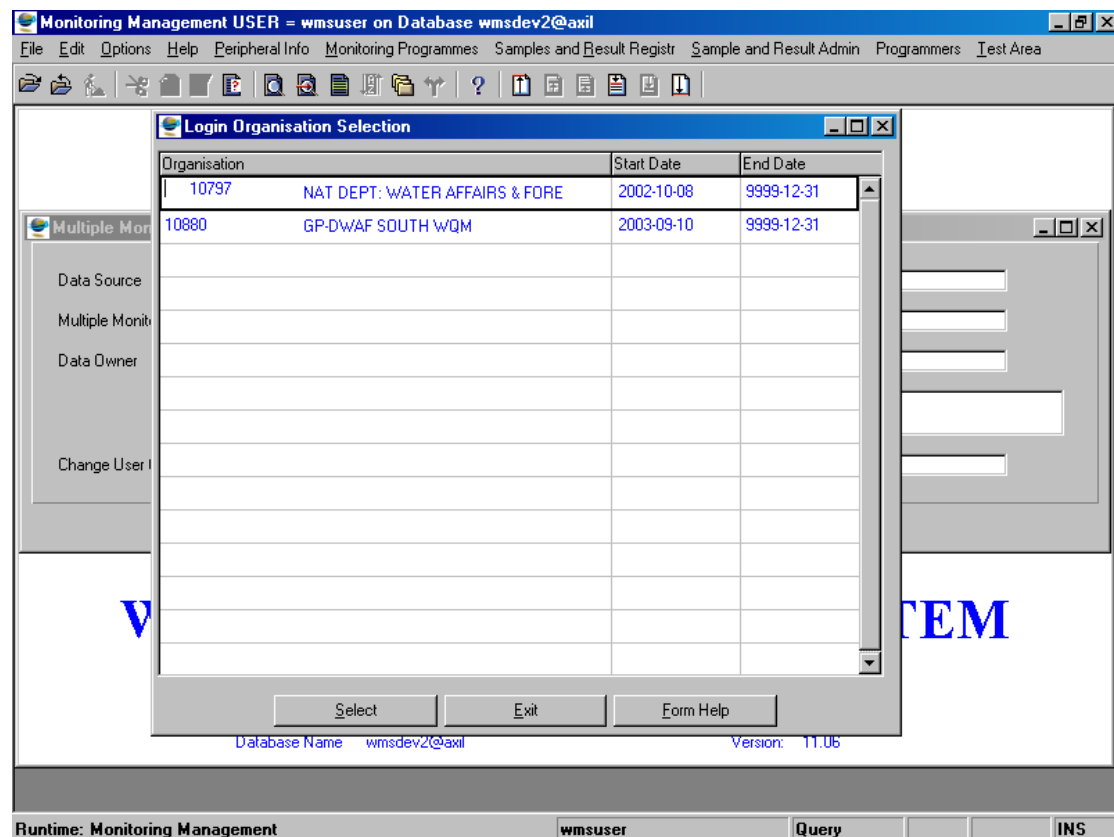
9.7 The **Data Owner Name** will be automatically displayed.

9.8 Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

9.9 The **Change User Name** will be automatically displayed.

9.10 Click on the **Next** button to open the **Multiple Monitoring Variable Reference Maintenance** form.

9.11   To **Search** for existing records, enter the **Reference Code**, the **Change User Name**, the **Change User Login** or the **Change User Abbreviation**, and click on the **Filter** button to locate the applicable record(s).

9.12   Click on the [icon]**Create** button.

9.13   A new line displays to allow the addition of a new record.

9.14   Enter the **Data Source ID** or click on the **ZOOM** **Zoom** button to open a **System Datasource Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.

9.15   The **Data Source Name** will be automatically displayed.

9.16   Enter the **Reference Code**.

9.17   Enter the **Parameter ID** or click on the **ZOOM** **Zoom** button to open the **Multiple Monitoring Parameter Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection.
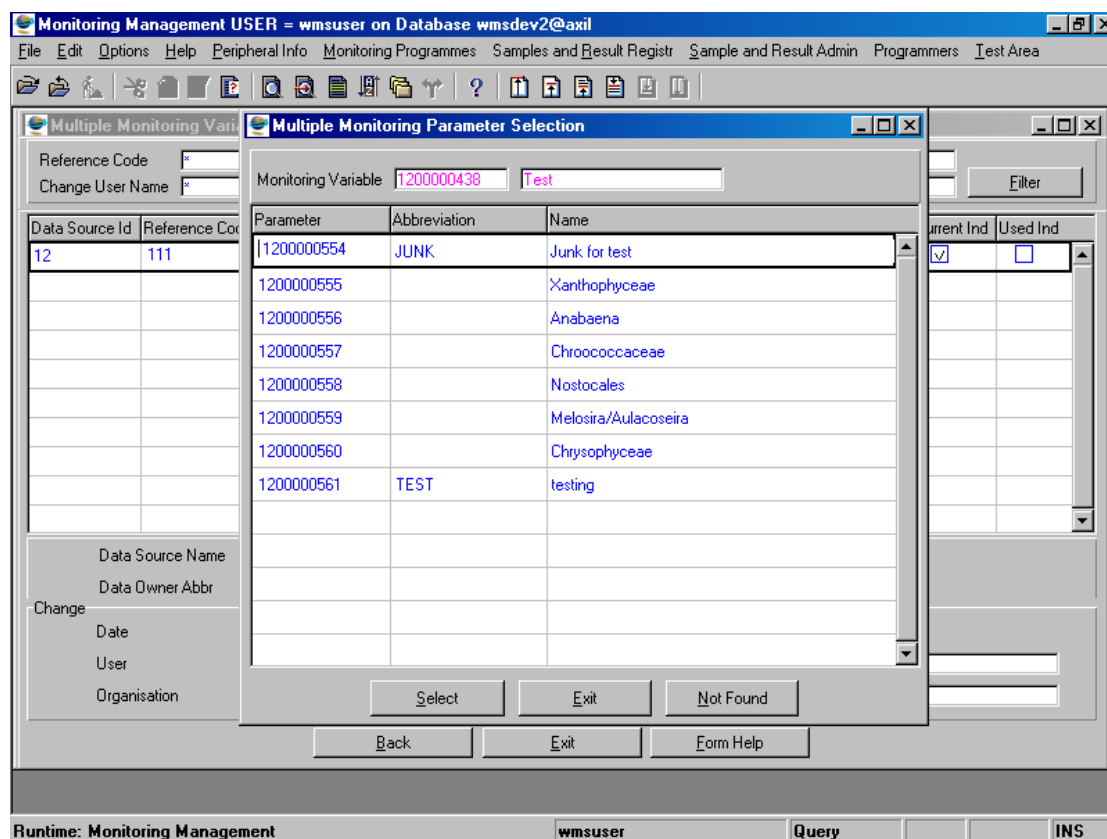
9.18   The **Multiple Monitoring Variable Parameter Description** will be automatically displayed.

9.19   The **Data Owner Organisation ID** will be automatically updated with the Login Organisation ID. *Note: The Data Owner Organisation ID can be changed by entering the ID or clicking on the Zoom button to open the Login Organisation Selection form, and selecting the applicable record by clicking on the Select button.*

9.20   Check the **Current Indicator** to indicate that the variable is being currently used.

9.21   The **Used Indicator** will be automatically updated when the last record is used.

9.22   Check the **Used Indicator** checkbox to indicate that the variable has been used already.

9.23   The **Datasource Name** and the **Data Owner Name Abbreviation** will be automatically displayed. *Note: The **Change Date**, **Change User** and the **Change Organisation** will be automatically updated by the system.*

9.24   Click on the **Back** button to go to the previous form.

9.25   Click on the **Exit** button to exit the form.

10. How to Map Variable Reference to Measuring Unit Reference Maintenance:

10.1 Select **Map Variable Reference to Measuring Unit Reference Maintenance** from the menu to open the **Map Variable Reference to Measuring Unit Reference Maintenance** form.

10.2 To **Search** for records, enter the **Monitoring Variable Reference Code** and/or the **Measuring Unit Reference Code** and click on the **Filter** button.

10.3 Click on the ![Create] **Create** button.

10.4 A new line displays to allow the addition of a new record.

10.5 Enter the **Import Format ID** or click on the **ZOOM** **Zoom** button to open the **Format Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

843
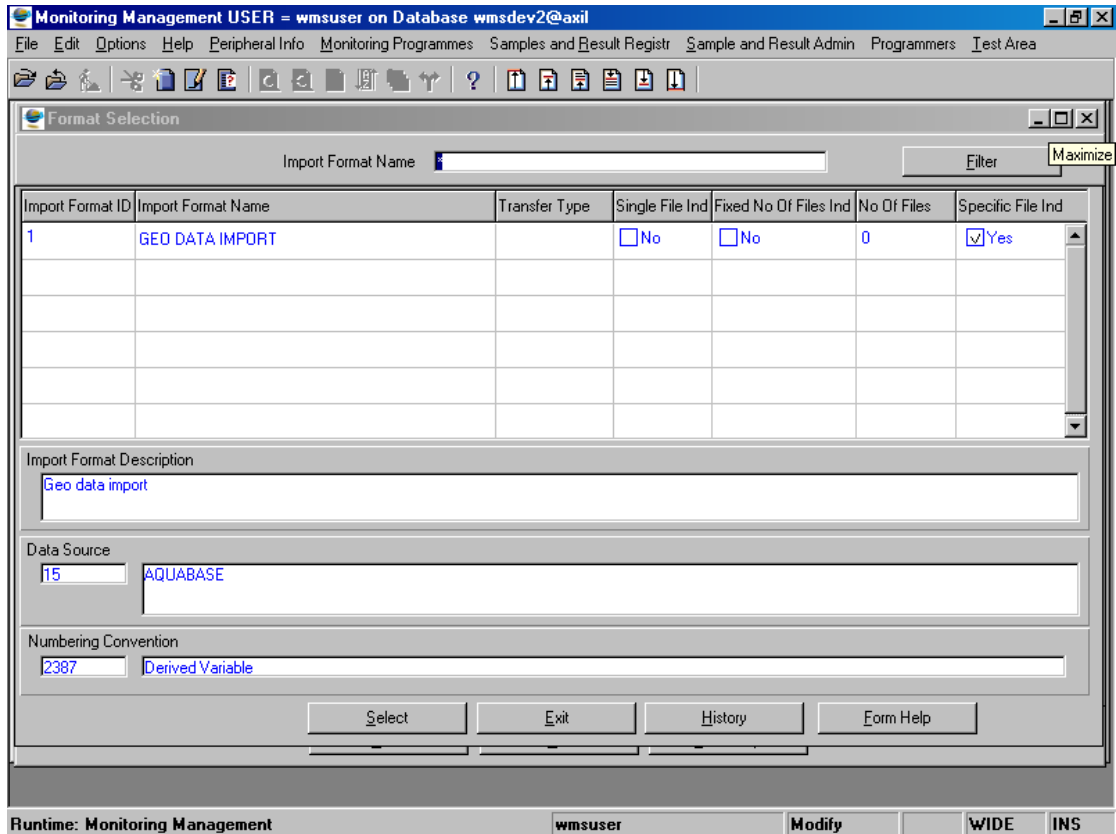
10.6   The **Import Format Name** will be automatically displayed.

10.7   Enter the **Monitoring Variable Reference Code** or click on the **ZOOM** **Zoom** button
        to open the **Monitoring Variable Reference Selection** form, select the applicable
        record and click on the [Select] **Select** button to return your selection.

10.8 Enter the **Measuring Unit Reference Code** or click on the `ZOOM` **Zoom** button to open the **Measuring Unit Reference Selection** form, select the applicable record and click on the `Select` **Select** button to return your selection.

10.9 Click on the **Exit** button to close the form.

General Assessment Category Maintenance

Introduction:

The General Assessment Category Maintenance module enables the user to maintain General Assessment Category

Business Rules:

i.   Only the Central Database Administrator has the rights to insert, update and delete records. Other users only have view rights.

Path:

1.1.   Select **Peripheral Info** from the Monitoring Management menu bar.

1.2.   Select **Assessment Category** from the drop down menu.

1.3.   Select **General Assessment Category Maintenance** from the sub menu

1.4.   This will open the **General Assessment Category Maintenance Decision Wizard**.

How to Search for General Assessment Category:

2.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Assessment Category Maintenance** from the sub menu. This will open **General Assessment Category Maintenance Decision Wizard.**

2.2.   Click the **Next** button to open the **General Assessment Category Filter Criteria Wizard**

2.3.   On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Assessment Category

2.4.   Enter the **Category ID** or click on the **ZOOM** **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.5.   The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID.

2.6.   The **Sub-Category Name** of the Assessment Category will be automatically displayed.

*Note: the **Back** button will return to the previous form*

2.7. Click the **Next** button to open the **General Assessment Category Maintenance** form displaying the assessment category records according to the filter criteria

2.8. Click on the **Exit** button to exit the form

How To Add General Assessment Category:

3.1. Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Assessment Category Maintenance** from the sub menu. This will open **General Assessment Category Maintenance Decision Wizard.** Click the **Next** button to open the **General Assessment Category Filter Criteria Wizard**

3.2. Select the **Next** button from the **General Assessment Category Filter Criteria Wizard**

This will open the General Assessment Category Maintenance

To search for existing records, enter the **Category or Sub-Category Name** and click on the **Filter** button to filter the records accordingly.

3.3.　If the Record is not available, click on the **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.4.　The **Category Id** will automatically displayed, as is a system-generated value.

Note: Category Id will only be generated once the record has been created

3.5.　Enter the **Category Name** and tab.

3.6.　Enter the **Sub-Category** Name and tab

3.7.　Click on the **Assessment Type** field **Drop Down** button and select the General Assessment Type.

3.8.　Tab to accept the newly created record

3.9.　Click F10 or the **Exit** button to exit the form

How to Edit the Result Quality Control Method:

Note: Only the Central Database Administrator can EDIT the records. Other users only have view rights.

4.1.　Click on the record to be edited to highlight it, and click on the Modify Records button.

4.2.　Click on the field to be edited to highlight it

4.3.　Edit the record as required.

4.4.　Click on another record to accept the newly modified record.

How to Delete the Result Quality Control Method:

Note: Only the Central Database Administrator can Delete the records.

5.1.   Click on the record to be deleted, to highlight it.

5.2.   Click on the ✂ Delete button. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3.   A confirmation message will be displayed asking if you would like to delete the record

5.4.   Click on the **OK** option to confirm the deletion

Evaluation Classification Maintenance

Introduction:

The Evaluation Classification Maintenance module enables the user to maintain Evaluation Classification

Business Rules:

i. Only the Central Database Administrator has the rights to insert, update and delete records. Other users only have view rights.

Path:

1.1. Select **Peripheral Info** from the Monitoring Management menu bar.

1.2. Select **Assessment Category** from the drop down menu.

1.3. Select **Evaluation Classification Maintenance** from the sub menu

1.4. This will open the **Evaluation Classification Maintenance Decision Wizard**.

How to Search for General Assessment Category:

2.1.　Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **Evaluation Classification Maintenance** from the sub menu. This will open **Evaluation Classification Maintenance Decision Wizard.**

2.2.　Click the **Next** button to open the **Evaluation Classification Filter Criteria Wizard**

2.3.　On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of Evaluation Classification

2.4.　Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open the **Evaluation Classification Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.5.　The **Evaluation Name** of the Assessment Category will be automatically displayed as it is linked to the Evaluation Classification ID.

2.6.　The **Evaluation Class** will be automatically displayed.

852

2.7.   The **Evaluation Colour** will be automatically displayed

🔲*Note: the **Back** button will return to the previous form*

2.8.   Click the **Next** button to open the **Evaluation Classification Maintenance** form
        displaying the assessment category records according to the filter criteria

ID	Evaluation Name	Evaluation Class	Evaluation Colour	Assessment Type
200000004	DATA FOR EVALUATIONS	4	Red	Compliance
200000005	TEST THE DATA	C	Blue	Compliance
200000007	KGKGJGJ	2	Blue	Risk

Evaluation Name: [*]   Filter

Back   Exit   Maintenance   Form Help

2.9.   Click on the **Exit** button to exit the form

How To Add General Assessment Category:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select
        Assessment Category from the drop down menu. Select **Evaluation Classification
        Maintenance** from the sub menu. This will open **Evaluation Classification
        Maintenance Decision Wizard.** Click the **Next** button to open the **Evaluation
        Classification Filter Criteria Wizard**

3.2.   Select the **Next** button from the **Evaluation Classification Filter Criteria Wizard**

This will open the Evaluation Classification Maintenance

To search for existing records, enter the **Evaluation Name** and click on the **Filter** button to filter the records accordingly.

3.3.   If the Record is not available, click on the [icon] **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.4.   The **Evaluation Classification Id** will automatically displayed, as is a system-generated value. [icon] *Note: Category Id will only be generated once the record has been created*

3.5.   Enter the **Evaluation Name** and tab.

3.6.   Enter the **Evaluation Class** and tab

3.7.   Enter the **Evaluation Colour** and tab

3.8.   Click on the **Assessment Type** field [icon] **Drop Down** button and select the General Assessment Type.

3.9.   Tab to accept the newly created record

Click F10 or the Exit button to exit the form

 How to Edit the Result Quality Control Method:

[icon] *Note: Only the Central Database Administrator can EDIT the records. Other users only have view rights.*

4.1.   Click on the record to be edited to highlight it, and click on the [icon] Modify Records button.

854

4.2.   Click on the field to be edited to highlight it

4.3.   Edit the record as required.

4.4.   Click on another record to accept the newly modified record.

How to Delete the Result Quality Control Method:

Note: Only the Central Database Administrator can Delete the records.

5.1.   Click on the record to be deleted, to highlight it.

5.2.   Click on the Delete button. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3.   A confirmation message will be displayed asking if you would like to delete the record

5.4.   Click on the **OK** option to confirm the deletion

General Guidelines and Standards Range Maintenance

Introduction:

The General Guidelines and Standards Range Maintenance module enables the user to maintain General Guidelines and Standards Range information

Business Rules:

i.   Only the Central Database Administrator has the rights to insert, update and delete records. Other users only have view rights.

Path:

1.1.   Select **Peripheral Info** from the Monitoring Management menu bar.

1.2.   Select **Assessment Category** from the drop down menu.

1.3.   Select **General Guidelines and Standards Range Maintenance** from the sub menu

1.4.   This will open the **General Guidelines and Standards Range Maintenance Decision Wizard** with the following option:

- **General Guidelines and Standards Single Range Filter Criteria**

- **General Guidelines and Standards Multiple Range Filter Criteria**

- **General Guidelines and Standards Survey Range Filter Criteria**

- **General Guidelines and Standards Single Range History Filter Criteria**

- **General Guidelines and Standards Multiple Range History Filter Criteria**

- **General Guidelines and Standards Survey Range History Filter Criteria**

General Guidelines and Standards Range Maintenance Decision Criter... ▭ ▫ ✕

○ General Guidelines Single Range Filter Criteria

○ General Guidelines Multiple Range Filter Criteria

○ General Guidelines Survey Range Filter Criteria

○ General Guidelines Single Range History Filter Criteria

○ General Guidelines Multiple Range History Filter Criteria

○ General Guidelines Survey Range History Filter Criteria

| Next | Exit | Form Help |

How to Search for Value Range using the General Guidelines and Standards Single Range Filter Criteria:

2.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

2.2.   Select the **General Guidelines and Standards Single Range Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Single Range Filter Criteria Wizard**

2.3.   On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Guidelines and Standards Range

2.4.   Enter the **Single Range ID** or click on the ZOOM **Zoom** button to open the **General Guidelines and Standards Single Range Selection** form and select the required Category then click on the Select **Select** button to return your selection.

2.5.   The **Interpretation** will be automatically displayed as it is linked to the Single Range ID.

2.6.   Enter the **Category ID** or click on the `ZOOM` **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the `Select` **Select** button to return your selection.

2.7.　The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID

2.8.　Enter the **Evaluation Classification ID** or click on the ZOOM **Zoom** button to open the **Evaluation Classification Selection** form and select the required Evaluation Classification then click on the [Select] **Select** button to return your selection.

ID	Evaluation Name	Evaluation Class	Evaluation Colour	Assessment Type
200000004	DATA FOR EVALUATIONS	4	Red	Compliance
200000005	TEST THE DATA	C	Blue	Compliance
200000007	KGKGJGJ	2	Blue	Risk

Evaluation Classification Selection

Evaluation Name [*]　　　　Filter

Select　　Exit　　Form Help

2.9.　The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

2.10.　Enter the **Monitoring Variable Id** or click on the ZOOM **Zoom** button to open the **Monitoring Variable Selection** form and select the required Monitoring Variable then click on the [Select] **Select** button to return your selection.

860

2.11. The **Monitoring Variable Abbreviation** and **Monitoring Variable Name** will be automatically displayed as they are linked to the Monitoring Variable ID

2.12. Enter the **Multimedia Id** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the **Select** button to return your selection.

2.13. The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

 *Note: the **Back** button will return to the previous form*

2.14.   Click the **Next** button to open the **General Guidelines and Standards Single Range Maintenance** form displaying the General Guidelines and Standards Single Range records according to the filter criteria

2.15.   Click on the **Exit** button to exit the form

How to Search for Value Range using the General Guidelines and Standards Multiple Range Filter Criteria:

2.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

2.2.   Select the **General Guidelines and Standards Multiple Range Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Multiple Range Filter Criteria Wizard**

2.3.   On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Guidelines and Standards Range

2.4.   Enter the **Multiple Range ID** or click on the **ZOOM** Zoom button to open the **General Guidelines and Standards Multiple Range Selection** form and select the required Category then click on the **Select** Select button to return your selection.

2.5.   The **Interpretation** will be automatically displayed as it is linked to the Multiple Range ID.

2.6.   Enter the **Category ID** or click on the **ZOOM** Zoom button to open the **Assessment Category Selection** form and select the required Category then click on the **Select** Select button to return your selection.

2.7.   The **Category Name** of the Assessment Category will be automatically displayed as
        it is linked to the Category ID

2.8.   Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open
        the **Evaluation Classification Selection** form and select the required Evaluation

        Classification then click on the ⟦ Select ⟧ **Select** button to return your selection.

2.9. The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

2.10. Enter the **Multiple Variable Parameter Id** or click on the [ZOOM] **Zoom** button to open the **Multiple Variable Parameter Selection** form and select the required Monitoring Variable then click on the [Select] **Select** button to return your selection.

2.11. The **Multiple Variable Parameter Abbreviation** will be automatically displayed as it is linked to the Multiple Variable Parameter ID

2.12. Enter the **Multimedia Id** or click on the [ZOOM] **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the [Select] **Select** button to return your selection.

2.13. The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

Note: the Back button will return to the previous form

2.14. Click the **Next** button to open the **General Guidelines and Standards Multiple Range Maintenance** form displaying the General Guidelines and Standards Multiple Range records according to the filter criteria

2.15. Click on the **Exit** button to exit the form

How to Search for Value Range using the General Guidelines and Standards Survey Range Filter Criteria:

2.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

2.2.   Select the **General Guidelines and Standards Survey Range Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Survey Range Filter Criteria Wizard**

2.3.   On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Guidelines and Standards Range

2.4.   Enter the **Survey Range ID** or click on the **ZOOM** **Zoom** button to open the **General Guidelines and Standards Survey Range Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.5.   The **Interpretation** will be automatically displayed as it is linked to the Survey Range ID.

2.6.   Enter the **Category ID** or click on the **ZOOM** **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the **Select** button to return your selection.

2.7.   The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID

2.8.   Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open the **Evaluation Classification Selection** form and select the required Evaluation Classification then click on the **Select** **Select** button to return your selection.

ID	Evaluation Name	Evaluation Class	Evaluation Colour	Assessment Type
200000004	DATA FOR EVALUATIONS	4	Red	Compliance
200000005	TEST THE DATA	C	Blue	Compliance
200000007	KGKGJGJ	2	Blue	Risk

Evaluation Classification Selection

Evaluation Name [*]   Filter

Select   Exit   Form Help

2.9.   The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

2.10.   Enter the **Survey Variable Parameter Id** or click on the **ZOOM** **Zoom** button to open the **Survey Variable Parameter Selection** form and select the required Monitoring Variable then click on the **Select** **Select** button to return your selection.

2.11. The **Survey Variable Parameter Abbreviation** will be automatically displayed as it is linked to the Survey Variable Parameter ID

2.12. Enter the **Multimedia Id** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the **Select** **Select** button to return your selection.

2.13. The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

870

*Note: the **Back** button will return to the previous form*

2.14.   Click the **Next** button to open the **General Guidelines and Standards Survey Range Maintenance** form displaying the General Guidelines and Standards Survey Range records according to the filter criteria

2.15.   Click on the **Exit** button to exit the form

How to Search for Value Range using the General Guidelines and Standards Single Range History Filter Criteria:

2.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

2.2.   Select the **General Guidelines and Standards Single Range History Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Single Range History Filter Criteria Wizard**

2.3.   On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Guidelines and Standards Range

2.4.   Enter the **Single Range ID** or click on the **ZOOM** **Zoom** button to open the **General Guidelines and Standards Single Range History Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.5.   The **Interpretation** will be automatically displayed as it is linked to the Single Range ID.

2.6.   Enter the **Category ID** or click on the **ZOOM** **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.7.   The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID

2.8.   Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open the **Evaluation Classification Selection** form and select the required Evaluation Classification then click on the **Select** **Select** button to return your selection.

2.9.   The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

2.10.   Enter the **Monitoring Variable Id** or click on the ZOOM **Zoom** button to open the **Monitoring Variable Selection** form and select the required Monitoring Variable then click on the [Select] **Select** button to return your selection.

2.11.   The **Monitoring Variable Abbreviation** and **Monitoring Variable Name** will be automatically displayed as they are linked to the Monitoring Variable ID

2.12.   Enter the **Multimedia Id** or click on the ZOOM **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the [Select] **Select** button to return your selection.

2.13.   The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

2.14.   Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form and select the required Organisation then click on the **Select** **Select** button to return your selection.

2.15. The **Change User Organisation Abbreviation** and **Change User Organisation Name** will be automatically displayed as it is linked to the Multimedia ID

 Note: *the **Back** button will return to the previous form*

2.16. Click the **Next** button to open the **General Guidelines and Standards Single Range History View** form displaying the General Guidelines and Standards Single Range History records according to the filter criteria

2.17. Click on the **Exit** button to exit the form

How to Search for Value Range using the General Guidelines and Standards Multiple Range History Filter Criteria:

2.1. Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

2.2. Select the **General Guidelines and Standards Multiple Range History Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Multiple Range History Filter Criteria Wizard**

2.3.   On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Guidelines and Standards Range

2.4.   Enter the **Multiple Range ID** or click on the **ZOOM** **Zoom** button to open the **General Guidelines and Standards Multiple Range History Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.5.   The **Interpretation** will be automatically displayed as it is linked to the Multiple Range ID.

2.6.   Enter the **Category ID** or click on the **ZOOM** **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

2.7.   The **Category Name** of the Assessment Category will be automatically displayed as
        it is linked to the Category ID

2.8.   Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open
        the **Evaluation Classification Selection** form and select the required Evaluation
        Classification then click on the **Select** **Select** button to return your selection.

2.9. The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

2.10. Enter the **Multiple Variable Parameter Id** or click on the **ZOOM** **Zoom** button to open the **Multiple Variable Parameter Selection** form and select the required Monitoring Variable then click on the [Select] **Select** button to return your selection.

2.11. The **Multiple Variable Parameter Abbreviation** will be automatically displayed as it is linked to the Multiple Variable Parameter ID

2.12. Enter the **Multimedia Id** or click on the **ZOOM** **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the [Select] **Select** button to return your selection.

2.13. The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

2.14. Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form and select the required Organisation then click on the **Select** **Select** button to return your selection.

2.15. The **Change User Organisation Abbreviation** and **Change User Organisation Name** will be automatically displayed as it is linked to the Multimedia ID

🔔 *Note: the **Back** button will return to the previous form*

2.16. Click the **Next** button to open the **General Guidelines and Standards Multiple Range History View** form displaying the General Guidelines and Standards Multiple Range History records according to the filter criteria

2.17. Click on the **Exit** button to exit the form

How to Search for Value Range using the General Guidelines and Standards Survey Range History Filter Criteria:

2.1. Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

2.2. Select the **General Guidelines and Standards Survey Range History Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Survey Range History Filter Criteria Wizard**

2.3. On the **Assessment Type**, click on the **Use, Compliance** or **Risk** option to filter out records associated with a selected type of General Guidelines and Standards Range

2.4. Enter the **Survey Range ID** or click on the `ZOOM` **Zoom** button to open the **General Guidelines and Standards Survey Range History Selection** form and select the required Category then click on the `Select` **Select** button to return your selection.

2.5. The **Interpretation** will be automatically displayed as it is linked to the Survey Range ID.

2.6. Enter the **Category ID** or click on the `ZOOM` **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the `Select` **Select** button to return your selection.

2.7. The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID

2.8. Enter the **Evaluation Classification ID** or click on the **ZOOM Zoom** button to open the **Evaluation Classification Selection** form and select the required Evaluation Classification then click on the **Select Select** button to return your selection.

2.9.   The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation
Classification ID

2.10.   Enter the **Survey Variable Parameter Id** or click on the **ZOOM** **Zoom** button to open
the **Survey Variable Parameter Selection** form and select the required Monitoring
Variable then click on the [**Select**] **Select** button to return your selection.

2.11.   The **Survey Variable Parameter Abbreviation** will be automatically displayed as it is
linked to the Survey Variable Parameter ID

2.12.   Enter the **Multimedia Id** or click on the **ZOOM** **Zoom** button to open the **Multimedia
Selection** form and select the required Multimedia then click on the
[**Select**] **Select** button to return your selection.

2.13. The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

2.14. Enter the **Change User Organisation** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form and select the required Organisation then click on the **Select** **Select** button to return your selection.

2.15.   The **Change User Organisation Abbreviation** and **Change User Organisation Name** will be automatically displayed as it is linked to the Multimedia ID

Note: *the **Back** button will return to the previous form*

2.16.   Click the **Next** button to open the **General Guidelines and Standards Survey Range History View** form displaying the General Guidelines and Standards Survey Range History records according to the filter criteria

2.17.   Click on the **Exit** button to exit the form

How To Add Single Range Record:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

3.2.   Select the **General Guidelines and Standards Single Range Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Single Range Filter Criteria Wizard**

3.3.   Click the **Next** button to open the **General Guidelines And Standards Single Range Maintenance Wizard**

886

Note: *To search for existing records, enter the **Interpretation** or **Interpretation Name** and click on the **Filter** button to filter the records accordingly*

3.4. If the Record is not available, click on the [icon] **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.5. The **Single Range Id** will automatically displayed, as is a system-generated value.

[icon] **Note: Single Id** *will only be generated once the record has been created*

3.6. Click on the **Assessment Type** field [icon] **Drop Down** button and select the General Assessment Type

3.7. Enter the **Category ID** or click on the **ZOOM** **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the **Select** **Select** button to return your selection.

3.8.   The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID

3.9.   Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open the **Evaluation Classification Selection** form and select the required Evaluation Classification then click on the **Select** **Select** button to return your selection.

3.10.   The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

3.11.   Enter the **Monitoring Variable Id** or click on the ZOOM **Zoom** button to open the **Monitoring Variable Selection** form and select the required Monitoring Variable then click on the ⬚ Select **Select** button to return your selection.

Mon Variable ID	Monitoring Variable Abbr	Variable Type ID	Variable Type Name	Variable Class ID	Type	Measuring Unit ID	Measure Unit Abbr
9	KJEL N-Tot-Water	2	TOTAL-WATER	2	Fundamental	102	mg/L
39	PO4-P-Diss-Water	3	DISSOLVED	2	Fundamental	102	mg/L

Monitoring Variable Class Id: 0
Monitoring Variable Type Id: 0
Measure Unit Id: 0
Std Monitoring Variable Id: 0
Filter

Mon Variable Abbr: *
Mon Variable Name: *
Filter

Monitoring Variable Name: KJELDAHL NITROGEN
Standard Monitoring Variable:

Select   Exit   Form Help

3.12.   The **Monitoring Variable Abbreviation** and **Monitoring Variable Name** will be automatically displayed as they are linked to the Monitoring Variable ID

Note: either the lower or the upper boundary should have a value, if you are entering a value for the upper boundary it should always be grater that the lower boundary

3.13.   Enter the **Lower boundary**

3.14.   Enter the **Upper boundary.**

3.15.   Enter the **Interpretation**

3.16.   Enter the **Interpretation Explanation**

3.17.   Enter the **Multimedia Id** or click on the ZOOM **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the ⬚ Select **Select** button to return your selection.
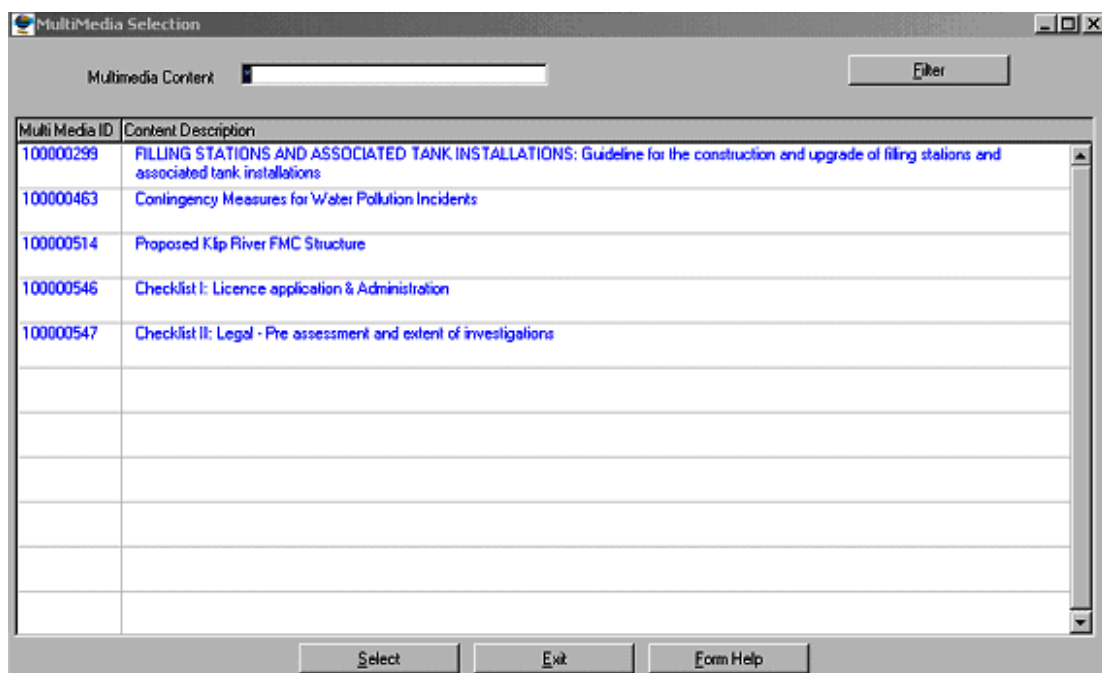
3.18.   The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

*Note: the **Back** button will return to the previous form*

*Note: the **Maintenance** button will open the option decision for General Guidelines Single Range maintenance form from where the Assessment category, Evaluation Classification and Single Monitoring Variable are maintained*

3.19.   Tab to accept the newly created record

3.20.   Click F10 or the **Exit** button to exit the form

How to Add a Multiple Range Record:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

3.2.   Select the **General Guidelines and Standards Multiple Range Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Multiple Range Filter Criteria Wizard**

3.3.   Click the **Next** button to open **General Guidelines And Standards Multiple Range Maintenance Wizard**

Note: To search for existing records, enter the **Interpretation** or **Interpretation Name** and click on the **Filter** button to filter the records accordingly

3.4. If the Record is not available, click on the [Create] **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.5. The **Multiple Range Id** will automatically displayed, as is a system-generated value.

Note: Multiple Range Id will only be generated once the record has been created

3.6. Enter the **Multiple Variable Parameter Id** or click on the **ZOOM** **Zoom** button to open the **Multiple Variable Parameter Selection** form and select the required Monitoring Variable then click on the **Select** **Select** button to return your selection.

3.7. The **Multiple Variable Parameter Abbreviation** will be automatically displayed as it is linked to the Multiple Variable Parameter ID

3.8. Click on the **Assessment Type** field ▼ **Drop Down** button and select the General Assessment Type

3.9. Enter the **Interpretation**

3.10. Enter the **Lower boundary**

Note: either the lower or the upper boundary should have a value, if you are entering a value for the upper boundary it should always be grater that the lower boundary

3.11. Enter the **Upper boundary.**

3.12. Enter the **Alpha Value**

3.13. Enter the **Interpretation Explanation**

3.14. Enter the **Category ID** or click on the ZOOM **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the Select **Select** button to return your selection.

3.15. The **Category Name** of the Assessment Category will be automatically displayed as it is linked to the Category ID

3.16. Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open the **Evaluation Classification Selection** form and select the required Evaluation Classification then click on the **Select** **Select** button to return your selection.

3.17.   The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

3.18.   Enter the **Multimedia Id** or click on the [ZOOM] **Zoom** button to open the **Multimedia Selection** form and select the required Multimedia then click on the [Select] **Select** button to return your selection.
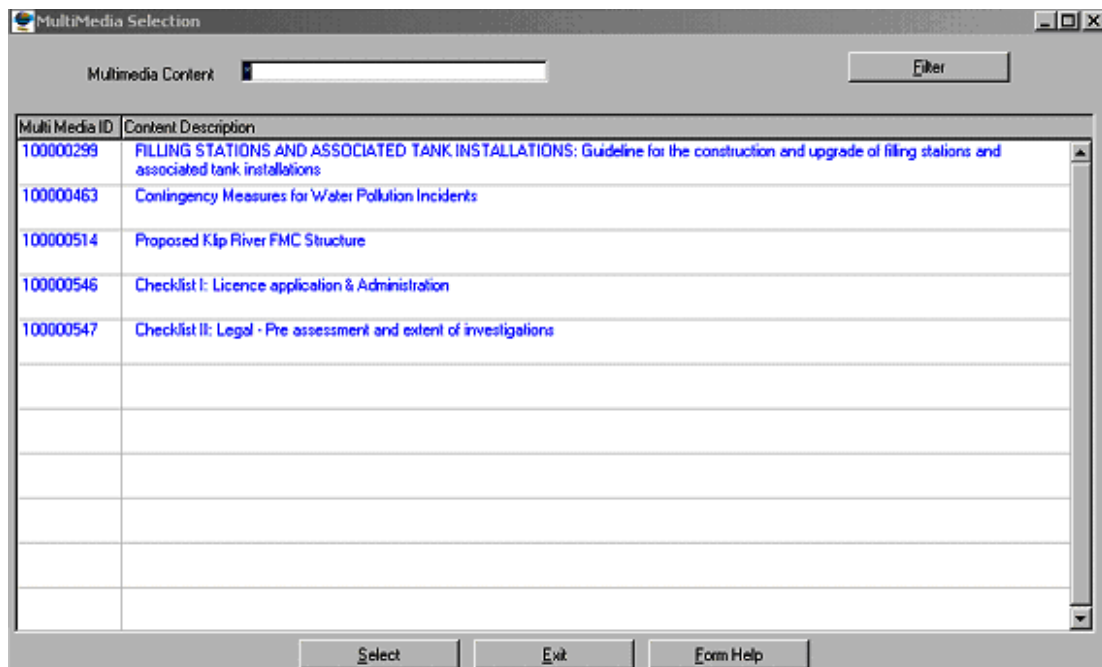
3.19.   The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

[?] *Note: the **Back** button will return to the previous form*

[?] *Note: the **Maintenance** button will open the option decision for General Guidelines Multiple Range maintenance form from where the Assessment category, Evaluation Classification and Multiple Monitoring Variable are maintained*

3.20.   Tab to accept the newly created record

3.21.   Click F10 or the **Exit** button to exit the form

How to Add a Survey Range Record:

3.1.   Select **Peripheral Info** from the Monitoring Management menu bar, and then select **Assessment Category** from the drop down menu. Select **General Guidelines and Standards Range Maintenance** from the sub menu. This will open **General Guidelines and Standards Range Maintenance Decision Wizard.**

3.2.   Select the **General Guidelines and Standards Survey Range Filter Criteria** radio button then Click the **Next** button to open the **General Guidelines and Standards Survey Range Filter Criteria Wizard**

3.3.   Click the **Next** button to open **General Guidelines And Standards Survey Range Maintenance Wizard**

 *Note: To search for existing records, enter the **Interpretation** or **Interpretation Name** and click on the **Filter** button to filter the records accordingly*

3.4.   If the Record is not available, click on the **Create** button or press **F4** to insert a new line. An empty record displays to allow the creation of a new record

3.5.   The **Survey Range Id** will automatically displayed, as is a system-generated value.

 Note: Survey Id will only be generated once the record has been created

3.6.   Enter the **Survey Variable Parameter Id** or click on the **Zoom** button to open the **Survey Variable Parameter Selection** form and select the required Monitoring Variable then click on the **Select** button to return your selection.

3.7.   The **Survey Variable Parameter Abbreviation** will be automatically displayed as it is linked to the Survey Variable Parameter ID

3.8.   Click on the **Assessment Type** field ▼ **Drop Down** button and select the General Assessment Type

3.9.   Enter the **Interpretation**

❓*Note: either the lower or the upper boundary should have a value, if you are entering a value for the upper boundary it should always be grater that the lower boundary*

3.10.   Enter the **Lower boundary**

3.11.   Enter the **Upper boundary.**

3.12.   Click the **Yes/No indicator** checkbox to indicate that the answer type for the Survey Variable parameter is 'Yes' or 'No'

3.13.   Enter the **Alpha Value**

3.14.   Enter the **Interpretation Explanation**

3.15.   Enter the **Category ID** or click on the ZOOM **Zoom** button to open the **Assessment Category Selection** form and select the required Category then click on the Select **Select** button to return your selection.

3.16.   The **Category Name** of the Assessment Category will be automatically displayed as
it is linked to the Category ID

3.17.   Enter the **Evaluation Classification ID** or click on the **ZOOM** **Zoom** button to open
the **Evaluation Classification Selection** form and select the required Evaluation
Classification then click on the **Select** **Select** button to return your selection.
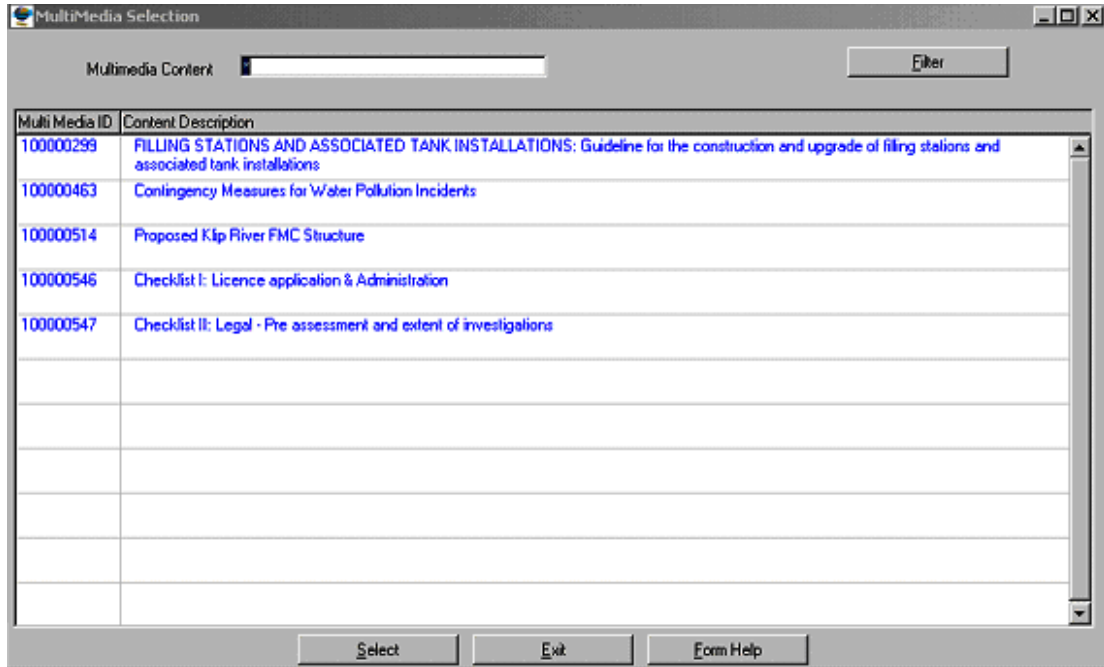
3.18. The **Evaluation Name** will be automatically displayed as it is linked to the Evaluation Classification ID

3.19. Enter the **Multimedia Id** or click on the `ZOOM` Zoom button to open the **Multimedia Selection** form and select the required Multimedia then click on the `Select` **Select** button to return your selection.

3.20. The **Multimedia Content Description** will be automatically displayed as it is linked to the Multimedia ID

3.21. Enter the **Lookup Type Id** or click on the `ZOOM` Zoom button to open the **Class Type Selection** form and select the required Lookup Item then click on the `Select` **Select** button to return your selection

3.22. The **Lookup Item Name** will be automatically displayed as it is linked to the Lookup ID

*Note: the **Back** button will return to the previous form*

*Note: the **Maintenance** button will open the option decision for General Guidelines Survey Range maintenance form from where the Assessment category, Evaluation Classification and Survey Monitoring Variable are maintained*

3.23. Tab to accept the newly created record

3.24. Click F10 or the **Exit** button to exit the form

How to Edit Value Range:

Note: Only the Central Database Administrator can EDIT the records. Other users only have view rights.

4.1. Click on the record to be edited to highlight it, and click on the ⬛Modify Records button.

4.2. Click on the field to be edited to highlight it

4.3. Edit the record as required.

4.4. Click on another record to accept the newly modified record.

How to Delete Value Range:

Note: Only the Central Database Administrator can Delete the records.

899

5.1. Click on the record to be deleted, to highlight it.

5.2. Click on the ✂ Delete button. **Note**: *When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3. A confirmation message will be displayed asking if you would like to delete the record

5.4. Click on the OK option to confirm the deletion

5.1. Click on the record to be deleted, to highlight it.

Result Management Information Overview

The Result Management Information component is used to generate water quality reports.

The Result Management Information component deals with the following main modules:

➢ Parameters (used to define selection criteria for monitoring points and monitoring variables in order to extract information for reporting and graphical representation)

➢ Reporting (used to generate different kinds of water quality reports)

➢ Graphs (used to display and print water quality graphs and diagrams)

➢ Standards and Objectives Audit Report (used to generate reports)

➢ Multimedia

Monitoring Feature Parameters

Introduction:

The Monitoring Feature Parameters module is used to search, add and maintain selection(s) criteria on monitoring features.

These criteria will later be used to extract data from the rest of the system. The data that will be retrieved in this way can be displayed in graphical format, or used to calculate statistical or compliance results.

This section deals primarily with the filters applied to extract data from the system i.e., which Monitoring points, which monitoring variables and to then make the selection available for the different graphs, statistical displays and reports.

Business Rules:

i   Selected Monitoring Feature Parameter Groups cannot be deleted therefore keep the creation of new groups to a minimum.
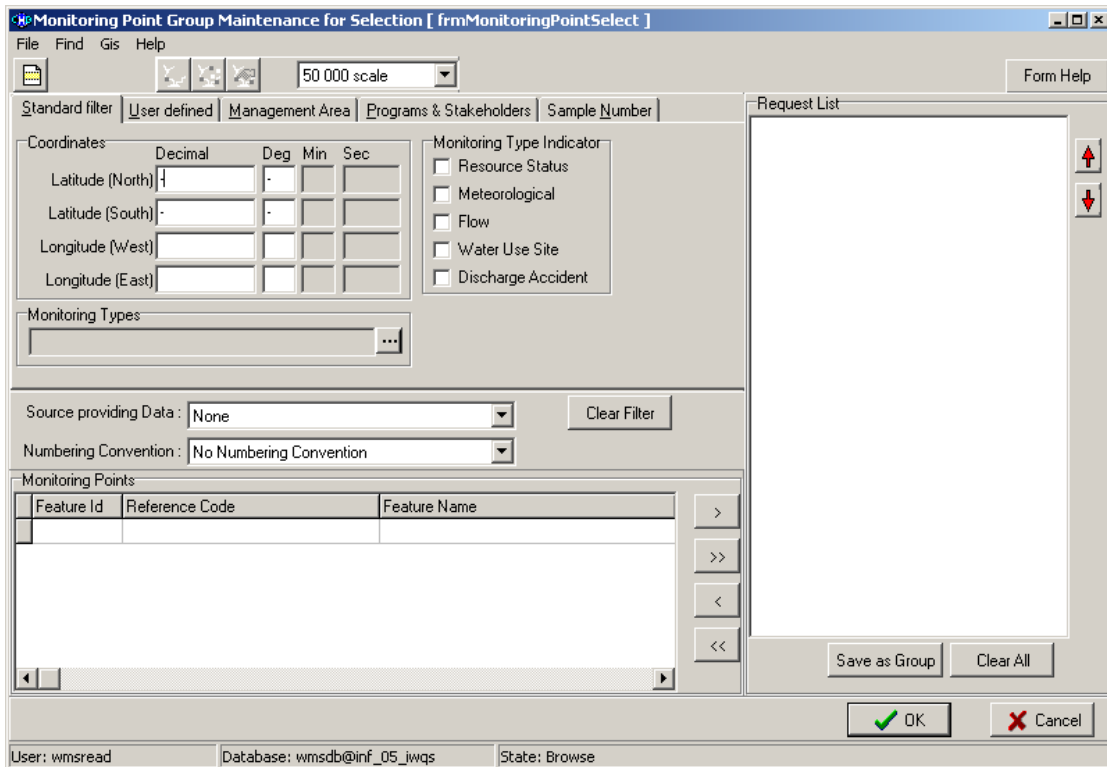
1   Path:

1.1   Select **Results Management Information** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Parameter**s and **Select** from the sub-menu.

1.3   Select **Monitoring Features** from the Parameters sub menu to open the **Monitoring Point Group Maintenance for Selection** form.

TIP: *The function of this form is to select the required monitoring points and insert them into the Request List on the right-hand side of the form. The monitoring points can also be placed in a sequential order in the request box by clicking on the up and down arrows on the right hand side of the form.*

How to Search for Monitoring Points:

2.1   You can search for monitoring points in one of the following ways:

> **Search by Standard filter:** Enter the latitude and longitude coordinates and/or click on the required Monitoring Type Indicator checkbox (resource status, meteorological, flow, water use site) and/or click on the Monitoring Types **Zoom** button to open the Class Type form, and select the required Monitoring Type and/or click on the Source Providing Data Drop Down button and select the required source and/or click on the Numbering Convention Drop Down button and select the required convention.

> **Search by User defined:** Enter the Single Monitoring Point ID and/or enter the Monitoring Point Name or a portion of the name with an *, and/or click on the Groups Drop Down button to select a previously set up group. Selections of points can also be saved as a group in this section and/or click on the All Monitoring Features checkbox, and/or click on the Source Providing Data Drop Down button and select the required source and/or click on the Numbering Convention Drop Down button and select the required convention.

> **Search by Management Area:** Enter or click on the Drop Down button to select the Management Area Code or ID and/or Water Feature or Transfer Feature Type, Name or ID and/or click on the Source Providing Data Drop Down button and select the required source and/or click on the Numbering Convention Drop Down button and select the required convention.

> **Search by Programs and Stakeholders**: Click on the LE/Stakeholder Drop Down button to open the Liaison Entity Details form and select the required Liaison Entity or Stakeholder and/or click on the Monitoring Programmes Drop Down button and select the required programme, and/or click on the Source Providing Data Drop Down button and select the required source and/or click on the Numbering Convention Drop Down button and select the required convention.

TIP: *The information entered into any one of these sections is kept when going to another option and will form part of the search criteria. It must be deleted from the form if it is not required to be a part of the search criteria. To do so with ease a "Clear Filter" button has been provided. NB: Source Providing Data and Numbering Convention is not cleared.*

2.2   Enter the search criteria as described above and click on the Range button. *The results will be displayed in the Monitoring Features block in the bottom left of the form.*

3   How to Select Monitoring Features:

3.1   First perform a search for the Monitoring Features.

3.2   The Request List can be cleared of previously selected points by clicking on the **Clear All** button.

3.3   You can add the required points to the **Request List** one at a time by clicking on the point to highlight it and then by clicking on the **Single Selection** [>] button. If the entire selection must be added to the Request List, simply click on the **Multiple Selection** button to add all the points.

3.4   A warning will appear asking whether you are sure that you want to select all the Monitoring Features, where x is the number of points in your Monitoring Features block in the bottom left of the form. If you click on the yes button, it will be added. If you click on the No button, the operation will be stopped and no points will be added to the Request List.

3.5   Click on the **Save as Group** button, to save the final selection of Monitoring Features as a Group.

3.6   If you have used no existing groups to set up your Request List, this will open the Provide Group Name form. Continue with step 3.9.

3.7   If you have used an existing group to set up your Request List, you will be asked whether to save as the selected group. If you select "No", continue with step 3.9. If you select "Yes", the Provide Group Name form will be defaulted with the existing information. If you click on the "OK" button, you will be asked whether you want to replace the existing group with the new information. If you click on the "Yes" button, it will be done. If you click on the "No" button it will stop and you can cancel to exit the process.

3.8   Either select an existing name from the **Existing Group Name** [▼] **Drop Down** button or enter a name.

3.9   If you have selected an existing Group Name, the existing Group Description will automatically be entered into the space provided for it and can then be accepted or edited. If you have entered a new Group Name, you must also enter the Group Description.

3.10 If other WMS users can use the Group, click the Radio Button to Public. If other WMS users cannot use the Group, click the Radio Button to Private.

3.11 Click on OK to save the information.

4   How to Edit a Monitoring Point Selection:

4.1   Select the required group of monitoring points as described in the "*How to Search for and Select Monitoring Points" section*.

4.2   You can change the sequential order of the Monitoring points appearing in the Request Box by clicking on either the Up or Down Arrow appearing on the right hand side of the form.

4.3   You can add the required points to the Request List one at a time by clicking on the point to highlight it and then by clicking on the Single Selection button (>). If the entire

selection must be added to the Request List, simply click on the Multiple Selection
button (>>) to add all the points.

Monitoring Variable Parameters

Introduction:

The Monitoring Variable Parameters module is used to search, add and maintain selection(s) criteria on monitoring variables.

This criterion will later be used to extract data from the rest of the system. The data that will be retrieved in this way can be displayed in graphical format, or used to calculate statistical or compliance results.

This section deals primarily with the filters applied to extract data from the system i.e., which Monitoring points, which monitoring variables and to then make the selection available for the different graphs, statistical displays and reports.

Business Rules:

Selected Monitoring Feature Parameter Groups cannot be deleted therefore keep the creation of new groups to a minimum.

1   Path:

1.1   Select **Results Management Information** from the Water Resource Management (Delphi Front-End) menu bar.

1.2   Select **Parameters** and **Select** from the sub-menu.

1.3   Select **Monitoring Variables** from the Parameters sub menu to open the **Select Monitoring Variables** form.

TIP:

The purpose of this form is to select the required variables and insert them into the Selected Variables list on the right-hand side of the form. The monitoring variables can also be placed in a sequential order in the request box by clicking on the up and down arrows on the right hand side of the form.

2   How to Search for Monitoring Variables:

2.1   You can search for monitoring variables in one of the following ways:

> **Search by Variable Type**: Click on the **Eco Compartment Drop Down** button and select the required source and/or click on the **Variable Type Drop Down** button and select the required type or click on the **All Monitoring Variables** button.

> **Search by Variable Class**: Click on the **Variable Class Drop Down** button and select the required Variable Class or click on the **All Monitoring Variables** button.

> **Search by Monitoring Type**: Click on the **Monitoring Type Drop Down** button and select the required type or click on the **All Monitoring Variables** button.

> **Search by Monitoring Programmes**: Click on the **Monitoring Programmes Drop Down** button and select the required programme or click on the **All Monitoring Variables** button.

> **Search by Monitoring Groups**: Click on the **Monitoring Group Drop Down** button and select the required group or click on the **All Monitoring Variables** button.

> **Search by Extraction Groups**: Click on the **Extraction Group Drop Down** button and select the required group or click on the **All Monitoring Variables** button.

TIP: The information entered into any one of these sections is kept when going to another option and will form part of the search criteria. It must be deleted from the form if it is not required to be a part of the search criteria. To do so with ease a "Clear Filter" button has been provided.

2.2   Enter the search criteria as described above and click on the ☐ **Range** button. *The results will be displayed in the Variables block in the bottom left of the form.*

3   How to select Monitoring Variables:

3.1   First perform a search for the Monitoring Variable.

3.2   The Selected Variables list can be cleared of previously selected variables by clicking on the "Clear all" button.

3.3   Add the required variables to the Selected Variable list one at a time by clicking on the variables to highlight it and then by clicking on the **Single Selection** button (>). If the entire selection must be added to the Selected Variable list, simply click on the **Multiple Selection** button (>>) to add all the variables. A warning will appear asking whether you are sure that you want to select all x Monitoring Variables, where x is the number of points in your Variables block in the bottom left of the form. If you click on the yes button, it will be added. If you click on the No button, the operation will be stopped and no variables will be added to the Selected Variable list.

3.4   To save the final selection of Monitoring Variables as a Group, click on the **Save as Group** button.

3.5   If you have used no existing groups to set up your Selected Variable list, this will open **the Provide Group Name** form. Continue with step 3.7.

3.6   If you have used an existing group to set up your Selected Variable list, you will be asked whether to save as the selected group. If you select "No", continue with step 2.8. If you select "Yes", **the Provide Group Name** form will be defaulted with the existing information. If you click on the "OK" button, you will be asked whether you want to replace the existing group with the new information. If you click on the "Yes" button, it will be done. If you click on the "No" button it will stop and you can cancel to exit the process.

3.7   Either Select an existing Group Name by clicking on the ▾ **Drop Down** button and clicking on the required name or enter a new name in the space provided.

3.8   If you have selected an existing Group Name, the existing Group Description will automatically be entered into the space provided and can then be accepted or edited. If you have entered a new Group Name, you must also enter the Group Description.

3.9   If other WMS users can use the Group, click the Radio Button to "**Public**". If other WMS users cannot use the Group, click the Radio Button to "**Private**".

3.10   Click on **OK** to save the information.

4   How to Edit a Monitoring Variable Selection:

4.1   Select the required group of monitoring variables as described in the "How to Search for and Select Monitoring Variables" section.

4.2   You can change the sequential order of the Monitoring Variables appearing in the **Request Box** by clicking on either the **Up** or **Down Arrow** appearing on the right hand side of the form.

4.3   You can add the required variables to the Request List one at a time by clicking on the point to highlight it and then by clicking on the **Single Selection** button (>). If the entire selection must be added to the Request List, simply click on the **Multiple Selection** button (>>) to add all the variables.

Reporting

Introduction:

Reporting is used to assist you in determining the status of results for one or more monitoring points on the WMS database.

The following types of reports are available from the system:

➢ Inventory - Inventory provides the amount of samples taken at a monitoring point between the first and last sample date, either per monitoring point or per monitoring point and variable.

➢ Standard Result - This provides results in a standard layout, namely date, time, depth, preservative and value (concentration).

➢ Single Sample Result - This provides you with detail about an individual sample

➢ Descriptive Statistics - This report provides summary statistics for the selected Monitoring points and monitoring variables. It includes the number of elements, the minimum and maximum values, the 5%, 25%, 75% and 95% percentile values, the median and mean values, the lower and upper 95% confidence limits, the standard deviation and the % Variation coefficient

➢ Sample Status - This report indicates each sample's current status of analysis, i.e. whether the sample is in process (of being analysed), completed or has been rejected, in which case a rejection reason will be supplied.

Notes: All parameters set on one form are remembered and displayed on subsequent forms.

1   Path:

1.1   Select **Results Management Information** from the Water Resource Management (Delphi Front-End) menu bar.

1.2   Select **Water Quality Results Reporting** from the sub-menu.

1.3   Select **Reports** from the menu.

2   How to obtain an Inventory Report:

2.1   Select **Inventory** from the Reports sub-menu. The **Monitoring Point Group Maintenance for Selection** form will open. Select the required Monitoring Points, and click on the **OK** button. **TIP:** *At least one Monitoring point must be selected to obtain a report.*

2.2   **TIP:** *If you have already selected Monitoring Points the Inventory form will open directly, and you can proceed. If at any stage you would like to change the selection of either the monitoring point or monitoring variable, click on the Parameters menu option, and select either the Selected Monitoring Points or Selected Monitoring Variables to open the required form and select the records.*

2.3   The **Sample or Analyses Inventory Report** form will open with the selected records.

![TIP icon] **TIP:** *Two different types of inventory reports are available:*

- *Inventory of Samples - This report displays an inventory of samples taken at specified monitoring points. The report provides a summary of the number of samples taken at a monitoring point, as well as the period wherein monitoring was performed.*

- *Inventory of Analyses - This report displays an inventory of analyses done for specific monitoring variables at specified monitoring points. The report provides a summary of the number of analyses done per monitoring variable at a monitoring point, as well as the period wherein these analyses were done.*

➢ Select either a **Samples taken** or **Variables analysed** inventory report, by clicking on the relevant radio button.

➢ For Variables analysed: If no monitoring variable(s) have been specified, the **Select Monitoring Variables** form will automatically open, and you will need to select one or more variables. The Dates, Depth, Season, and Result Type fields will then become visible.

➢ Enter a **Sampling Date From** and **Sampling Date To** range option.

➢ Enter a **Sampling Depth From** and **Sampling Depth To** range option, if so desired.

➤ It is optional to select **Seasons** by clicking on the required {bmct Gis radio button.bmp} **radio** button *(No Season, Summer (October to March inclusive), Winter (April to September inclusive).*

➤ It is optional to specify the **Type of Results Required** by clicking on the required checkbox (es). *(Time Interval, Depth Profile, Single, Multiple)* **TIP:** *At least one type of result has to be selected for the Report button to become enabled.*

➤ *For Samples taken and Variables analysed:* It is also optional to specify **Feature Reference Code Display Options**. You can do this by clicking on the **Source Providing Data Drop Down** button and selecting a source, and then clicking on the **Numbering Convention Drop Down** button and selecting a numbering convention. *If you change one field, the other field is blanked and the report button is disabled. Likewise, if one field is changed to "None" or "No Numbering Convention", the other is automatically changed to 'None' or 'No Numbering Convention'.*

➤ Click on the **Report** button to display the **Report and Export Options** form.

➤ Click on the applicable report option and click **OK**.

The following report options will be displayed on the **Report and Export Options** form *(Please note that the options differ per Inventory choice as does the output)*:

- **Display Results on Screen**: The results will be displayed on an Inventory of Samples form.

- **Export to CSV** (Comma Delimited format): This creates .CSV files in the specified location - for import into e.g. Excel. *A message will appear asking you what maximum size the files must be: "none", "stiffy (1.44mb)", "CD-R (650mb)", "CD-RW (550mb)" or "other" in which case you will have to enter a file size. If there is more data than can fit into a single file, another file is automatically created. The file name will be the name supplied by you, and if any subsequent files need to be created, the name will be suffixed by _1, _2etc.*

- **Export to GIS**: This creates DBF files in the specified location - for import into e.g. Arcview. *To do this, ensure that your computer has enough disc space available. You will need to enter a name and destination. Two files are created with the extension DBF of which one is suffixed with "L".*

- **Inventory of Samples Word Report:** *for samples taken inventory report.*

- **Inventory of Analyses Word Report:** *for a variable analysed inventory report.*

3   How to obtain a Standard Result Report:

3.1   Select **Standard Result** from the Reports sub-menu. The **Monitoring Point Group Maintenance for Selection** form will open. Select the required Monitoring Points,

and click on the **OK** button. [?] **TIP:** *At least one Monitoring point must be selected to obtain a report.*

3.2   The **Select Monitoring Variable form** will open. Select the required monitoring variables, and click on the **OK** button. [?] **TIP:** *At least one Monitoring variable must be selected to obtain a report.*

3.3   [?] **TIP:** *If you have already selected Monitoring Points and/or Monitoring Variables the Standard Result form will open directly, and you can proceed. If at any stage you would like to change the selection of either the monitoring point or monitoring variable, click on the Parameters menu option, and select either the Selected Monitoring Points or Selected Monitoring Variables to open the required form and select the records.*

3.4   The **Water Quality Standard Result Reports** form will open.

➢   Enter a **Sampling Date From** and **Sampling Date To** range option.

➢   It is optional to select **Seasons** by clicking on the required **radio** button *(No Season, Summer (October to March inclusive), Winter (April to September inclusive).*

➢ At least one, but not all **Type of Results Required** must be specified, by clicking on the required checkbox (es). *(Time Interval, Depth Profile, Single, or Multiple). Please note: Only the monitoring variables corresponding to the selected result type will be displayed and extracted.*

➢ Enter a **Sampling Depth From** and **Sampling Depth To** range option, if so desired.

➢ It is also optional to specify **Feature Reference Code Display Options**. You can do this by clicking on the **Source Providing Data Drop Down** button and selecting a source, and then clicking on the **Numbering Convention Drop Down** button and selecting a numbering convention. *If you change one field, the other field is blanked and the report button is disabled. Likewise, if one field is changed to "None" or "No Numbering Convention", the other is automatically changed to 'None' or 'No Numbering Convention'.*

➢ Click on the **Report** button to display the **Report and Export Options** form.

➢ Click on the applicable report option and click **OK**.

➢ The following report options will be displayed on the **Report and Export Options** form:

• **Export to CSV** (Comma Delimited format): This creates .CSV files in the specified location - for import into e.g. Excel. *A message will appear asking you what maximum size the files must be: "none", "stiffy (1.44mb)", "CD-R (650mb)", "CD-RW (550mb)" or "other" in which case you will have to enter a file size. If there is more data than can fit into a single file, another file is automatically created. The file name will be the name supplied by you, and if any subsequent files need to be created, the name will be suffixed by _1, _2etc.*

• **Export to GIS**: This creates DBF files in the specified location - for import into e.g. Arcview. *To do this, ensure that your computer has enough disc space available. You will need to enter a name and destination. Two files are created with the extension DBF of which one is suffixed with "L".*

• **Standard Results Word Report**: This will generate a Word document.

• **Export to External System:** This will create a set of 10 .CSV files in the specified location that can be used to import released results, together with their related information into other systems or databases, e.g. Hydstra.

4   How to obtain a Single Sample Report:

4.1   Select **Single Sample** from the Reports sub-menu. The **Monitoring Point Group Maintenance for Selection** form will open. Select the required Monitoring Points, and click on the **OK** button.

4.2   **TIP:** *If you have already selected Monitoring Points the Single Sample Water Quality Result Report form will open directly, and you can proceed. If at any stage*

> *you would like to change the selection of monitoring points, click on the Parameters menu option, and select the Selected Monitoring Points to open the required form and select the records.*

4.3   The **Single Sample Water Quality Result Report** form will open.
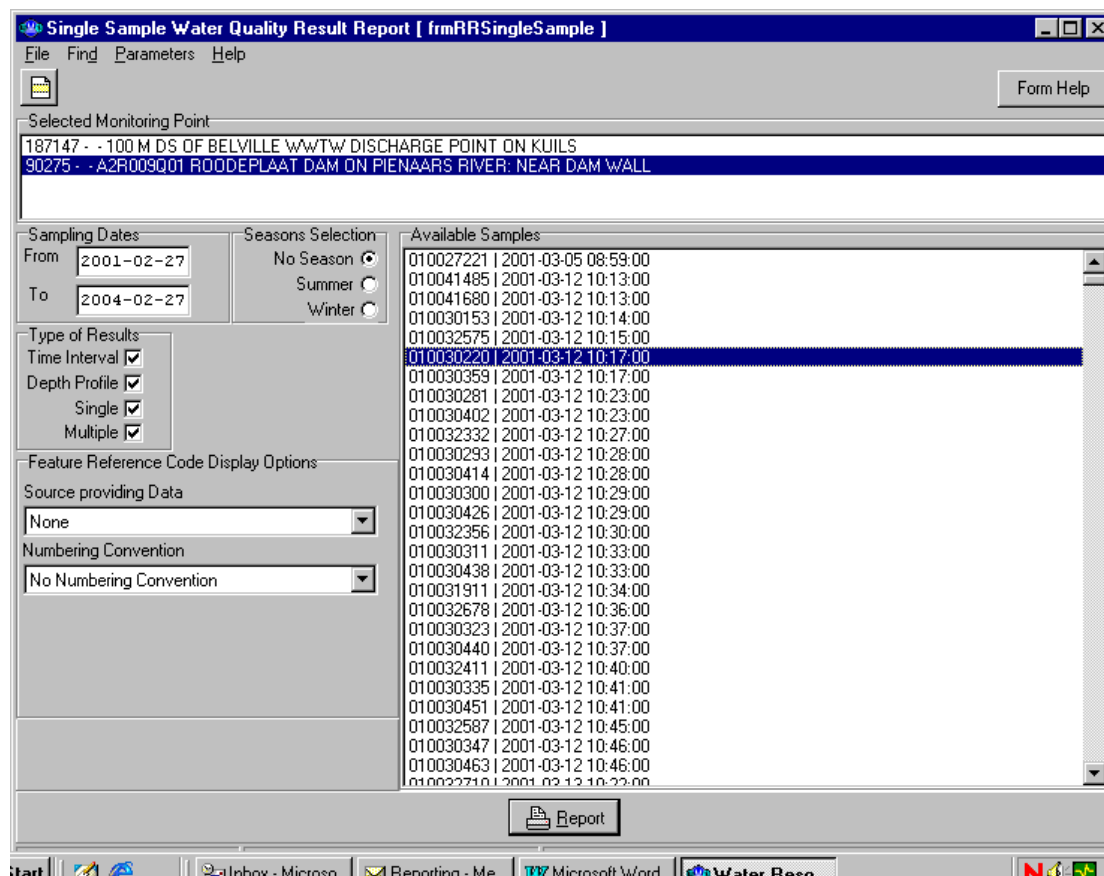
> ➤ Enter a **Sampling Date From** and **Sampling Date To**.

> ➤ It is optional to select a **Seasons Selection** by clicking on the required **radio** button *(No Season, Summer (October to March inclusive), Winter (April to September inclusive).*

> ➤ Specify at least one **Type of Results Required** by clicking on the required checkbox (es). *(Logger, Depth Profile, Single, Multiple)*

> ➤ It is also optional to specify **Feature Reference Code Display Options**. You can do this by clicking on the **Source Providing Data Drop Down** button and selecting a source, and then clicking on the **Numbering Convention Drop Down** button and selecting a numbering convention. *If you change one field, the other field is blanked and the report button is disabled. Likewise, if one field is changed to "None" or "No Numbering Convention", the other is automatically changed to 'None' or 'No Numbering Convention'.*

> ➤ Click on the **Range** button. A list of Available Samples is displayed for the Monitoring Point record that has focus. Select the required sample. The Report button will now be enabled.

> ➤ Click on the **Report** button to display the **Report and Export Options** form.
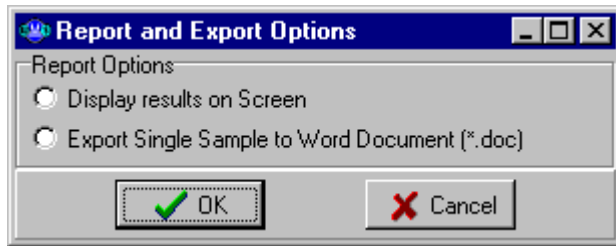
➢ Click on the applicable report option and click **OK**.

➢ The following report options will be displayed on the **Report and Export Options** form:

- **Display Results on Screen**: The results will be displayed on a Single Sample Water Quality Results form.

- **Single Sample Word Report**: This will generate a Word document.

5   How to obtain a Descriptive Statistics Report:

5.1   Select **Descriptive Statistics** from the Reports sub-menu. The **Monitoring Point Group Maintenance for Selection** form will open. Select the required Monitoring Points, and click on the **OK** button. [?] **TIP:** *At least one Monitoring point must be selected to obtain a report.*

5.2   The **Select Monitoring Variable form** will open. Select the required monitoring variables, and click on the **OK** button. [?] **TIP:** *At least one Monitoring variable must be selected to obtain a report.*

5.3   [?] **TIP:** *If you have already selected Monitoring Points and/or Monitoring Variables the Water Quality Summary Statistics Report form will open directly, and you can proceed. If at any stage you would like to change the selection of either the monitoring point or monitoring variable, click on the Parameters menu option, and select either the Selected Monitoring Points or Selected Monitoring Variables to open the required form and select the records.*

5.4   The **Water Quality Summary Statistics Report** form will open.

> ➢ The following descriptive statistics are available by default, you can deselect those not required:

- Number of Elements

- Minimum Value

- Maximum Value

- (Mean) Average

- Geometric Mean

- Standard Deviation Statistics

- % Variation Coefficient

- 5% Percentile

- 10% Percentile

- 25% Percentile

- Median (50% Percentile)

- 75% Percentile

- 90% Percentile

- 95% Percentile

- Lower 95% confidence limit around the mean

- Upper 95% confidence limit around the mean

➢ Enter a **Sampling Date From** and a **Sampling Date To**.

➢ Enter a **Sampling Depth From** and a **Sampling Depth To** range option, if desired.

➢ It is optional to select **Seasons** by clicking on the required {bmct Gis radio button.bmp} **radio** button *(No Season, Summer (October to March inclusive), Winter (April to September inclusive).*

➢ Specify at least one **Type of Results Required** by clicking on the required checkbox (es). *(Time Interval, Depth Profile, Single)*

➢ It is also optional to specify **Feature Reference Code Display Options**. You can do this by clicking on the **Source Providing Data Drop Down** button and selecting a source, and then clicking on the **Numbering Convention Drop Down** button and selecting a numbering convention. *If you change one field, the other field is blanked and the report button is disabled. Likewise, if one field is changed to "None" or "No Numbering Convention", the other is automatically changed to 'None' or 'No Numbering Convention'.*

➢ Click on the **Report** button to display the **Report and Export Options** form.

➢ Click on the applicable report option and click **OK**.

➢ The following report options will be displayed on the **Report and Export Options** form:

- **Display Results on Screen**: The results will be displayed on a Water Quality – Summary Statistics Report.

- **Export to CSV** (Comma Delimited format): This creates .CSV files in the specified location - for import into e.g. Excel. *A message will appear asking you what maximum size the files must be: "none", "stiffy (1.44mb)", "CD-R (650mb)", "CD-RW (550mb)" or "other" in which case you will have to enter a file size. If there is more data than can fit into a single file, another file is automatically created. The file name will be the name supplied by you, and if any subsequent files need to be created, the name will be suffixed by _1, _2etc.*

- **Export to GIS**: This creates DBF files in the specified location - for import into e.g. Arcview. *To do this, ensure that your computer has enough disc space available. You will need to enter a name and destination. Two files are created with the extension DBF of which one is suffixed with "L". If too many variables and statistics were selected, a .DBF will be created for each variable.*

- **Standard Statistics Word Report**: This will generate a Word document.

6 How to obtain a Sample Analyses Status Report:

6.1 Select **Sample Status** from the Reports sub-menu. The **Monitoring Point Group Maintenance for Selection** form will open. Select the required Monitoring Points, and click on the **OK** button. **?** **TIP:** *If you have already selected a Monitoring Point, the Sample Status form will open directly, and you can proceed. If at any stage you would like to change the selection of the monitoring point, click on the Parameters menu option, and click on Selected Monitoring Points to open the required form and select the records.*

6.2 The **Sample Analyses Status Report** form will open.

➤ Enter a **Sampling Date From** *(this date may not be older/earlier than 1999-10-01)* and a **Sampling Date To**.

➤ It is optional to provide a **Seasons Selection** by clicking on the required {bmct Gis radio button.bmp} **radio** button *(No Season, Summer (October to March inclusive), Winter (April to September inclusive).*

➤ It is also optional to specify **Feature Reference Code Display Options**. You can do this by clicking on the **Source Providing Data drop down** button and selecting a source, and then clicking on the **Numbering Convention Drop Down** button and selecting a numbering convention. *If you change one field, the other field is blanked and the report button is disabled. Likewise, if one field is changed to "None" or "No Numbering Convention", the other is automatically changed to 'None' or 'No Numbering Convention'.*

➤ Click on the **Report** button to display the **Report and Export Options** form.

➢ Click on the applicable report option and click **OK**.

➢ The following report options will be displayed on the **Report and Export Options** form:

- **Display Report on screen:** This will display an on-screen report.

- **Sample Status Word Report**: This will generate a Word document.

Graphs

Introduction:

The objective of the **Graphs** module is to be able to assess the water quality of specific monitoring points over a specified period of time and to analyse the information against Objectives and Standards.

Business Rules:

i. **CTRL-R** or click on the **Range** button or go to the **graph tabsheet** or go to the **data tabsheet** to perform a query.

ii. The Range button will be disabled and you will be unable to perform a query if certain information has not been entered. A query will be disallowed if there is not a selected Monitoring Point, Variable or if the Start or End Date is illegal, or earlier than the start date. A query will not be allowed when you want to compare data for a monitor or analyst, but haven't selected specific monitor(s)/analyst(s).

1. Path:

1.1. Select **Results Management Information** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2. Select either **Time Series, Frequency Histogram, Box or Whisker Plot, Distance Plot, Depth Profile, Analyse - Trend/Season, Exceedance Plot or Animated Plot** from the **Graphs** sub menu.

1.3. If you have not previously selected Monitoring Points the **Select Monitoring Point** form will open, and you will first need to select monitoring points before the requested graph form will open. If you have not previously selected Monitoring Variables, **'All'** Monitoring Variables will be selected (If you open the Links - WQ variables you will see the 'All Monitoring Variables' box checked). See **How to select a Monitoring Point** OR **How to Select a Monitoring Variable** in the relevant modules. If you have previously selected Monitoring Points and Monitoring Variables, the selected monitoring points and monitoring variables will be automatically displayed in the selected graph form.

 Note that 'All' Variables means all variables that have data for one or more of your Monitoring Points. If you have not selected any Monitoring Points, you will get an error message, the 'All Monitoring Variables' option will be cancelled and the Monitoring Variable list will remain empty. Even if you have selected Monitoring Points, sometimes the Monitoring Variable list will be empty. That is because the selected Monitoring Points have NO data. Also note that this trick, of populating the Monitoring Variable list with all variables with data for the Monitoring Points, only happens once. That is when you first open the form. If you change the contents of your Monitoring Points list, the Monitoring Variable list will not automatically update. You can manually update it as follows:

Link - Select WQ variables (the All Monitoring Variables will be selected); then click on the OK button.

WATER QUALITY TIME SERIES GRAPH

The Water Quality Time Series graph is used to assess the water quality of specific monitoring points and variables over a specified period of time. The information can also be analysed against Objectives and Standards. On the Time Series graph the value displayed on the y-axis and the date and/or time displayed on the x-axis.

How to select extraction data for a Time Series Graph:

You can specify filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

Filter by Monitoring Points:

2.1 Ensure the required **Monitoring Points** have been selected and appear in the **Monitoring Point list box.**

You can populate this list via:

The main menu: Result Management Information - Parameters - Select - Monitoring Features; or

The graph menu: Links- Select monitoring point

This will open the Select Monitoring Points form where you can select specific monitoring points.

TIP: *If no monitoring points are selected, queries will not be allowed.*

2.2 Filter by WQ Variables:

Ensure the required **Variables** have been selected and appear in the **WQ Variables list box.**

You can populate this list via:

➢ The main menu: Result Management Information - Parameters - Select - Monitoring Variables; or

➢ The graph menu: Links- Select WQ Variables

This will open the Select Monitoring Variables form where you can select specific

monitoring variables. **TIP***: If no monitoring variables are selected, by default all variables applicable for the monitoring point(s) will be selected, and displayed in the WQ Variables list box.*

2.3   Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.4   Filter by Graph Type:

Select the required **Graph Type** by clicking on the relevant radio button:

➢ Single Point, Single Variable (to obtain results for a single point and single variable)

➢ Compare Variables for Point (to compare results of all or some selected variables for a specific point)

➢ Compare Points for Variable (to compare results of all or some selected points for a specific variable)

➢ Compare Monitors/Laboratories (to compare all or some selected Monitors/Analysts' results for a specific Monitoring Point and variable.

2.5   Filter by Objective/Standard:

Select the required **Objective or Standard** by clicking on the relevant radio button:

➢ **Point Objective** (the Class Type form will open, select a specific point objective*). This option can only be used for one point and one variable at a time.*

➢ **Point Standard** (the Class Type form will open, select a specific point standard). *This option can only be used for one point and one variable at a time.*

➢ **Adhoc Limits** (This can only be used for one variable. Enter an upper limit and/or a lower limit)

➢ **No Objective** Note: When Point Objective/Standard is selected, the Objective/Standard tab is available to view the records for the objective or standard.

2.6   Filter by Monitor or Laboratory:

➢ **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

➢ **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

 Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable*

Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.

2.7 **Filter by Depth:**

Depth is used to filter the monitoring variable data taken on different depths. To perform this Filter click on the Menu-Data - Sample Depth. The filter on Depth form is opened; there are 3 different sample types:

➢ **All** (to filter on samples taken all depths)

➢ **Grab Samples** (A grab sample always has the same begin and end depth, enter a minimum and maximum value, all grab samples within that depth range will be selected.)

➢ **Integrated Samples** (An integrated sample has an end depth greater than a start depth. Enter a minimum sample begin depth and a maximum sample end depth to select sample within this specified range.)

FREQUENCY HISTOGRAM GRAPH

The Frequency Histogram graph is used to determine the percentage of records that occur in each water quality category. The Frequency Histogram is the amount of Percentage Variable Results falling within a specific range (category). By default the programme will calculate the categories according to the monitoring point, variable and time period values. The standard categories are: Very Good, Good, Average, Poor and Very Poor. These category descriptions can be edited or removed as required.

How to select extraction data for a Frequency Histogram Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1 **Filter by Date:**

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2 **Filter by Graph Type:**

Select the required **Graph Type** by clicking on the relevant radio button:

➢ Single Point, Single Variable (to obtain results for a single point and single variable)

➢ Compare Variables for Point (to compare results for all variables for a specific point)

➢ Compare Points for Variable (to compare results for all points for a specific variable)

➢ Compare Monitors/Laboratories (analyst)

➢ You must also click on the **Water Quality Categories** button to open the Monitoring Variable Categories form and select the required water classes *(If you open the graph tab without doing this, the Monitoring Variable Categories form will automatically open)*

   ➢ This form is used to determine the water quality categories for each variable. By default, all variables are divided into 5 (five) water quality categories, from very good to very poor; this is based upon its minimum or maximum value. As you have read in the data for all variables, to determine the minimum and maximum, this may take a long time. Rather select the minimum variables required.

   ➢ This automatic calculation of categories only happens the first time. Never again, even if you add or delete variables or switch the order of the variables around. This is to ensure that your own editing changes are never overwritten. You can always manually recall these systems defaults by using the manus option Edit - Set min/max intervals.

   ➢ The value in each cell can be edited, within certain limits. Each cell must have a value. If you open the graph tab with any of these cells blank, this form will be opened to allow you to provide the blank cell with a value. Each cell's value must be larger than the preceding one. If you break this rule, and click on the OK button, the incorrect cell's value will be cleared. The last cell's value is not editable; it is automatically set as less than the previous cell's value. The number of categories, as well as the name of each category can be changed by using the menu - Edit - Set Category Names.

      ➢ Categories

         The Menu option Edit - Set Category Names opens the Categories form where you can add a category by clicking on the Add button. The category will always be added to the end of the list. Delete a category by clicking on the Delete button. The last category will always be deleted. When there are only two categories remaining, the delete button will become disabled, as this is the minimum number of categories allowed. You can edit the name of each category. This name will be used as x-axis annotation. If you leave the names blank, the water quality range will be used as x-axis annotation instead. For some Monitoring Variables, a low value is as bad as a high value, e.g. pH. The option Symmetrical Classes copes with that. If you left the default 5 categories (Very Good, Good, Average, Poor, Very Poor), clicking this option will suddenly give you 9 classes when you exit this form to go back to the Monitoring Variable Categories form, namely (Very Poor, Poor, Average, Good, Very Good, Good, Average, Poor, Very Poor). The Combine Upper/Lower Classes option allows you to combine these categories into one graph.

2.3   Filter by Monitor or Laboratory:

➢ **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

> ➢ **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories applicable for the monitoring point, variable and period. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.*

BOX AND WHISKER PLOT GRAPH

The Box and Whisker Plot graph is a statistical way of displaying data as a percentile value.

Each 'box with whiskers' display, from top to bottom, the maximum, 75'th, 50'th (median), 25'th percentile and minimum value.

This 'box with whiskers' represents the data

➢ for a year (yearly)

➢ for a 6 month period (seasonal),

➢ for e.g. all the Januaries aggregated (monthly aggregated),

➢ for all the data of the monitoring point (Compare Monitoring Points and specific Monitoring Variables),

➢ for all the records taken by the specific monitor or analysed at the specific laboratory (Compare Monitor/Laboratory) for a specific variable.

How to select extraction data for a Box and Whisker Plot Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1 Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2 Filter by Graph Type:

Select the required **Graph Type** by clicking on the relevant radio button:

➢ Yearly

➢ Seasonal

➢ Monthly Aggregate

➢ Compare Monitoring Points

➢ Compare Monitors/Laboratories

2.3 Filter by Objective/Standard:

This option will only be available for Yearly and Seasonal graph types. Select the required **Objective or Standard** by clicking on the relevant radio button:

➢ **Point Objective** (the Class Type form will open, select a specific point objective)

➢ **Point Standard** (the Class Type form will open, select a specific point standard)

➢ **Adhoc Limits** (This can only be used for one variable. Enter an upper limit and/or a lower limit)

➢ **Lower Limit** (this can only be set when the Adhoc Limits option has been selected)

➢ **Upper Limit** (this can only be set when the Adhoc Limits option has been selected)

➢ **No Objective**

➢ **Objective Reason** (select from Class Type a specific objective or stanza reason, depending on the Point Objective or Point Standard radio button selection)

2.4 Filter by Monitor or Laboratory:

➢ **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

➢ **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.*

DISTANCE PLOT GRAPH

The Distance Plot provides a visual indication of the impact that the site related monitoring point's results have on the quality of water on the river or transfer feature. The Distance Plot graph is used to compare the water quality of different monitoring points and the same variable with each other.

For each monitoring point, a distinction is made between site-related and status-related monitoring points.

Ideally speaking, these points should be selected all on the same river or transfer feature, and in the direction of flow, using GIS.

There are two ways of displaying the data:
➢ The default 'As Line / Bar Plot' displays the Site points with a bar and the status related points with a line.
➢ This bar or line display by default the 50'th percentile (median).
➢ The 'Select statistic' option on the Select tabsheet allows you to change this to other options.

➢ The 'As Boxplot' option displays both as a box-and-whisker plot.

How to select extraction data for Distance Plot Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1   Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2   Filter by Graph Type:

Select the required **Graph Type** by clicking on the relevant radio button:

➢ Box Plot

➢ Line/Bar Plot

2.3   Filter by Select Statistic:

➢   Average

➢   Percentage 25

➢   Median

➢   Percentage 75

2.4   Filter by Monitor or Laboratory:

➢   **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

➢   **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.*

DEPTH PROFILE GRAPH

The Depth Profile graph is used to measure results at different depths. The graph displays the depth of the dam for one variable and value at each depth, and can also measure per date. Only certain variables have depth related data that can be meaningfully used e.g. oxygen, pH and temperature. Furthermore depth related data is always taken at a dam. You can look on the data tab for begin depth and end depth. Zero (0) will represent data taken at the surface, while larger numbers represent data taken at a greater depth.

You would like to represent this data on a three-dimensional graph, with concentration on one axis, depth on a second, and date on the third. Since that graph type is not available, two other options are available:
Concentration vs. depth for each day with data
For each depth with data, you calculate the "Summary Statistic" (percentile) and draw a graph of depth vs. that statistic.

How to select extraction data for Depth Profile Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1   Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2   Filter by Type of Data to Display:

Select the required **Type to be displayed** by clicking on the relevant radio button:

➢ Each day a Time Series

➢ Summary Statistics if you have selected summary statistics click on the specific statistical radio button: Minimum, 25th Percentile, 50th Percentile, 75th Percentile, Maximum.

ANALYSE TREND/SEASON GRAPH

The Analyse Trend/Season graph is used to analyse data for trends and seasonal tendencies.

The first option is Tendency, it is important to note that tendency is not quite trend analysis. Therefore it is safer to talk about tendency. The equation that is calculated predicts the value, and can have an order of 0 (just a straight horizontal line), 1 (straight line) or more (curved lines).

The second option is Seasonal.
This option determines its equation by taking possible seasonal effects into consideration.

Both these options use a maximum order equal to the square root of the number of years with data, rounded down to the nearest whole number.

On the report page these predicted values are compared with a simple straight line through the mean.

On the graph tabsheet you can plot:

➢ Actual Data

➢ Modelled (calculated) Data

➢ Residual Data (this is the difference between actual and seasonal data)

How to select extraction data for Analyse Trend/Season Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1   Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2   Filter by Graph Type:

Select the required **Graph Type** by clicking on the relevant radio button:

➢   Tendency

➢   Seasonal

2.3   Filter by What to Plot:

➢   Actual Data

➢   Modelled Data

➢   Residual Data (this is the difference between actual and seasonal data)

  And specify the order of selection. (The maximum order is the square root of the amount of years)

2.4   Filter by Objective/Standard:

Select the required **Objective or Standard** by clicking on the relevant radio button:

➢   **Point Objective** (the Class Type form will open, select a specific point objective)

➢   **Point Standard** (the Class Type form will open, select a specific point standard)

➢   **Adhoc Limits** (This can only be used for one variable. Enter an upper limit and/or a lower limit)

➢   **Lower Limit** (this can only be set when the Adhoc Limits option has been selected)

➢   **Upper Limit** (this can only be set when the Adhoc Limits option has been selected)

➢   **No Objective**

➢   **Objective Reason** (select from Class Type a specific objective or standard reason, depending on the Point Objective or Point Standard radio button selection)

2.5   Filter by Monitor or Laboratory:

- ➢ **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

- ➢ **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.*

EXCEEDENCE PLOT GRAPH

The Exceedance Plot Graph can be used to display what percentage of time has been exceeded by any standard or guideline value.

How to select extraction data for an Exceedance Plot Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1   Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2   Filter by Graph Type:

Select the required **Graph Type** by clicking on the relevant radio button:

➢ Single Point, Single Variable (to obtain results for a single point and single variable)

➢ Compare Variables for Point (to compare results for all variables for a specific point)

➢ Compare Points for Variable (to compare results for all points for a specific variable)

➢ Compare Monitors/Laboratories (analyst)

2.3 Filter by Objective/Standard:

Select the required **Objective or Standard** by clicking on the relevant radio button:

➢ **Point Objective** (the Class Type form will open, select a specific point objective)

➢ **Point Standard** (the Class Type form will open, select a specific point standard)

➢ **Adhoc Limits** (This can only be used for one variable. Enter an upper limit and/or a lower limit)

➢ **Lower Limit** (this can only be set when the Adhoc Limits option has been selected)

➢ **Upper Limit** (this can only be set when the Adhoc Limits option has been selected)

➢ **No Objective**

➢ **Objective Reason** (select from Class Type a specific objective or standard reason, depending on the Point Objective or Point Standard radio button selection)

2.4 Filter by Monitor or Laboratory:

➢ **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

➢ **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.*

ANIMATED PLOT GRAPH

The Animated Plot graph is used to show the changes in value for a period at a Monitoring Point over time. You can compare Variables and Monitoring Points with each other. This graph is intended to be viewed, and not printed. The operating instructions are stop, go back, or forward, delay (milliseconds per record, enter 0 to stand still) and you can also page manually.

How to select extraction data for an Animated Plot Graph:

You can filter criteria for graph extraction in the following ways:

TIP:

A message on the status bar will provide a clue as to the reason for the failed query. If all the criteria needed for a query is in place, the status bar will display the message 'Adequate Search Criteria'

Note that executing a query does not necessarily read the data in anew. Whenever a query is executed, the current search criteria will be compared with those when the previous query was executed. This allows you to toggle between the select, data and graph tabsheet instantly.

2.1   Filter by Date:

Enter the **Start Date** (CCYY-MM-DD) and **End Date** (CCYY-MM-DD) or click on the **Calendar** and select the required dates. *Remember, the Start Date must be before the End Date.*

2.2   Filter by Delay:

2.3   Filter by Graph Type:

Select the required **Graph Type** by clicking on the relevant radio button:

➢ Single Point, Single Variable (to obtain results for a single point and single variable)

➢ Compare Variables for Point (to compare all variables for a specific point)

➢ Compare Points for Variable (to compare all points for a specific variable)

➢ Compare Monitors/Laboratories

➢ You can also click on the Water Quality Categories button to open the Monitoring Variable Categories form and select the required filter criteria

2.4   Filter by Objective/Standard:

Select the required **Objective or Standard** by clicking on the relevant radio button:

➢ **Point Objective** (the Class Type form will open, select a specific point objective)

➢ **Point Standard** (the Class Type form will open, select a specific point standard)

➢ **Adhoc Limits** (This can only be used for one variable. Enter an upper limit and/or a lower limit)

➢ **No Objective**

➢ **Objective Reason**

➢ **Lower Limit**

➢ **Upper Limit**

2.5 **Filter by Monitor or Laboratory:**

➢ **Monitor** *(The Monitor uniquely identifies an organisation that collects samples or obtains field readings. The Monitor can also be referred to as an analyst when field measurements are recorded.)*

➢ **Laboratory** *(The Laboratory identifies an organisation that analyses samples. A laboratory can also be referred to as an Analyst.)*

Click on the **Range** button, the List will display a list of all monitors or laboratories. The **Enable Filtering** checkbox will be enabled. Check the enable filtering checkbox, by default all monitors/laboratories are selected. If required, deselect some monitors and click on the **Range** button. Only those variables taken by the selected monitor/laboratories will contain data. Tip: What has happened is that when Enable Filtering is NOT selected, clicking on the Range button will read in all data and populate the list of Monitors/Laboratories. However when the Enable Filtering IS selected, only those records analysed at the selected laboratories, or taken by the selected monitors, will be read in.

Select the **Compare Monitors/Laboratories** Radio button, Click the **Enable Filtering** checkbox on, with all monitors selected, and open the graph tab sheet.

Tip *Sometimes, when you try to click on the Compare Monitors/Laboratories Radio button, the Single Point, Single Variable button will become enabled, and the Enable Filtering checkbox will be disabled. This happens when you change one of the search criteria, causing the list of monitors/laboratories to be out of date. Click on the Range button to perform a new query and refresh the list of monitors or laboratories.*

The operating instructions can be executed by clicking on a bar

➢ Click to stop animation

➢ Right click to move forward to next record

➢ Left click to move back to previous record

➢ Double-click to resume animation.

The Delay on the select page refers to the number of milliseconds that the graph must pause between successive records.

A delay of 0 milliseconds would mean no animation.

However, left- and right click to move back and forward will still work.

How to Select and Display Data Information:

3.1. Click on the **DATA Tab**

3.2.   Click on the Display fields button to select either **Basic Plot Data** or **Descriptive Data**.

3.3.   If you have selected **Descriptive Data** check the required Descriptive data checkboxes.

How to Display information in a Graph:

The following options are available under the graph tabsheet to customize a graph. It allows you to do all sort of nice things with the graph, like editing and customising it.

➢ Graph – Previous Monitoring Point (option also on right hand side icons) to go to previous monitoring point. This option is disabled if this is the first monitoring point.

➢ Graph – Next Monitoring Point (option also on right hand side icons) to go to next monitoring point. This option is disabled if this is the last monitoring point.

➢ Graph – previous Monitoring Variable (option also on right hand side icons) to go to previous monitoring variable. This option is disabled if this is the first monitoring variable.

➢ Graph – Next Monitoring Variable (option also on right hand side icons) to go to next monitoring variable. This option is disabled if this is the last monitoring variable.

➢ Graph – Print – Print Chart. This prints the current chart.

➢ Graph – Print – Save for Printing. This does not print the chart. However, it saves the chart in memory, as a windows metafile, for later printing

➢ Graph – Print – Print Saved Charts. This option (F) does a 'Save for Printing' on current and then calls Print form. The print form allows you to 1) select and deselect which of the saved charts you want to print, by clicking on the promote and demote buttons.2) select how many you want to display on a printed page (by moving the saved list to the right hand side of the screen), and3) how you want to arrange the graphs on the printed page, by specifying the rows & columns.4) export any of these graphs as a windows metafile. Select a saved graph on the left hand and activate the 'Export' button. Specify the destination path.5) import a windows metafile to print together with these graphs. Click on the 'Import' button and select the file from the source path. It will appear with the other saved graphs on the left hand side.6) Edit the title of any of these plots by double clicking on it in the left hand list box

➢ Graph – Copy Chart. This will copy the chart as windows metafile to the clipboard. This allows you to paste it into any application that supports windows metafile. For testing purposes you can use the paint program that comes with windows.

➢ Graph – Save to file. Save the graph as a windows metafile.

➢ Graph – Change Fonts. This gives you access to the standard windows font dialog box for the following elements of the graphTitleFooterLegendBottom AxisTop AxisLeft AxisRight AxisDepth Axis

➢ Graph – Change Colours. This gives you access to a Colour Dialog box to edit the colours of Title backgroundFooter backgroundMain backgroundBack wallBottom wallLeft wallGradient startGradient endAll the series

➢ Graph – Change Pen Style. Each series is drawn by a combination of pen (thin lines) and brush (thick regions). This allows you to change the pen (line) type. The options are SolidDashDotDash DotDash Dot DotClearInside Frame

➢ Graph - Toggle Log Scale. Toggle axis between normal (default) and log scale. The log scale is often used when plotting biological data. Note that Log (0) is illegal. All 0'e are therefore replaced by 0.0001.

➢ Graph – Change Brush Style. Each series is drawn by a combination of pen (thin lines) and brush (thick regions). This allows you to change the brush style The options areSolidClearHorizontal LinesVertical LinesBackward DiagonalForward DiagonalCrossDiagonal Cross

➢ Graph – Refresh graphs. There are editable stuff that does not automatically refresh graphs e.g. **Zoom** in &/or include Legend. Then you can use this option to **Zoom** out to the original view. It does the same as when you go to another tab sheet and back to graph tab sheet.

➢ Graph – Toggle Axes. Toggle between axis tic marks and annotation present and absent.

➢ Graph – Toggle Legend. Toggle between legend present and absent.

➢ Graph – **Zoom** in/out

➢ Graph – Undo **Zoom**. Undo all **Zoom**, does back to original picture.

➢ Graph – Monitoring Point. Edit name of currently selected monitoring point. Weakness. If many points are selected, is still only allows editing of 1 point. The change will only be visible when viewing another graph and return. These name changes are remembered from 1 chart to the next.

➢ Graph - Variable – Name. Edit long name of currently selected variable. Weakness. If many variables are selected, is still only allows editing of 1 variable. The change will only be visible when viewing another graph and return. These name changes are remembered from 1 chart to the next.

➢ Graph - Variable – Abbreviation. Edit short name of currently selected variable. Weakness. If many variables are selected, is still only allows editing of 1 variable. The change will only be visible when viewing another graph and return. These name changes are remembered from 1 chart to the next.

➢ Graph - Variable – Unit. Edit measuring unit of currently selected variable. Weakness. If many variables are selected, is still only allows editing of 1 variable. The change will only be visible when viewing another graph and return. These name changes are remembered from 1 chart to the next. (DIFFERS FOR DIFFERENT GRAPHS) Graph – X-axis Labels. Always disabled for Time series.

➢ Graph – Edit – Header. Edit the header.

➢ Graph – Edit - x-axis Title. Edit the x-axis title.

➢ Graph – Edit – y-axis Title. Edit the x-axis title.

The following abilities can be accessed by clicking on various portions of the graph. Many of these provide functionalities that are also available in the menu (see above).

➢ Click on header. This will do the same as Graph – Edit – Header

➢ Click on bottom axis. This will do the same as Graph – Edit - x-axis Title.

➢ Click on left axis. This will do the same as Graph – Edit - y-axis Title.

(DIFFERS FOR DIFFERENT GRAPHS) Pass the mouse over the series in the graphs. As it passes over a series, the series become clickable and the mouse cursor change into a hand.

This changes the series type line series becomes a point series point series becomes a bar series becomes a line series

(DIFFERS FOR DIFFERENT GRAPHS) The look of the line series and bar series can be fully customised using the graph menu options. However, the type of marker (point) used cannot be changed that way. That can be changes by clicking on the point series (changing it into bar series), then clicking on the bar series (changing it into line series), then clicking on the line series (changing it into point series, with a different type of point than previous).

(NOT APPLICABLE TO ALL GRAPH TYPES) Click on the mouse key anywhere within the graph where the cursor is the default not the hand. Now keep it down and drag it to the right and to the bottom. A little window will appear. When you release the mouse-button, the graph will **Zoom** in.

Repeat the previous instructions, but from top-right to bottom-left. This will do the same as the Graph-Undo **Zoom** menu.

PC Polmon Transfer

NOTE: THIS IS A DRAFT PC POLMON MANUAL by Marysia

Introduction:

The objective of this module is to be able to transfer data from Pc-Polmon to WMS.

Business Rules:

Before any data can be transferred, certain information must first be set up. For example, the monitoring point should be registered and link to the monitor; the laboratory should be registered, and linked to monitoring variables and also monitoring methods. The laboratory must also be linked to the monitor, and the monitoring frequency must be linked to the monitor. Last but not least a Monitoring Programme must also be registered, design and set up.

Have the Latest WMS Procedural Manual at hand.

What Must Be In Place And Be Set Up Before Transferring Data

This involves the following:

WMS – (WRM) Water Resource Management

Step 1:   Register Monitoring Point (Now RQS Function – e-mail form WMS_017B_Monitoring_Point_Registration to kobus at RQS)

Step 2:   Register the Monitor (**Path:** Stakeholder Management; Organisation)

Step 3:   Link Monitor to Monitoring Structure as executive (**Path:** Stakeholder Management; Functional Structures; Click Organisation field and type in your Organisation Id)

Step 4:   Link Monitor to Monitoring Point and register the visit frequency (**Path:** Water Network Management; Monitoring Network; Point Query)

Step 5:   Register Organisation (Laboratory) – (**Path:** Stakeholder Management; Organisation)

Step 6:   Link to Laboratory Analysis Structure as executive (**Path:** Stakeholder Management; Functional Structures; Click Organisation field and type in your Organisation Id)

WMS – (MM) Monitoring Management

Peripheral Information

Step 7:   Register Monitoring Action and link Monitor to action (Central Function – (**Path:** Monitoring Action And Frequency; Monitoring Action Maintenance)

Step 8:   Register the Sample Type, Transport and Packaging Methods (Central Function – (**Path:** Monitor; Transport and Packaging From Monitor to Laboratory)

Step 9:   Create/Link the Monitor, Sample Type, Laboratory, Container and Preservative (**Path:** Monitoring Variable; Defaults For Programme Sample - then press Populate Variables Tab)

Step 10:   Verify that the variables in Pc-Polmon exist on WMS and write down the variable ID's.   (WMS_020_Variable_Groups, WMS_017C_Standards_and_Objectives_per_Monitoring_Point or use own form). If variable does not exist e-mail Triana or Kobus to add them WMS_019B_Analysis_Method - Form)

Now Register Analysis Method for Laboratory and then link Sample Type, Container & Preservative to Laboratory and Analysis method (**Path:** Monitoring Variable; Analyst Method Maintenance)

Step 11:   Register a Monitoring Programme (**Path:** Monitoring Programmes; Programme Registration; Register Programme – See Latest WMS Procedural Manual for further help)

Step 12:   Register the Programme Design & Write Detail (**Path:** Monitoring Programmes; Programme Registration; Register Programme Design – See Latest WMS Procedural Manual for further help)

Step 13:   Edit Programme Samples (**Path:** Monitoring Programmes; Programme Administration; Edit Programme Samples - See Latest WMS Procedural Manual for further help)

Step 14:   E-mail Request for Approval & Consolidation to Mr Kobus Myburgh

Once all these steps have been completed you can now start to transfer data from Pc-Polmon to WMS

Now Pc-Polmon must be selected and be opened, be sure the latest vision 6.00 is on the network, if not e-mail Deon Van Zyl - ahd@dwaf.gov.za .
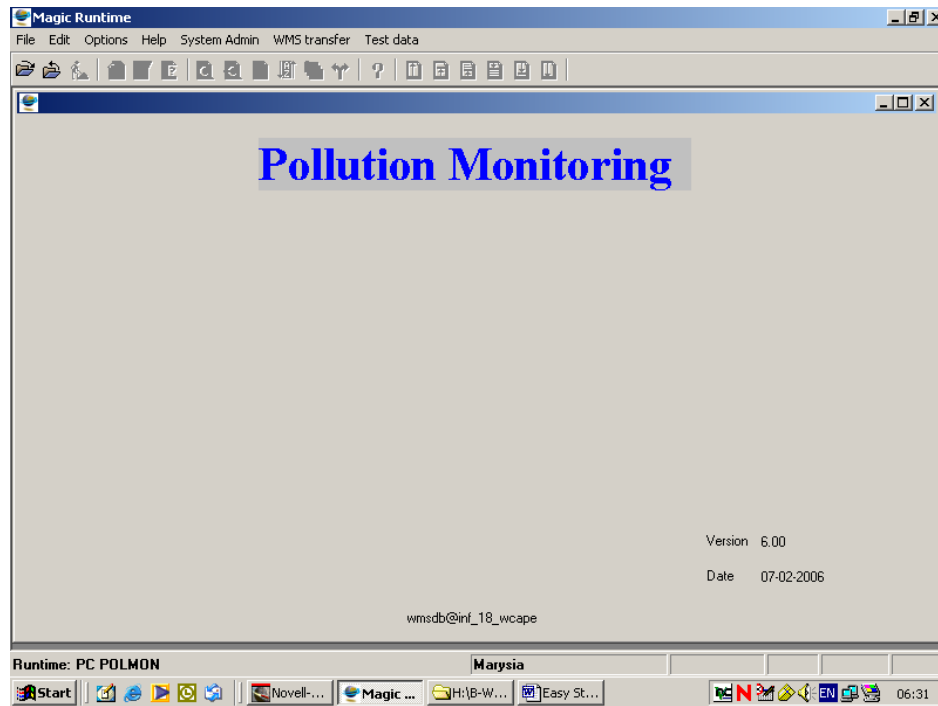
1. **Path:**

1.1 Once in Pc-Polmon, select WMS transfer from the Pc-Polmon menu bar.

1.2 Select Export mon point from the drop down menu. (This is to export the monitoring points from WMS to Pc-Polmon – **Note:** This can be done once a week or month because this takes long)

1.3 Select Export Laboratories from the drop down menu. (This is to export the laboratories from WMS to Pc-Polmon – (This doesn't take so long)

1.4 Select Export Monitors from the drop down menu. (This is to export the monitors from WMS to Pc-Polmon – (This doesn't take so long)

Note: **The following is already mapped:**

- **Map Polmon Variables to WMS**

- **Map Polmon Units to WMS**

If a variable or unit is not mapped e-mail Deon van Zyl or Kobus Myburgh so that they can map it for you because no user have the rights to do so.
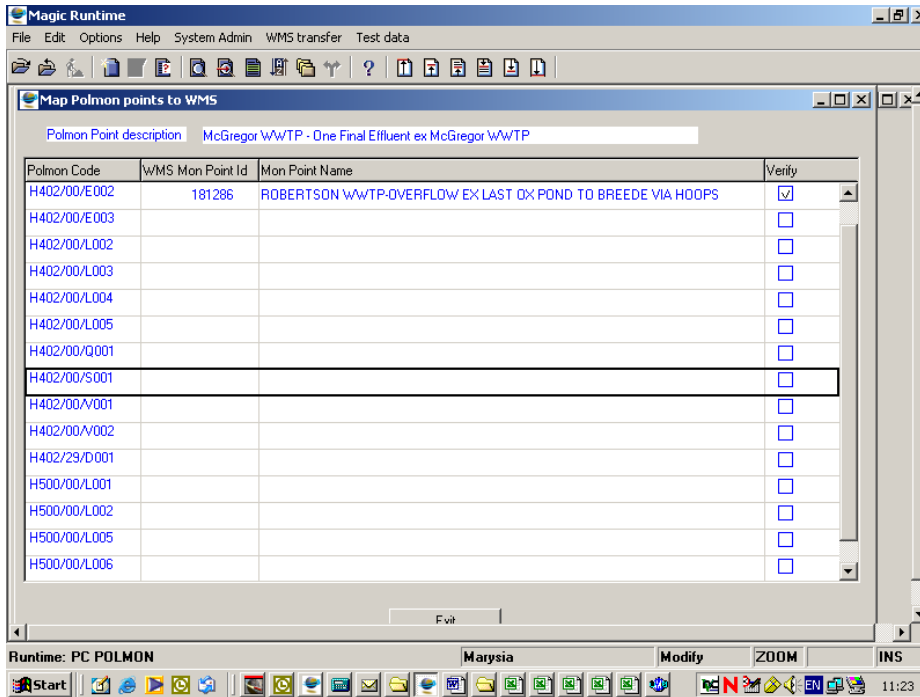
1.5   Select Map Polmon points to WMS from the drop down menu.   You are now going to locate your Pc-Polmon monitoring point you want to transfer by using the "Ctrl+L – Locate a Record". Type in the Pc-Polmon monitoring point in the "Polmon Code" Field and enter, you will now stand on the selected monitoring point.

Note: Ctrl+R - Range of Records doesn't always work.
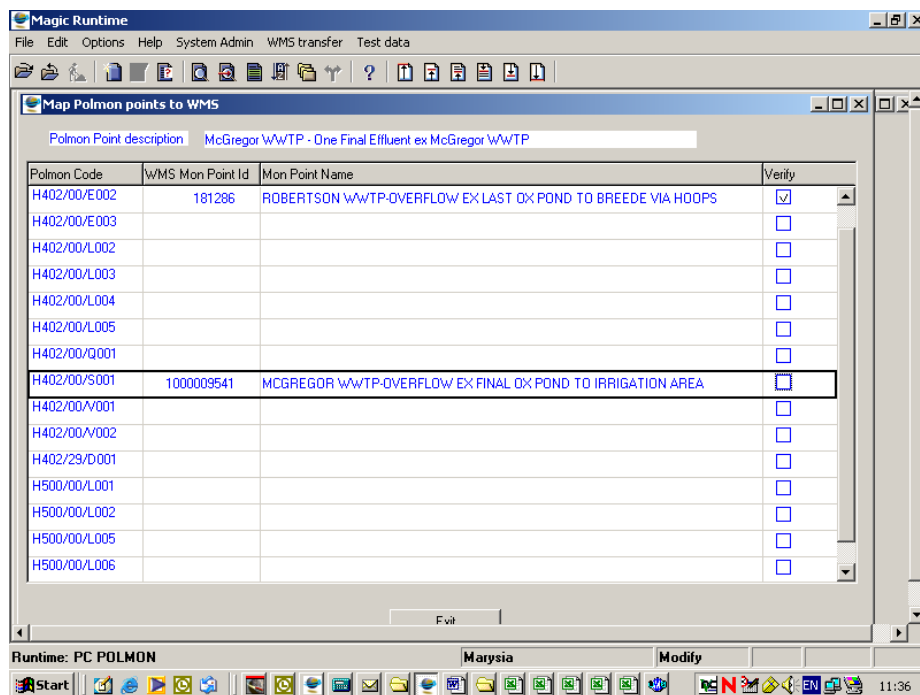
1.5.1 Zoom by using **F5** in the WMS Mon Point Id field, Ctrl+R (Range of Records), click with the mouse in the "Mon Point ID" field then type or paste & copy the WMS monitoring point in the "Mon Point ID" field. Press enter, the WMS monitoring point will appear and now press the Select button.
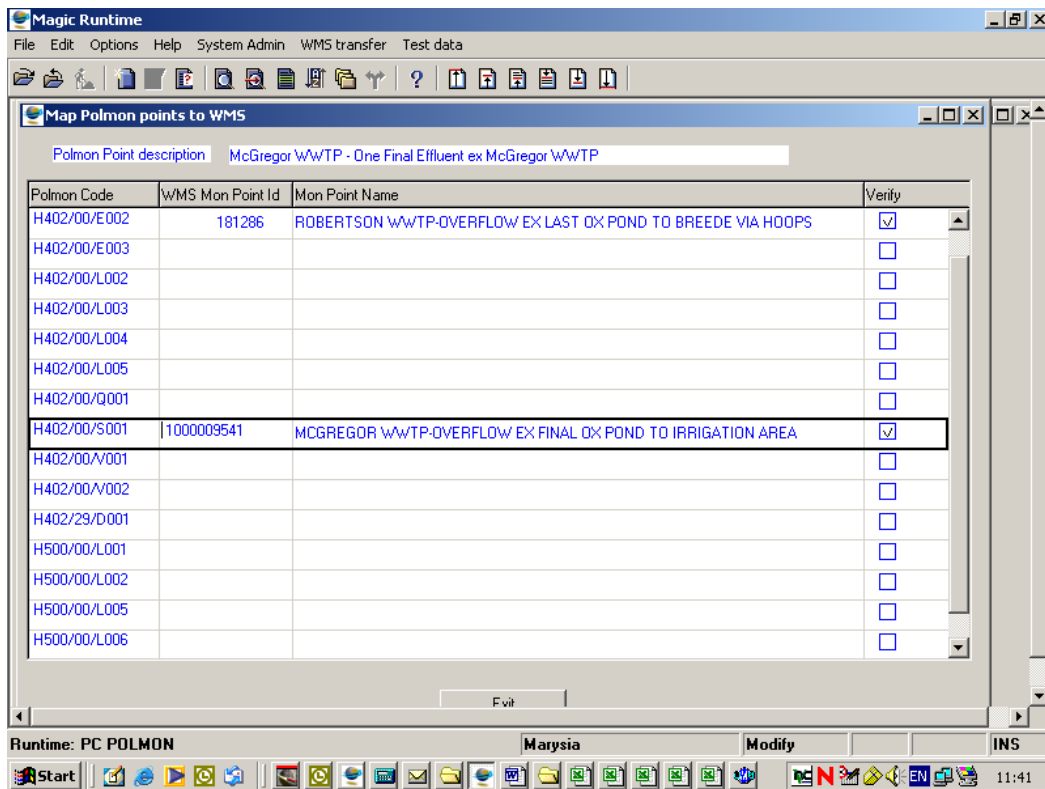
1.5.2 Verify the WMS monitoring point by clicking the Verify field square on with an √. Press the Exit button.
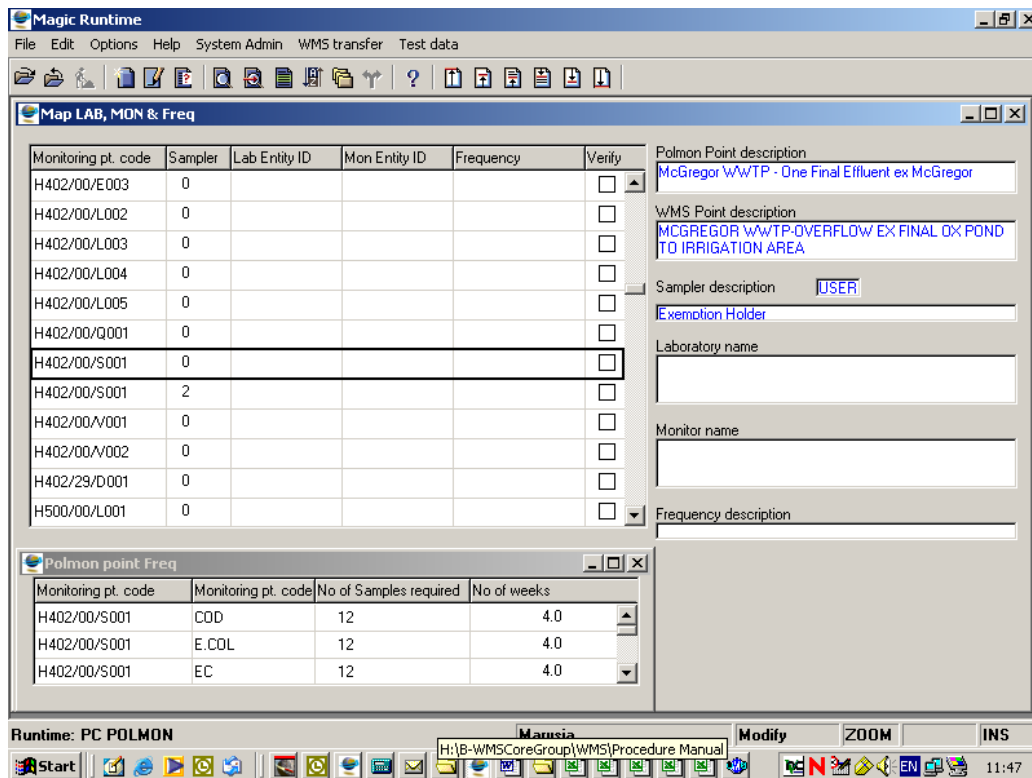
1.6   Select WMS transfer at the top of menu bar in Pc-Polmon and then "Map LABS, Mon Freq to Point/User" from the drop down menu. Now the hunt begins by using the page down & up on keyboard or at the top of the menu bar to locate the applicable Polmon monitoring point in Pc-Polmon.

Note: Ctrl+L Locate a Record & Ctrl+R Range of Records doesn't work at all.
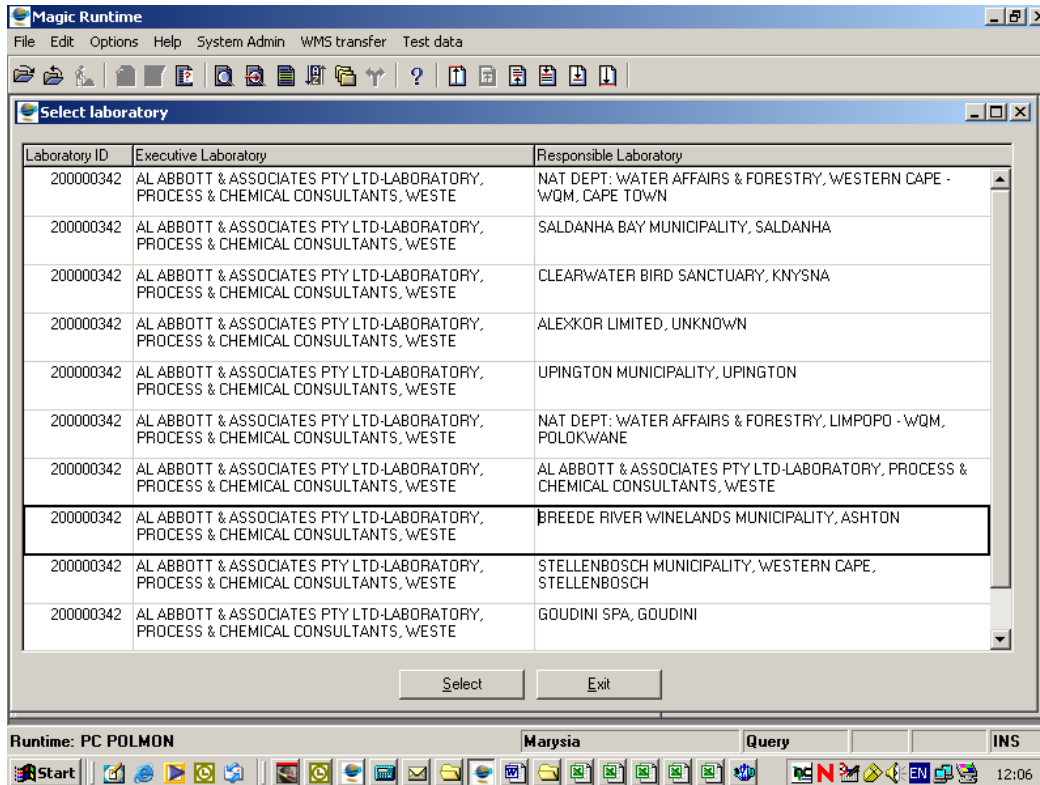
1.6.1   You will be standing in the "Lab Entity ID" field, your will now locate the Lab from WMS. Zoom by using **F5** in the Lab Entity ID field, Ctrl+R (Range of Records) tab until you are in the Laboratory ID field now type or paste & copy in the WMS Laboratory ID in the Laboratory ID field then enter, the Laboratory ID will appear, if there is more than one Lab ID select the correct one and press the Select button.
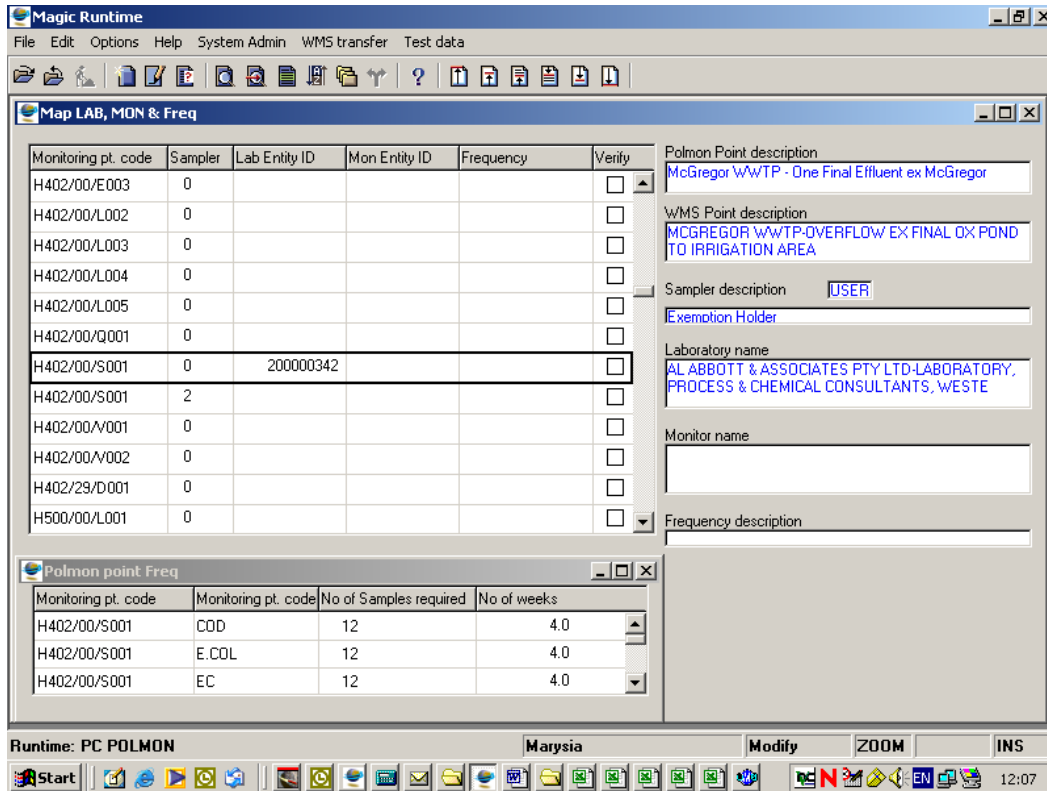
1.6.2   You will be standing in the "Mon Entity ID" field, your will now locate the monitor from WMS.   Zoom by using **F5** in the "Mon Entity ID" field, Ctrl+R (Range of Records) tab until you are in the "Monitor ID" field now type or paste & copy in the WMS monitor ID in the "Monitor ID" field then enter, the Monitor ID will appear and now press the Select button.
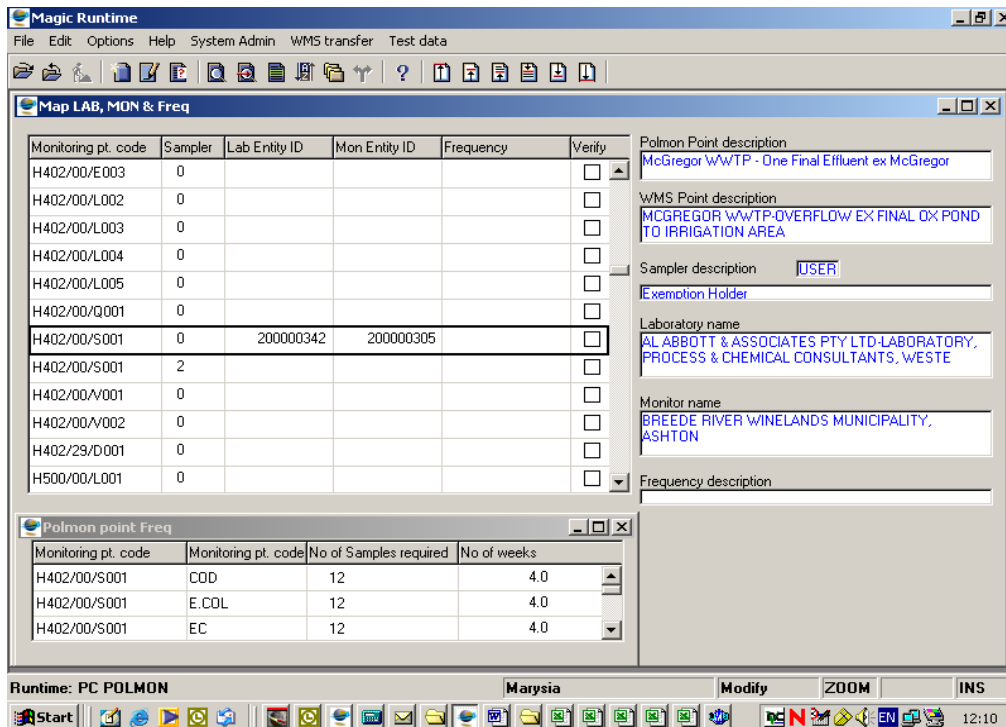
1.6.3   You will now be standing in the "Frequency" field, your will now add how often samples are to be taken, if you choose for e.g. "04 WEEKLY" samples will be taken

once a month. Zoom by using **F5** in the "Frequency" field, select the frequency applicable and press the Select button.
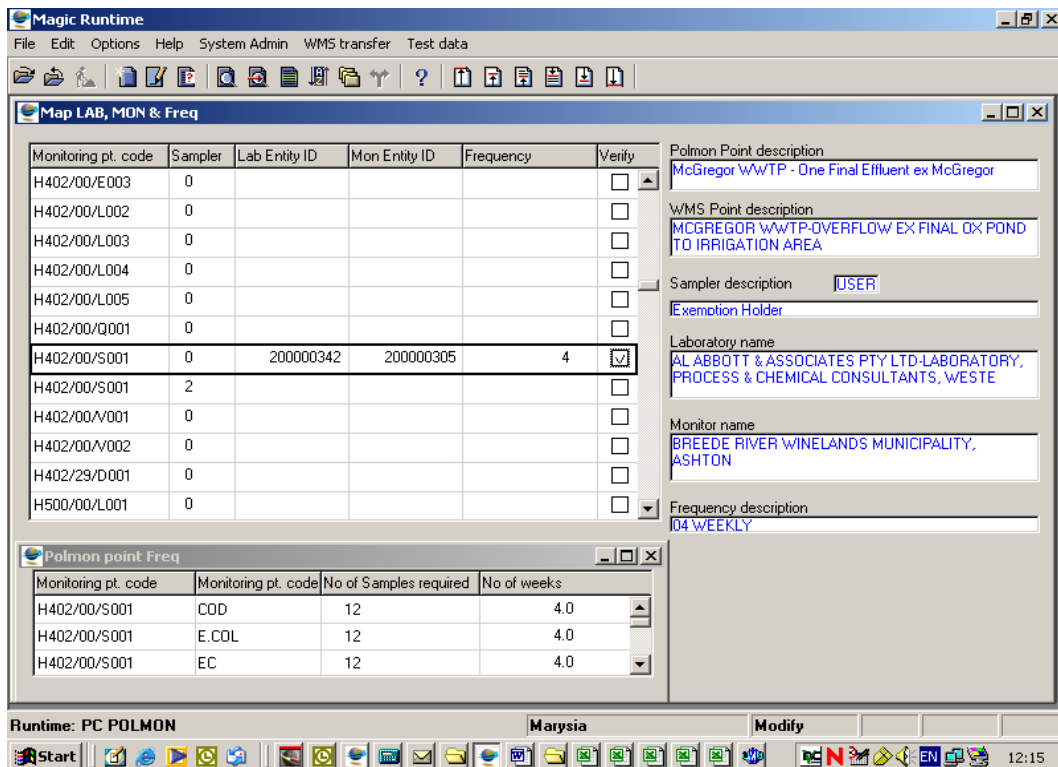
1.6.4 Verify all information as correct by clicking the Verify field square on with an √. Exit by pressing the X in the right hand corner.
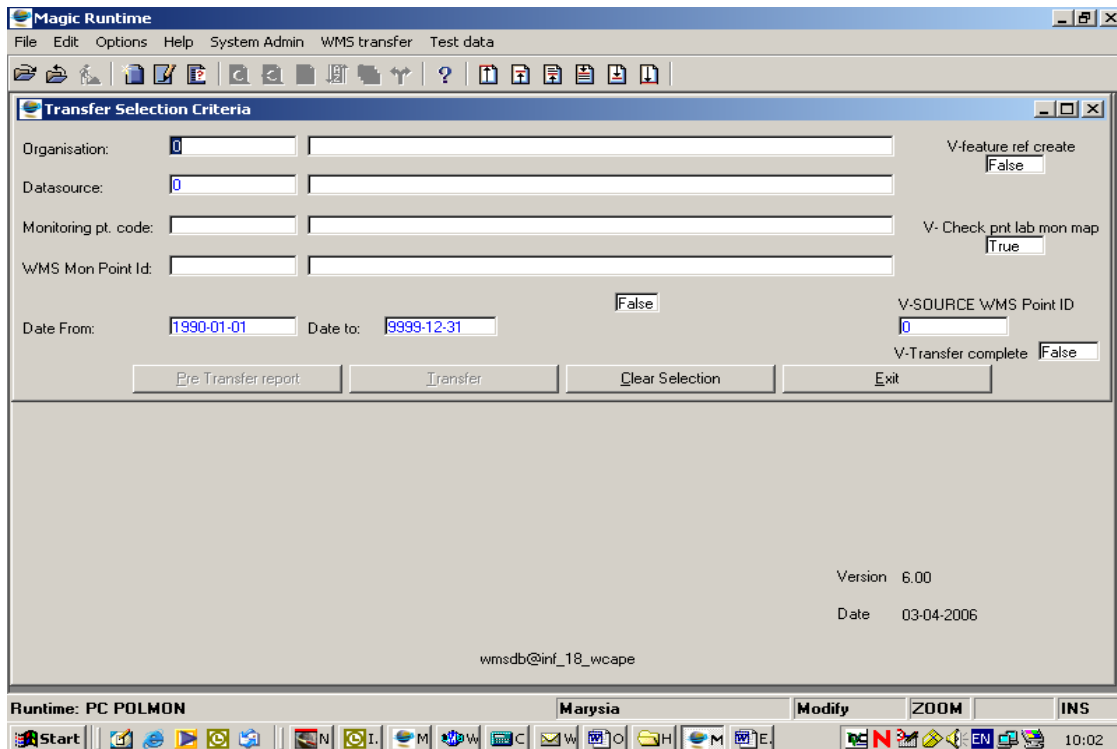
1.7 Select WMS transfer at the top of menu bar in Pc-Polmon and then "Transfer Selection Criteria" from the drop down menu.

1.7.1   At the "Organisation" field zoom by using **F5**, select applicable organisation and press the Select button.

1.7.2   At the " Datasource" field zoom by using **F5**, select applicable datasource ID and press the Select button.
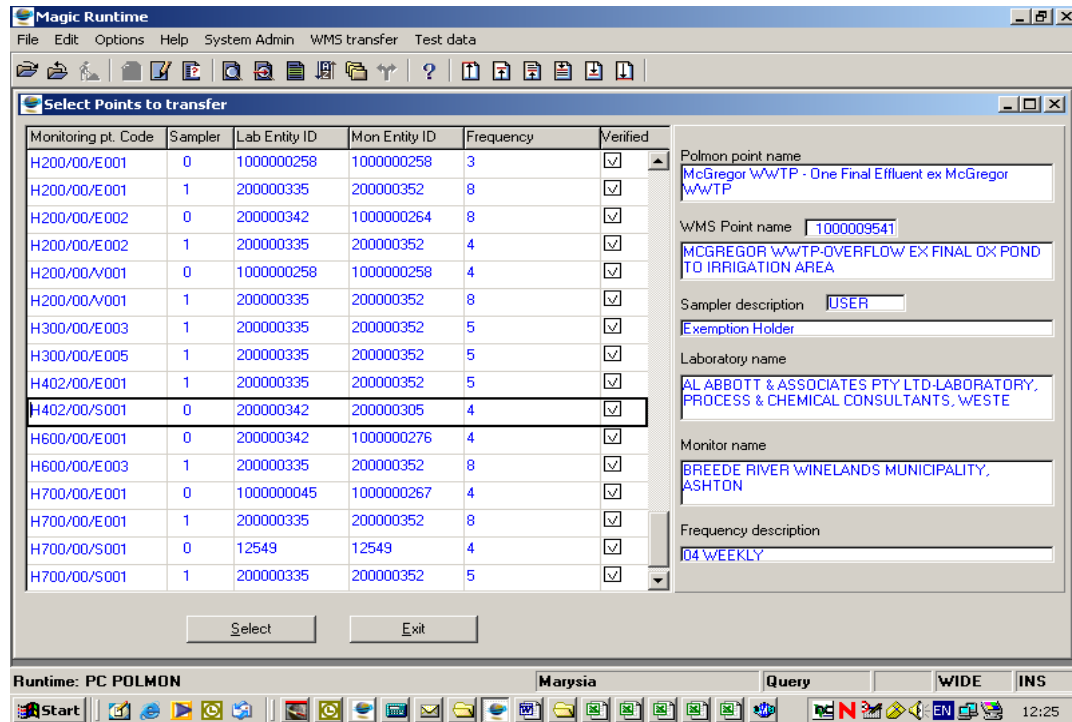
1.7.3   At the "Monitoring pt. code" field zoom by using **F5**, select applicable polmon monitoring pt. by using the page down on keyboard or at the top of the menu bar, then press the Select button. The correct WMS Monitoring Point ID and description will be automatically filled in the "WMS Mon Point Id field".

1.7.4   The cursor will now be at the Date From field. Now transfer can begin, if there are for e.g. five (2001-01-01 to 2005-12-31) years data **please** transfer two (2001-01-012 to 2002-12-31) years at a time, yes it will take longer but this will avoid transfer problems.

1.7.5   Type in the from & to date the "Pre Transfer report" button will now become active and you can press it now.

1.7.6   You will get a printout of the Pre Transfer report to see if there were any problems with the transfer or not. See **appendix 1** - page 1 - Variables with problems, there are none, but if there were problems it would have stated that there was, see **appendix 3** variables with problems. If there is any problems it has to be fix first before transfer can go ahead, the "Transfer" button will be disabled anyway.

Note: **Before pressing the "Transfer" button close Microsoft Outlook (e-mail) or any e-mail package you are using, I found that it interferes with the PcPolmon transfer to WMS.**

1.7.7   See **appendix 2 -** page 2 you can see all details & total results to be transferred to WMS, if there are no problems shown on the Pre Transfer report printout the "Transfer" button can be pressed.

1.7.8   See **appendix 4** - page 1 of the Post Transfer report one can see al details & same total results have been transferred, always make sure that the same total results have been transferred to WMS. See **appendix 4** - page 2 one can see if there were any "Transfer Errors or not. See **appendix 4** - page 3 one can see the objective/standards transferred from PcPolmon to WMS.

1.7.8   If all total results and no transfer errors occurred you have successfully transferred your data to WMS, the "Exit" button can be pressed.

CONGRATULATIONS!!!

APPENDIX 1

Pre Transfer report for WESTERN CAPE Region

Date 2006-04-03
Page 1

Polmon Monitoring P H402/00/S001   McGregor WWTP - One Final Effluent ex McGregor WWTP

WMS Monitoring Poi   1000009541   MCGREGOR WWTP-OVERFLOW EX FINAL OX POND TO IRRIGATION AREA

Datascource   13   PCPOLMON WESTERN CAPE

Transfer peric   2004-03-01   to 2006-01-31

Variables with problems

APPENDIX 2

Pre Transfer report for WESTERN CAPE Region

Date 2006-04-03

Page 2

Polmon Monitoring P H402/00/S001   McGregor WWTP - One Final Effluent ex McGregor WWTP

WMS Monitoring Poi	1000009541	MCGREGOR WWTP-OVERFLOW EX FINAL OX POND TO IRRIGATION AREA
Datascource	13	PCPOLMON WESTERN CAPE
Transfer peric	2004-03-01	to 2006-01-31

Variables to be transfered

Polmon Variab	COD		Chemical Oxygen Demand	Polmon un	mg/l
WMS Variable		122	COD	WMS Unit	mg/L
Polmon Variab	E.COL		Coliforms - Esch.	Polmon un	per 100ml
WMS Variable		77	E.COLI-Susp-Water	WMS Unit	cfu/100mL
Polmon Variab	EC		Electrical Conductivity	Polmon un	mS/m - 25C
WMS Variable		56	EC-Phys-Water	WMS Unit	mS/m
Polmon Variab	NH3-N		Ammonia - free and saline	Polmon un	mg/l
WMS Variable		13	NH4-N-Diss-Water	WMS Unit	mg/L
Polmon Variab	NO2-N		Nitrite - as N	Polmon un	mg/l
WMS Variable		12	NO2-N-Diss-Water	WMS Unit	mg/L
Polmon Variab	NO3-N		Nitrate - as N	Polmon un	mg/l
WMS Variable		11	NO3 + NO2-N-Diss-Water	WMS Unit	mg/L
Polmon Variab	PH		pH	Polmon un	pH units
WMS Variable		3	pH-Diss-Water	WMS Unit	pH units
Polmon Variab	SS		Solids - suspended	Polmon un	mg/l
WMS Variable		83	SOLIDS-Susp-Water	WMS Unit	mg/L
Polmon Variab	T.COL		Coliforms - Total count	Polmon un	per 100ml
WMS Variable		72	TC-Susp-Water	WMS Unit	cfu/100mL

Variables to be transfered detail

Polmon Variable		Results transf	Results to transf	Total Value	Total Convert Valu	Duplicat	QC-Problem
COD	Chemical Oxygen Demand	0	20	5897.000	5897.000	0	0
E.COL	Coliforms - Esch.	0	20	25700.000	25700.000	0	0
EC	Electrical Conductivity	0	20	2882.000	2882.000	0	0
NH3-N	Ammonia - free and saline	0	20	1051.700	1051.700	0	0
NO2-N	Nitrite - as N	0	20	6.520	6.520	0	0
NO3-N	Nitrate - as N	0	20	56.870	56.870	0	0
PH	pH	0	20	149.740	149.740	0	0
SS	Solids - suspended	0	20	1858.000	1858.000	0	0
T.COL	Coliforms - Total count	0	20	34700.000	34700.000	0	0

Total Results   180

APPENDIX 3

Pre Transfer report for WESTERN CAPE Region

Date   2001-08-31

Page   1

Polmon Monitoring Point G401/00/E001   GRABOUW MUN DISCHARGE TO PALMIET RIVER

WMS Monitoring Point

Datascource   13   PCPOLMON WESTERN CAPE

Transfer period`   1990-01-01   to   9999-12-31

Variables with problems

Permit Number	532 B		
Polmon Variable	COD	Chemical Oxygen Demand	Polmon Variable Unit mg/l
WMS Variable	122	CHEMICAL OXYGEN DEMAND	WMS Variable Std. Unit mg/l

Problems:

7   No Analysis Method exists for the Variable and Laboratory - Enter Associated Analysis method on Monitoring Management.

12   The Monitoring variable is specified as Sample and the Laboratory is not specified - Select a Laboratory for the Point and Sampler

Permit Number	532 B		
Polmon Variable	EC	Electrical Conductivity	Polmon Variable Unit mS/m - 25C
WMS Variable	56	ELECTRICAL CONDUCTIVITY	WMS Variable Std. Unit mS/m

Problems:

11   Neither the Analysis method nor the Monitoring Method exists on WMS for this Laboratory or Monitor - Create either of the 2 Methods in Monitoring Management.

Permit Number	532 B		
Polmon Variable	NH3-N	Ammonia - free and saline	Polmon Variable Unit mg/l
WMS Variable	13	AMMONIUM NITROGEN	WMS Variable Std. Unit mg/l

Problems:

11   Neither the Analysis method nor the Monitoring Method exists on WMS for this Laboratory or Monitor - Create either of the 2 Methods in Monitoring Management.

Permit Number	532 B		
Polmon Variable	PH	pH	Polmon Variable Unit pH units
WMS Variable	3	PH	WMS Variable Std. Unit pH units

Problems:

11   Neither the Analysis method nor the Monitoring Method exists on WMS for this Laboratory or Monitor - Create either of the 2 Methods in Monitoring Management.

Permit Number	532 B		
Polmon Variable	SS	Solids - suspended	Polmon Variable Unit mg/l
WMS Variable	83	TOTAL SUSPENDED SOLIDS	WMS Variable Std. Unit mg/l

Problems:

7   No Analysis Method exists for the Variable and Laboratory - Enter Associated Analysis method on Monitoring Management.

12   The Monitoring variable is specified as Sample and the Laboratory is not specified - Select a Laboratory for the Point and Sampler

APPENDIX 4

Post Transfer report for WESTERN CAPE Region   Date 2006-04-03

Page 1

Polmon Monitoring P	H402/00/S001	McGregor WWTP - One Final Effluent ex McGregor WWTP
WMS Monitoring Po	1000009541	MCGREGOR WWTP-OVERFLOW EX FINAL OX POND TO IRRIGATION AREA
Datascource	13	PCPOLMON WESTERN CAPE
Transfer peric	2004-03-01	to 2006-01-31

Variables transfered detail

Polmon Variable		Results transfered	Total Value
COD	Chemical Oxygen Demand	20	5897.000
E.COL	Coliforms - Esch.	20	25700.000
EC	Electrical Conductivity	20	2882.000
NH3-N	Ammonia - free and saline	20	1051.700
NO2-N	Nitrite - as N	20	6.520
NO3-N	Nitrate - as N	20	56.870
PH	pH	20	149.740
SS	Solids - suspended	20	1858.000
T.COL	Coliforms - Total count	20	34700.000
	Total result	180	

Post Transfer report for WESTERN CAPE Region   Date 2006-04-03

Page 2

Polmon Monitoring P	H402/00/S001	McGregor WWTP - One Final Effluent ex McGregor WWTP
WMS Monitoring Po	1000009541	MCGREGOR WWTP-OVERFLOW EX FINAL OX POND TO IRRIGATION AREA
Datascource	13	PCPOLMON WESTERN CAPE
Transfer peric	2004-03-01	to 2006-01-31

Transfer Errors

Post Transfer report for WESTERN CAPE Region   Date 2006-04-03

			Page 3
Polmon Monitoring P	H402/00/S001	McGregor WWTP - One Final Effluent ex McGregor WWTP	
WMS Monitoring Poi	1000009541	MCCREGOR WWTP-OVERFLOW EX FINAL OX POND TO IRRIGATION AREA	
Datascource	13	PCPOLMON WESTERN CAPE	
Transfer peric	2004-03-01	to 2006-01-31	

Variable objectives

Objective   1000000151   Section 21 - Purification and disposal of effluent

Monitoring Varial		Measure Unit	Limit	Limit Value
13	NH4-N-Diss-Water	mg/L	Upper Limit	10.000

Structures: Impactor Relationship

Introduction:

The objective of the Impactor Structures module is to be able to query, add and maintain information pertaining to organisations outside (external to) DWAF, that own sites where water is used in terms of the National Water Act of 1998.

The Impactor structure is used to manage the relationship between the water user (organisation) and its subsidiary organisation. For example, Harmony Mines owns Evander Mine and Randfontein Estates. The structure also connects the organisation to its site, e.g. connect the SAPPI Enstra organisation to the SAPPI Enstra site.

The Impactor Structure is used to link an organisation's contact person and the legally responsible person to establish who should receive a non-compliance letter when compliance on a monitoring point fails. (A non-compliance letter is sent out by the system every three months if no response is received). This structure also links other Liaison Entities such as Interested and Affected Parties (I&AP's) to the Impactor.

A typical structure has the following format:

Organisation   SAPPI South Africa

- SAPPI ENSTRA

- - J C SMIT   Qualifying relationship   MANAGER

    -       K MANN   Qualifying relationship   LEGALLY RESPONSIBLE

    -       L NIEMAN   Qualifying relationship   CONTACT PERSON

    -       M KNAPP   Qualifying relationship   INTERESTED/AFFECTED PARTY

Business Rules:

i.   The system is set up so that only capital (upper case) letters may be used in this module. The reason for this is that the system searches are case sensitive.

ii.   Always perform a search for the Impactor/organisation you are interested in before you add a new entity – this is to reduce / avoid duplication.

iii.   Ensure that the detail added to the system is correct and comprehensive.

iv.   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

1   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Functional Structures** from the sub menu.

1.3   Select **Organisation and Person Functional Structure** from the **Functional Structures** sub menu.

1.4   This will open the **Organisation and Person Functional Structure** form.

2.   How to Search for an Impactor Relationship:

2.1   Click the **Organisation check box**.

2.2   You can search for Impactor Relationships in one of the following ways:

  ➢ Click on the **Organisation Type Zoom** button. This will open the **Class Type** form; select an Organisation Type that best describes the Organisation. Click the **Select** button and/or

  ➢ In the **Name** field, enter a name or a portion of the organisation name followed by an *. A search can also be done on any part of the **Name** e.g. for Water a search can be done on *at* and/or

  ➢ In the **Abbreviation** field, enter the organisation's abbreviation or a portion of the abbreviation followed by "*".

2.3   Click on the ▭ **Range** button.

2.4   In the bottom right of the form, scroll down under **Relation Structure Reason** until you find the **Impact Relationship** Structure.

3.   How to Add an Impactor Relationship Structure to the Relation Structure Reason:

3.1   If an Impactor Relationship Structure does not exist, create a new Impactor Relationship Structure by clicking on the **New Relation Structure** button.

3.2   Click on the **Reason** **...** **Zoom** button. This will open the **Class Type** form for "Relationships Reasons". Select the **Impactor Relation Structure** Type and click the **Select** button.

3.3   Enter the **Date** from which the structure is valid.

3.4   Enter an **Explanation** of what this function is, e.g. all license holders.

4   How to Add a Structure to Impactor Relationship Structure:

4.1   Click on the **Results Structure** tab.

4.2   Click on the 🔳 **Add Root** button *(Note that clicking on the "Add" button adds the new organisation as a 'sub-ordinate' to the organisation on which the cursor is parked at the time, but this is not used, because of difficulties with maintaining this information on the system during resignations, retirements etc.)*

4.3   Scroll to the organisation that you require and click on the 🔳 **Select** button.

4.4   Enter the **From Date** in the top left of the form. This date is the date from which this organisation has been working in this rank in this structure. The 'To' date can be completed in if known e.g. upon resignation. (ccyy-mm-dd).

4.5   Click on the ✔️ **Accept** button (or click on F9) to accept the Organisation in the structure.

4.6   Click on the ⬛ **Zoom** button next to "Qualify Relationship" and select the correct rank or position.

4.7   Click on the ✔️ **Accept** button (or click on F9) to accept the Rank.

4.8   An Address can be linked to the Organisation (See the Address Module).

5.   How to Edit a Structure:

5.1   Click on the **Results Structure** Tab.

5.2   Click on the ⬛ **Edit** button.

5.3   This will open the Liaison Entity Details form.

5.4   Change the specific information as required.

5.5   Click on the ✔️ **Accept** button to accept the new information.

6.   How to Delete a Structure:

6.1   Click on the **Results Structure** Tab.

6.2   Click on the information of the organisation or the organisation you want to be deleted.

6.3   Click on the Qualify Relationship and click on the ⬛ **Delete** button.

6.4   Click on the ✔️ **Accept** button (or click on F9) to accept the deletion.

Objectives and Standards

Introduction:

The Objectives and Standards module is used to search, add and maintain Objectives and/or Standards pertaining to monitoring being performed at monitoring features.

Water Quality Management is a highly complex task which is often not considered to be measurable. Water quality managers also make the mistake of not setting goals in their quest to manage a catchment or resource. The Water Quality Manager's tasks often become a blur of pollution control, reports, meetings and writing letters. In order to effectively enforce Water Quality Management and address the needs of the different and conflicting water uses without succumbing to the economic click onures of writing off the water resource, it is important to set measurable goals. The National Water Act makes provision for Resource Quality Objectives, which include water quantity, quality, and aquatic ecosystem requirements. Furthermore, an important tool in the management of a catchment is the setting of License standards and/or conditions, which a water user must comply with.

WMS differentiates between Objectives and Standards in that Objectives are goals, whereas Standards are legally enforceable. Therefore, at a point on the river or on a transfer facility, such as a pipe, there can only be one standard, but there can be more than one objective. The manager can set "intermediate" objectives, and at the same time set "acceptable" and "ideal" objectives at the same point on a river. This immediately gives you of that resource an exact point on the scale as to what impact (positive or negative) a specific water use is having on the water resource.

The Standards and Objective module has the functionality to search, add and maintain Objectives and/or Standards at a specific monitoring point. The system also provides the functionality to record a "Subsequent" Objective or Standard. In other words a new License was issued on a certain day and from that day the standard is different. The system, further, makes provision for Seasonal Objectives or Standards.

Finally, the most important part of this component is that WMS can then verify to what extent the resource or water use at that monitoring point is complying with the Objective or Standard.
    1.2.

Business Rules:

i.   Objective – the quality measurement required at a monitoring point in terms of management objectives set by a section. Non-compliance with an Objective cannot result in legal action taken against a person or organisation.

ii.   There may be more than one different type of Objectives relevant to a monitoring point at any given time.

iii.   Standard – the quality measurement required at a monitoring point in terms of legislation (National, Provincial, Local). Non-compliance with a Standard may result in legal action taken against a person or organisation.

iv.   There may not be more than one Standard relevant to a Monitoring point at any given time.

v.   Always perform a search for the Objective / Standard you are interested in before you add a new Objective / Standard – this is to reduce /avoid duplication.

vi.   The monitoring point for which the Objective / Standard will be linked, must already have been added to the System.

vii.   Ensure that the detail added to the system is correct and comprehensive.

1   Path 1:

1.1   Select the **Monitoring Network** from the **Water Resource Management** menu bar.

1.2   Select **Point Query** from the sub menu.

1.3   This will open the **Monitoring Point View** form.

1.4   Select the monitoring point in question *(How to do this is explained in the Monitoring Point module of the manual).*

1.5   Select **Objectives / Standards Limits** from the Links menu.

1.6   This will open the **Objectives / Standards Maintenance** form.

2   Path 2:

2.1   Select **Results information Management** from the **Water Resource Management** menu bar.

2.2   Select **Compliance Management** from the sub menu.

2.3   Select **Objectives and Standard Limits** option.

2.4   This will open the **Monitoring Point View** form.

2.5   Select the monitoring point in question *(How to do this is explained in the Monitoring Point module of the manual).*

2.6   Select **Objectives / Standards Limits** from the Links menu.

2.7   This will open the **Objectives / Standards Maintenance** form.

3   How to search for an Objective / Standard:

3.1   On "Linking" to the Objective / Standard form, the system will automatically do a search for the default settings and display the results.

   3.1.1   If the Monitoring point has been tagged as a Resource Status point, the default search will be for an **Objective**;

   3.1.2   If the Monitoring point has been tagged as a Water Use Site, the default search will be for a **Standard**; and

   3.1.3   If the monitoring point has been tagged as a Resource Status point and a Water Use Site, the default search will be for both **Objectives and Standards**.

3.2   The default settings of Objectives and/or Standards can be modified by clicking on the appropriate **Radio** button to switch it on and off. The search will automatically run after each change and display the results.

3.3   If the Objective / Standard already exists, only verify the information.

4.   How to Add an Objective / Standard:

Ensure the Objective or Standard you want to add does not appear in the list:

4.1   If the Objective or Standard does not yet exist, click the **Add** button

4.2   There are three (3) options possible:

   4.2.1 **Add new Objective / Standard**

      4.2.1.1 Click on **Objective / Standard**. Click on the ▼ **drop down** button and select Point Objective or Point Standard by clicking on the correct option.

      4.2.1.2 Click on **Reason**. Click on the ▦ **Zoom** button to open the **class type** form. Expand the list and select the correct option by highlighting it and then clicking on the ▣ **Select** button.

      4.2.1.3 Click on the ✓ **Accept** button. The Monitoring Variable Limit Maintenance form will open.

4.2.1.4 Click on the ⊞ **Add** button. The Monitoring Variable form will open.

4.2.1.5 Click on the **Eco Compartment** ▼ **drop down** button and select the correct option. Click on the Variable Type dropdown button and select the correct option.

4.2.1.6 A list of variables will appear. Select the correct option.

4.2.1.7 Click on the **Boundary Type** ⁙ **Zoom** button and select the correct option.

4.2.1.8 Enter the value of the Objective / Standard.

4.2.1.9 Click on the ✓ **Accept** button to accept the new Objective/Standard.

4.2.2 **Specify Objectives / Standards with seasonal variation.**

4.2.2.1 Highlight the variable and seasonal value and click in the **Season from** field and click on the ⊞ **Add** button. The Seasons form will appear.

Highlight the corresponding season and click on the **Select** button. Repeat for the other variable value combinations.

4.2.2.2 Repeat steps 4.2.1.1 to 4.2.1.9 until all the required variables have been specified.

4.2.2.3 Once finished with the Monitoring Variable Limit Maintenance form, close it. The Monitoring Variable Limit Maintenance form can be re-opened and edited at a later stage.

4.2.2.4 Once the information is correct, click on edit and select "Finalise Objective". The "From Date" of the objective is defaulted with the current date and the "To Date" is defaulted with 9999/12/31. Correct if needed.

4.2.2.5 Click on the **Accept** button to accept the new record.

4.2.3 Add subsequent Objective / Standard from scratch

4.2.3.1 Highlight the Objective / Standard that must be superseded by the new Objective / Standard and select "Add subsequent Objective / Standard from scratch"

4.2.3.2 Repeat steps 4.2.1.1 to 4.2.1.9 as before.

4.2.4 Add subsequent Objective / Standard from previous

4.2.4.1 Highlight the Objective / Standard that must be superseded by the new Objective / Standard and select "Add subsequent Objective / Standard from previous"

4.2.4.2 The monitoring variables, values and seasons from the Objective / Standard to be superseded will be copied into this subsequent Objective / Standard where it can be changed as needed. The previous steps 3.2.1.1 to 3.2.1.9 can be repeated as needed here.

Tip: *Options 8.2 and 8.3 are only available once there is an Objective / Standard recorded at the point. When specifying seasons, no overlap or gaps are allowed in the year. The seasons selected must be for a full and complete calendar year. The "To Date" for the superseded Objective / Standard will automatically be replaced with the "From Date" – 1 day for this subsequent Objective / Standard. No overlap is allowed.*

5   How to Maintain an Objective / Standard:

5.1   To fix errors, click on edit and select "Fix Objective". It is now possible to change the Objective / Standard type, the Reason and the "From" and "To" dates. Click on the maintain button to be able to make changes to the variables, values and seasons as was described in the Add section previously.

5.2   Click on the **Accept** button to accept the new Objective/Standard.

Tip: *In the maintenance mode, the normal copy and paste commands can be utilised with the right hand button of the mouse. Do not change the information in this module unless it is incorrect. If the values for an Objective / Standard has changed over time, these changes must always be visible in the system.*

Compliance Determination

Introduction:

Compliance Determination is the process whereby a monitoring point's data is compared to the standard/objective for that monitoring point and the percentage compliance of the data is calculated for any given time period. Several processes are involved in compliance determination:

COMPLIANCE DETERMINATION STEPS:

STEP 1

Extraction Parameter - This process is used to specify the exact combination of Monitoring Feature(s) and Monitoring Variable(s) with an extraction period, to obtain the required information from the system. The analyst (Laboratory) or monitor can also be specified for compliance purposes, in order to view specific monitor or laboratory results at a monitoring point.

STEP 2

Objective Compliance Parameter - This process is used to define the particular standard/objective applicable to each variable and each monitoring point. This can be done automatically whereby the standard/objective details recorded in the Standards and Objectives module (valid and finalised standards and objectives) will be used. Alternatively, you can manually specify Objective or Standard compliance parameter that is not stored on the system.

OR

Adhoc Compliance Parameters - This process is used to quickly determine compliance against a value and measuring unit, irrespective of the variable or variables selected. The compliance will be determined for a given extraction parameter set, but without different values for different variables. The only requirement is that the variables must have the same/convertible measuring unit. The Adhoc Compliance Parameters and Results is set-up to allow you to run compliance on an adhoc basis (according to the upper and lower boundary limits and measuring unit) using existing extraction parameter values and additionally specified limits. The Adhoc Compliance Results is run for every monitoring point in the group, and variable or group of variables with the same/convertible measuring unit as specified on the Adhoc Compliance Parameter.

STEP 3

Compliance Run - *This* process is used to statistically compare the standard/objective predefined value against the released results. This process can be started in two different ways; through Batch Compliance or Manual Compliance:

2. **Batch Compliance** - This is an automatic batch process that is executed on a quarterly basis on every WMS server. This process will only run compliance on Monitoring Points as grouped in specific regional Monitoring Point Groups. The Monitoring Point's Groups for each region is maintained on the Select Monitoring Point form by a super-user in that region. The Batch will execute compliance for every point in the group for a period of one year (excluding the last three months, as this

information will still be in the process of being captured/received). The compliance will be run for all the finalised objectives and standards for the monitoring point, for each monitor, and all variables. All this information will become available for the Objective/Compliance Parameter without a link to extraction Parameter.

Important: Every time the batch runs, all the previous compliance results will be erased from the database.

Manual Compliance - You can start the process manually by clicking on the Compliance Determination button (on the Maintain Extraction Parameters form) or on the Compliance button (on the View Objective Compliance Parameter or View Adhoc Compliance Parameter forms).

STEP 4

View Compliance Results - This process is used to view results or create reports for the compliance previously determined. It is also possible to link to the statistical and graphical modules of WMS.

STEP 5

View Failed Runs - In the event of troubleshooting. To display a list of all monitoring points for which the compliance determination run was unsuccessful. Because the objective or standard was not finalised, did not exist, or released results for the specific variables, monitoring point, period and monitor/laboratory did not exist.

EXTRACTION PARAMETER

The Extraction Parameter is a combination of Monitoring Feature(s) and Monitoring Variable(s) with an extraction period to be used for various reasons e.g. Graphical Presentation of Monitoring Result data, Statistical Analysis, Objective and/or Adhoc Compliance Determination. The analyst (Laboratory) or monitor can also be specified for compliance purposes, in order to view specific monitor or laboratory results at a monitoring point.

1   Path:

1.1   Select **Results Information Management** from the Water Resource Management (Delphi front-end) menu bar.

1.2   Select **Prepare Results Extraction Parameters** from the sub-menu.

1.3   Select one of the two options from the **Prepare Results Extraction Parameters** sub-menu. The options are **Monitoring Point Groups** and **Monitoring variable Groups.**

How to search for an Extraction Parameter (Monitoring Point Groups):

Click on the **Monitoring Point Groups** selection on the **Prepare Results Extraction Parameters** sub-menu:

A **Monitoring Point Group Maintenance** for Selection form displays.

2.1 You can search for the extraction parameter in one of the following ways:

➧ **Search on the Standard Filter tab**:

➢ **Search on you Defined tab.**
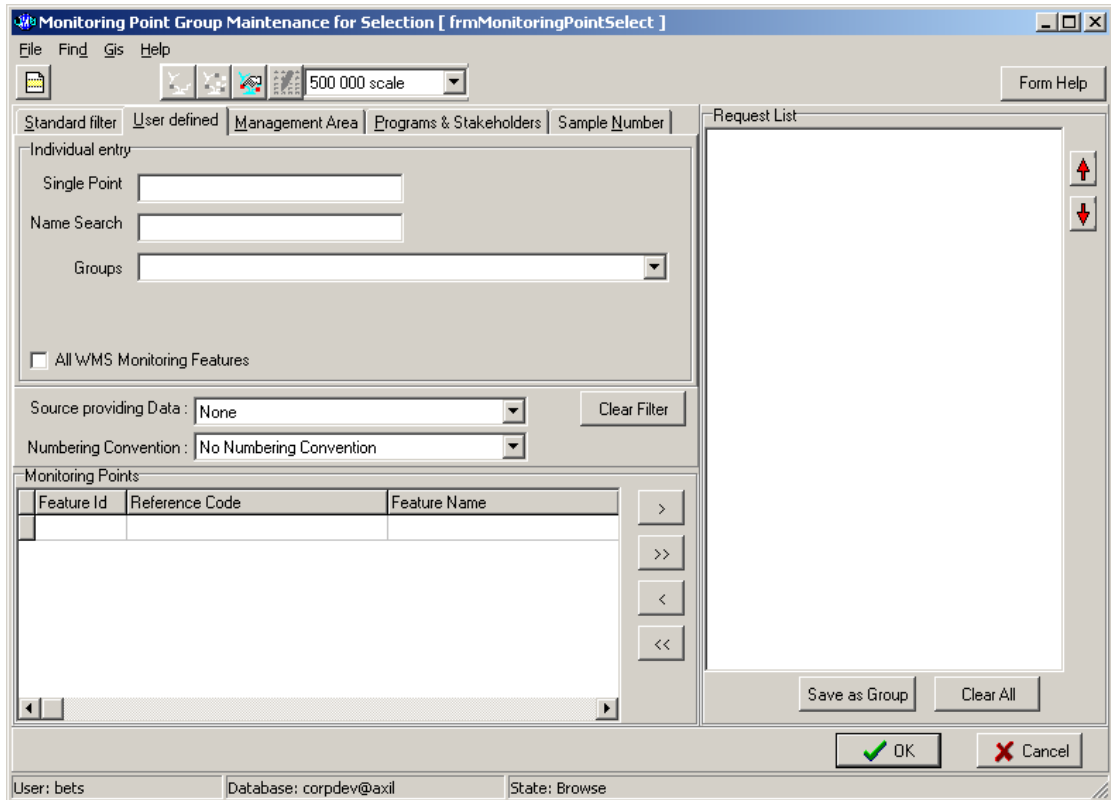
➢ **Search on the Management Area tab.**

➢ **Search on the Programs and Stakeholders tab.**

> ➢ **Search on the Sample Number tab.**

2.2 Enter the search criteria as described above and click on the ⬜ **Range** button. *The results will be displayed in the Results tab.*

🔲 **TIP:** *The information entered into any one of these sections is kept when going to another option and will form part of the search criteria. It must be cleared from the form if it is not required to be a part of the search criteria.*

How to search for an Extraction Parameter (Monitoring Variable Groups):

Click on the **Monitoring Variable Groups** selection on the **Prepare Results Extraction Parameters** sub-menu:

A **Select Monitoring Variables** Form displays.

2.1   You can search for the extraction parameter (Monitoring Variables) in one of the following ways:

   ➢   **Search on the Extraction Groups tab**:
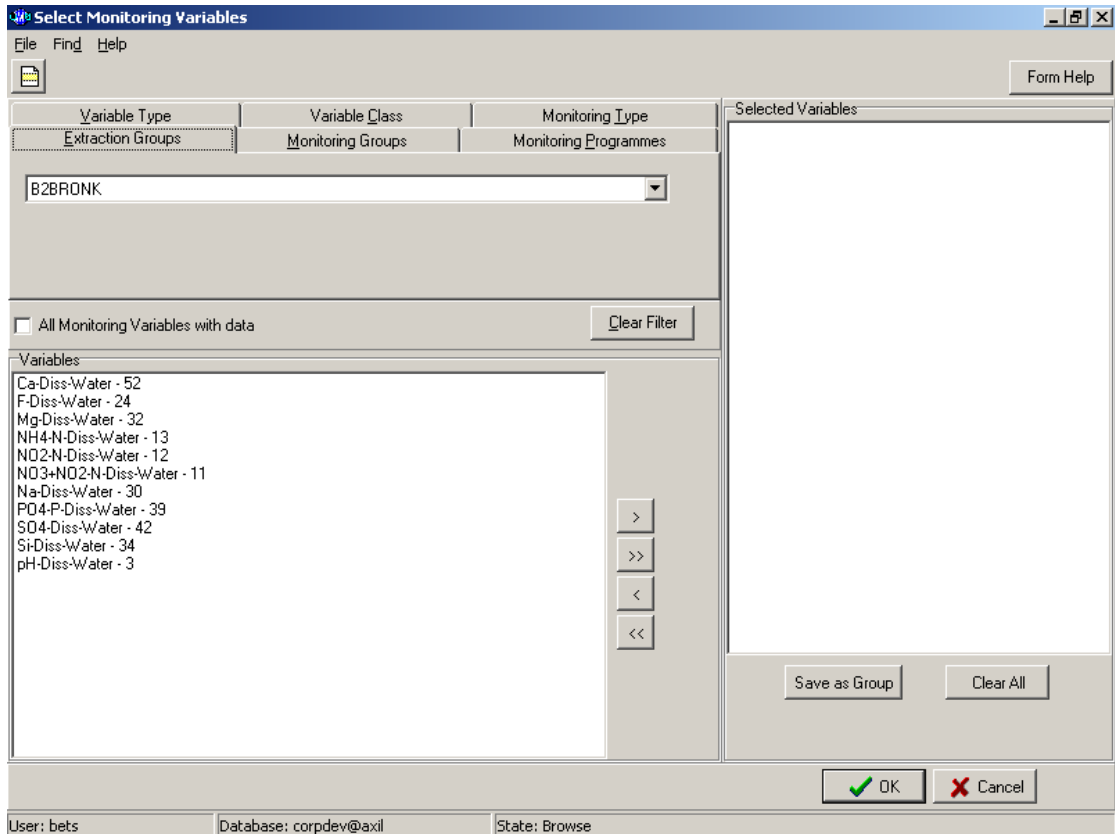
➢ **Search on the Monitoring Groups tab.**
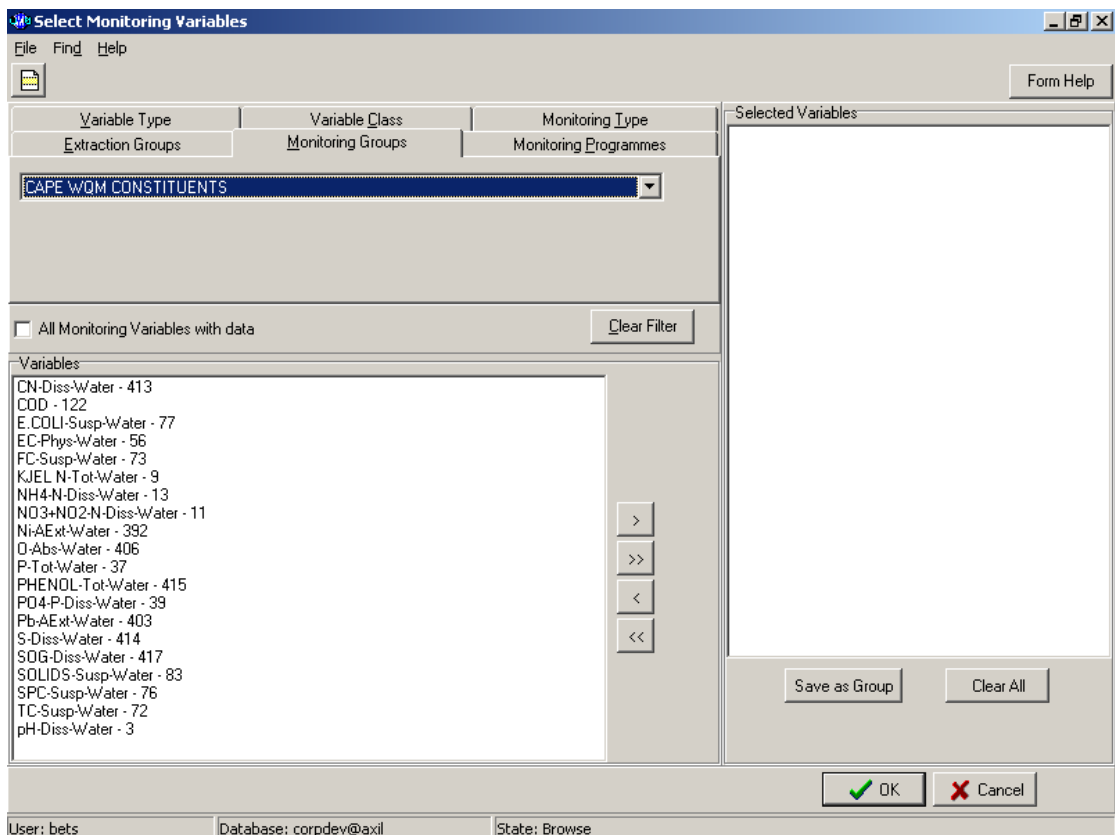
➢ **Search on the Monitoring Programmes tab.**

➢ **Search on the Variable Type tab.**

➢ **Search on the Variable Class tab.**
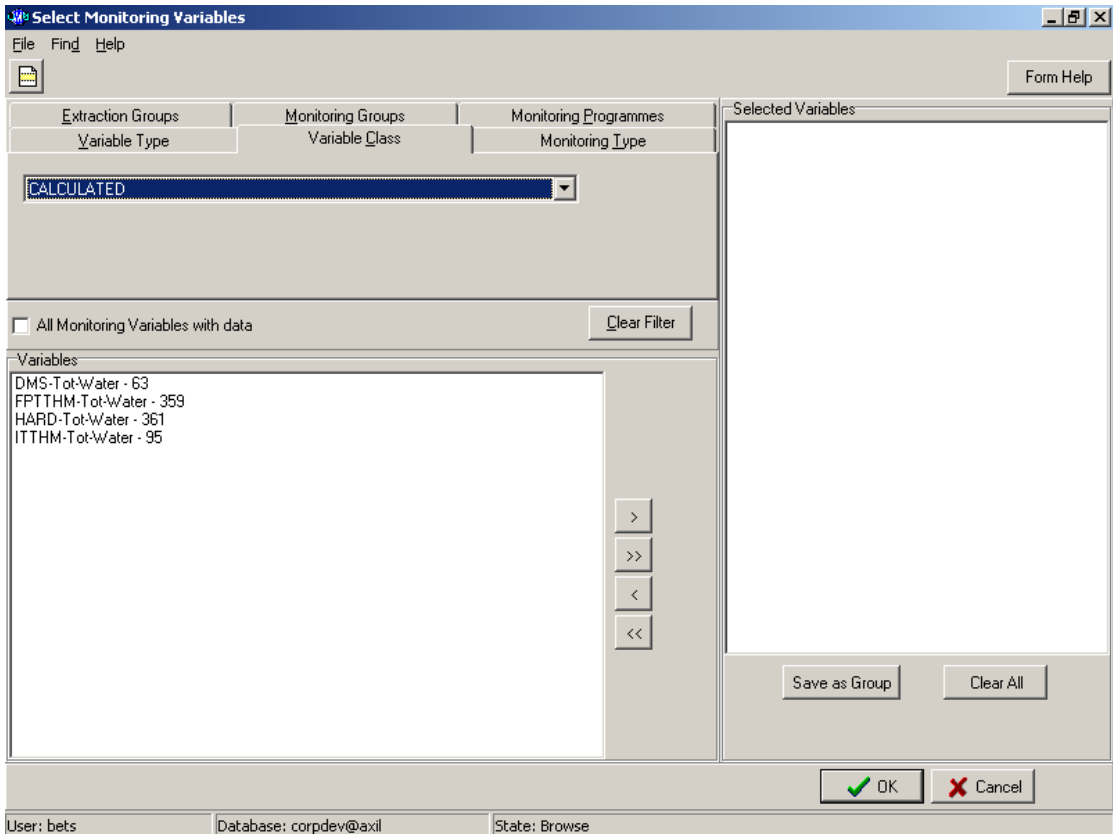
> ➢ **Search on the Monitoring Type tab.**
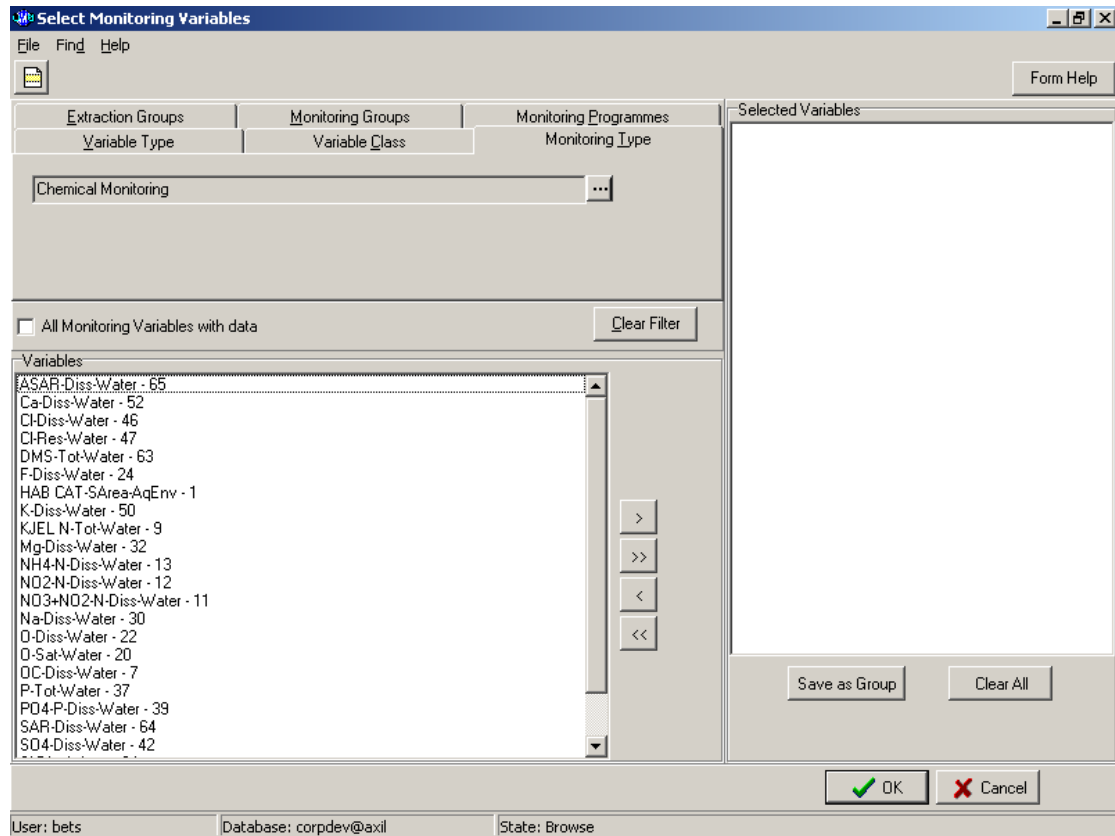
2.2   Enter the search criteria as described above and click on the ▢ **Range** button. *The results will be displayed in the Variables tab.*

3   How to add an Extraction Parameter:

Note: Duplicate records are not allowed. A record is a duplicate if it has the same Monitoring Point(s) and Variable(s) as another record.

3.1   First perform a Search for the Extraction Parameter (Both Monitoring Point Groups and Monitoring Variable Groups). If the required Parameter does not exist, in the Results tab, click on the **Add** button to open the **Maintain Extraction Parameters** form.

Tip: To successfully add an Extraction Parameter, the following fields are compulsory:

If you do not enter these correctly, ACCEPT will fail.

- Name

- Feature or Feature Group

- Start date < End Date

3.2   Enter the new **Extraction Parameter Name** in the field.

3.3   In the **Extraction From Date** field, enter the From date or click on the **Drop Down** button to open the Calendar and select the date from which the data must be extracted.

3.4   In the **Extraction To Date** field, enter the to date or click on the **Drop Down** button to open the Calendar and select the date to which the data must be extracted.

3.5   In the **Result Data Type field**, **click** on the **Drop Down** button and select either *Single, Multiple, Depth Profile or Time Series* from the drop down list.

3.6   In the **Start Depth** field, enter a Start Depth.

3.7   In the **End Depth** field, enter an End Depth.

3.8   Specify either a Feature or a Feature Group as follows:

➢ In the **Feature** field, click on the **Zoom** button and select the required Feature from the Select Monitoring Point form. *(See how to Select a Monitoring Point in the Select Monitoring Feature Parameter module)*

➢ In the **Feature Group** field, click on the **Drop Down** button and select the required Feature Group from the drop down list. *Only the public and private groups for the logged on user will be displayed in the list.*

3.9   Optionally, specify either a Variable or a Variable Group as follows:

➢ In the **Variable** field, click on the **Zoom** button to open the Select Monitoring Variables form, and select a record. *(See how to Select a Monitoring Variable)*

➢ In the **Variable Group** field, click on the **Drop Down** button and select the required Variable Group from the drop down list.

Important: *If neither a monitoring Variable nor a Group of Monitoring Variables was selected, you will not be able to execute the compliance determination process against an ad-hoc limit.*

3.10   To filter by Monitor or Analyst, Click on either the **Monitor or Analyst radio** button**, and then click on the Range** button. A list of possible monitors/analysts will be displayed, check the checkbox next to the required Liaison Entity.

Important: If you do not specify any of the parameters in step 3.9 or 3.10, and you execute the compliance determination program, it implies that you re-run the Batch Comply for the specified period and monitoring point(s). It is unnecessary and may take a while. Take this option carefully into consideration before executing it.

3.11   To specify the **Owner of the Extraction parameters as an organisation or person registered in a specific structure**, click on the Drop Down button to open the **Liaison Entity Zoom** form. Select the required record by clicking on the record, and clicking on the **Select** button to return the information to the previous form.

3.12   In the **Remarks** field, you may enter any remarks/reason for creating the extraction parameter.

3.13   Click on the Accept button to accept the new record.

Note: *The replication strategy for the extraction parameter is data consolidation. Data is sent from the regions to the central servers, therefore your extraction parameter record will only be seen by your own, and central servers. Don't change an existing extraction parameter created by another user, rather create or change your own record.*

4   How to Maintain an Extraction Parameter:

4.1   First search for the Extraction Parameter record to be edited.

4.2   Edit the Extraction From Date and/or Extraction To Date and perform the necessary changes to the fields that require editing. The change will not be applied to existing Compliance Records created for the extraction parameter. *You can only edit the Monitoring Point(s) and Monitoring Variable(s) of existing extraction parameter records if no compliance parameter exists for the specific extraction parameter record.*

4.3   Click on the **Accept** button to accept the new information.

5   How to Delete an Extraction Parameter:

You can only delete an extraction parameter when no compliance parameters exist for it.

5.1   Click on the required Extraction Parameter record to highlight it.

5.2   Click on the **Delete** button.

5.3   A message will be displayed asking if you are sure you want to delete the record, click on the **OK** button.

STEP 2:

Objective Compliance Parameter:

This process is used to define the particular standard/objective applicable for each variable and each monitoring point. This can be done automatically whereby the standard/objective details recorded in the Standards and Objectives module (valid and finalised standards and objectives) will be used. Alternatively, you can manually specify Objective or Standard that is not stored on the system as standard/objective records.

1   Path:

1.1   Select **Results Management Information** from the Water Resource Management (Delphi front-end) menu bar.

1.2   Select **Parameters** from the sub-menu.

1.3   Select **Objective Compliance Parameter** from the Parameters sub-menu. The View Objective Compliance Parameters form will open and display all existing objective compliance parameters. Note: When the Objective Compliance Parameters were created via the batch compliance job, no extraction parameter information will be displayed.

OR

1.4   An alternative path is from the **View Extraction Parameters** form, select a specific extraction parameter record, click on the **Links** menu item and select **View Objective Compliance Parameters**. The View Objective Compliance Parameters form will open and only display the Objective Compliance Parameter records created for the selected extraction parameter.

2   Search:

On the View Objective Compliance Parameter Find tab:

You can search for the objective compliance parameter in one of the following ways:

➢ **Search by Objective Compliance Parameter ID**: Click on the **Find on Objective Compliance Parameter ID only radio** button, and enter the ID in the **Objective Comply Parameter ID** field.

➢ **Search on Date**: Ensure the **Find on Other Criteria on this form radio** button is checked. Check the Search on Date **checkbox**. The **From** and **To Da**te fields will be enabled. Enter the dates, or click on the From and To Date ⏷ **Drop Down** buttons to open the calendar and select the required dates for the objective compliance parameter.

➢ **Search by Extraction Parameter ID**: Ensure the **Find on Other Criteria on this form radio** button is checked. In the Extraction Parameter ID field, enter the ID.

➢ **Search by Objective Type**: Ensure the **Find on Other Criteria on this form radio** button is checked. Click on the **Objective Type Drop Down** button and select the required objective type from the list.

➢ **Search by Objective Reason**: Ensure the **Find on Other Criteria on this form radio** button is checked. Click on the **Objective Reason Drop Down** button to open the **Class Type** form, and select the required objective reason, by clicking on it, and click on the **Select** button to return the information to the previous form.

2.1   Enter the search criteria as described above and click on the ▤ **Range** button. *The results will be displayed in the Results tab.*

🔲 *TIP: When viewing a record with a Run date, you will be able to see a list of Monitoring Features and Monitors/Laboratories with compliance result records, and view a list of monitoring features with no compliance results. The failure can be a result of one or more of the following: the applicable objective type and objective reason combination was not created from the extraction period on the compliance parameter record before the Compliance*

Determination process was activated, or which was not finalised or the extraction period differs or no released results exist for the analyst/monitor, monitoring point, variable and period combination.

3 How to Add Objective Compliance Parameter:

3.1   Ensure you have already setup your extraction parameters in the **Extraction Parameter** form. *See How to add an Extraction Parameter.*

3.2   On the **Objective Compliance Parameter Results** tab, click on the objective compliance parameter record with the required Extraction Parameter record that you would like to add objective compliance parameters to, to highlight the record.

3.3   Then click on the **Maintain** button to open the **Maintain Compliance Parameter** form.

3.4   Click on the **Add** button, a new objective compliance parameter ID will automatically appear in the ID field.

3.5   In the **Objective Type** field, click on the **Drop Down** button to select either a Point Objective or Point Standard from the list.

3.6   In the **Objective Reason** field, click on the **Zoom** button to open the **Class Type** form and select the required Objective Reason by clicking on the record, and clicking on the **Select** button.

3.7   The **Extraction From Date** is displayed as the Objective From Date. Enter another date if required.

3.8   The **Extraction To Date** is displayed as the Objective To Date. Enter another date if required.

3.9   Click on the **Accept** button to accept the new record.

   OR
   From the **Maintain Extraction Parameter** form, you also have three options to add.

3.1   You can click on the **View/Create Compliance Parameters Manually** button to create Adhoc and Objective/Compliance Parameters for the specific parameters. *Note: There is no validation that the objective type and reason exists for the monitoring point, variable or period.* **OR**

3.2   You can click on the **Create Compliance Parameters Automatically** button to create all possible objectives and standards compliance parameters for the selected monitoring point and period. *Note: No run date is displayed.* **OR**

3.3   You can click on the **Compliance Determination** button to automatically create and run compliance.

4   How to Maintain an Objective Compliance Parameter:

4.1   First search for the Objective Compliance Parameter record in View Objective Compliance Parameter to be edited. Focus on the record to be edited and click on the Edit button.

4.2   Edit the record as required. The following fields can be edited when the run date is empty: Objective Type and Objective Reason. Objective Compliance From Date and/or Objective Compliance To Date.

4.3   Click on the ✔ **Accept** button to accept the new information.

5   How to Delete an Objective Compliance Parameter:

You can only delete the Objective Compliance Parameter record when the run date is empty, i.e. compliance has not yet been determined.

5.1   Click on the required Objective Compliance Parameter record to highlight it.

5.2   Click on the [icon] **Delete** button.

5.3   A message will be displayed asking if you are sure you want to delete the record, click on the **OK** button.

Adhoc Compliance Parameter:

This process is used to quickly determine compliance against a value, irrespective of the variable or variables selected. The compliance will be determined for a given extraction parameter set but without different values for different variables. The only requirement is that the variables must have the same/convertible measuring unit. The Adhoc Compliance Parameters and Results is set-up to allow you to run compliance on an adhoc basis (according to the upper and lower boundary limits and measuring unit) using existing extraction parameters and additionally specified limits. The Adhoc Compliance Results is run for every monitoring point in the group, and variable or group of variables with the same/convertible measuring unit as specified on the Adhoc Compliance Parameter.

1   Path:

1.1   Select **Results Management Information** from the Water Resource Management (Delphi front-end) menu bar.

1.2   Select **Parameters** from the sub-menu.

1.3   Select **Adhoc Compliance Parameter** from the Parameters sub-menu. The View Adhoc Compliance Parameters form will open. All existing records will be displayed.

<div align="center">**OR**</div>

1.3   An alternative path is from the **View Extraction Parameters** form, click on the **Links** menu item and select **View Adhoc Compliance Parameters**. Only Adhoc Compliance Parameters for the extraction parameter will be displayed.

2   How to Search for an Adhoc Compliance Parameter:

On the View Adhoc Compliance Parameter form:

[icon] *TIP: When viewing a record with a Run date, you will be able to see a list of Monitoring Features with compliance result records.*

2.1   To search for a record, scroll through the list of records displayed or **Search on Date**: Check the Search on Date **checkbox**. The **From** and **To Da**te fields will be enabled.

Enter the dates, or click on the From and To Date [icon] **Drop Down** buttons to open the calendar and select the required dates for the adhoc compliance parameter, then

Click on [icon] **Range** button.
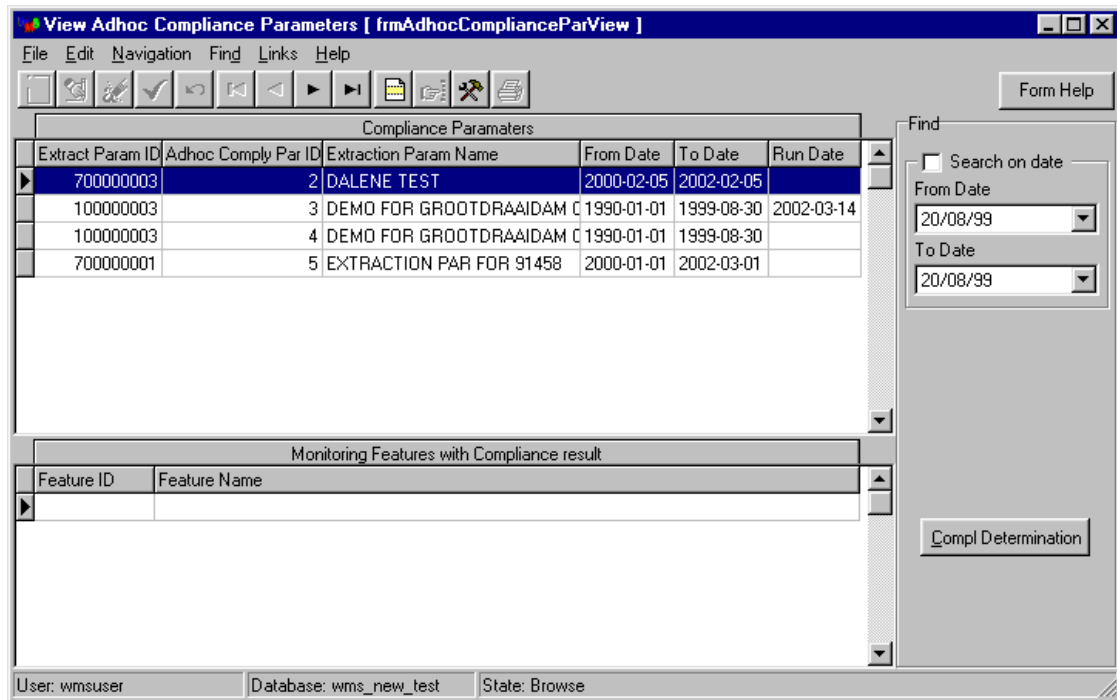
3 How to Add an Adhoc Compliance Parameter:

3.1 Ensure you have already setup your extraction parameters in the **Extraction Parameter** form. *See How to add an Extraction Parameter.* [?] *Note: If no specific monitoring Variable or group of monitoring Variables were defined for the associated Extraction Parameter, you will not be able to create Ad-hoc Compliance Parameters.* **OR**

3.2 On the **Objective Compliance Parameter Results** tab, click on the objective compliance parameter record with the required Extraction Parameter record that you would like to add objective compliance parameters to, to highlight the record.

3.3 Then click on the **Maintain** button to open the **Maintain Compliance Parameter** form.

3.4 Click on the **Add** button, a new objective compliance parameter ID will automatically appear in the ID field.

3.5 On the **View Extraction Parameter** form, click on the required Extraction Parameter record that you would like to add adhoc compliance parameters to, to highlight the record.

3.6 Then click on the **Maintain** button to open the **Maintain Extraction Parameter** form. Click on the **View/Create Compliance Parameter Manually** button to open the **Maintain Compliance Parameter** form.

3.7 Enter the information you require for the adhoc parameters *(information may already appear in the fields, you may select or enter other information) By default the Extraction From and To Dates will be displayed as the default adhoc compliance parameter dates, but you may change it. Note: The default measuring unit is Mg/l. You may change it. The adhoc compliance will only be executed for monitoring variables with the same measuring unit.*

3.8 Click on the **Accept** button to accept the new record.

4   How to Edit an Adhoc Compliance Parameter:

4.1   First search for the Adhoc Compliance Parameter record to be edited on the View Adhoc Compliance Parameter form.

4.2   Focus on the record to be edited and click on the Edit button and perform the required changes. The following fields can be edited: Boundary type, Unit of Measure and Boundary Value when the record has no run date yet.

4.3   Click on the ☑ **Accept** button to accept the new information.

Note: An Adhoc Compliance Parameter may only have one upper and one lower boundary record.

5   How to Delete an Adhoc Compliance Parameter:

You can only delete an Adhoc Compliance Parameter when the run rate is empty, i.e. no adhoc compliance results exist. When the Batch comply process was successfully completed, old compliance results will automatically be removed from the database.

5.1   Click on the required Adhoc Compliance Parameter record to highlight it.

5.2   Click on the 🖌 **Delete** button.

5.3   A message will be displayed asking if you are sure you want to delete the record, click on the **OK** button.

STEP 3

Compliance Run

This process is used to statistically compare the standard/objective against the released results. This process can be started in two different ways, either by Automatic Batch Compliance or by Manual Compliance.

1. Batch Compliance - *An automatic batch process is executed quarterly on every WMS server. It will only run compliance on Monitoring Points in specific regional Monitoring Points Groups. The Monitoring Points Groups for each region is maintained on the Select Monitoring Point form by a super-user in that region. The Batch will execute compliance for every point in the group for a period of one year (excluding the last three months, as this information will still be in the process of being captured/received). The compliance will be run for all the finalised objectives and standards for the monitoring point, for each monitor, and all variables. All this information will become available as Objective Compliance Parameters without a link to an extraction Parameter.*

Important: Every time either a batch run occurs, all the previous Objective and Adhoc Compliance results will be erased from the database.

1.   Manual Compliance

1.   In order to generate compliance result records, you have to initiate the Compliance Determination process.

1. *From Result Management Information menu select Adhoc Compliance Parameter or Objective Compliance parameter. (You would have done this in STEP 2 of the Compliance Determination Steps)*

2. *View all the Compliance Parameters. The records without an extraction parameter, were created with the auto batch compliance process. The Run date gives you an indication of when the compliance results are created for the specific compliance parameter.*

3. *You will be able to run the Compliance Determination process from this view for the active/selected/highlighted Compliance Parameter record. You can start the process manually by clicking on the Compliance Determination button (on the View Objective Compliance Parameters form/ View Adhoc Compliance Parameter form).*

4. *From the Result Management Information menu, select Parameters - View Extraction Parameters, and click on the maintain button. The Maintain Extraction Parameter form will open. Click on the Compliance Determination button.*

How to View/Print Compliance Results:

There are various options available that can be used to view or print the compliance results as follows:

From the View Adhoc Compliance Parameter form the following results can be viewed from the Links menu:

View Adhoc Compliance Result per Monitoring Point:

When the extraction parameter was associated with more than one Monitoring Point, it is the average percentage Compliance for all monitoring variables with the same measuring unit for the Monitoring Points in the group.

View Adhoc Compliance Result per Monitoring Variable:

View the percentage compliance and number of records used to determine the % compliance per Monitoring Point and Variable.

From the View Objective Compliance Parameter form the following results can be viewed from the Links menu:

View Objective Compliance Result per Monitoring Feature:

You will see the average percentage per Monitoring Feature. It is the average percentage compliance of the associated monitoring variables.

View Objective Compliance Result per Monitoring Variable:

View compliance result per Monitoring Point, Monitor/Analyst/Variable and per Season.

View Graphical Presentation

View Statistical Analysis

From the Objective Compliance Parameter form and the Adhoc Compliance Parameter form, the following results can be viewed from the Links menu:

Print Compliance Result Ranked per Percentage Compliance

Sort the % compliance results, and display the Objective, Compliance Results from the lowest to the highest % Compliance.

Print Compliance Result per Monitoring Point and Objective

Display Compliance Result per Monitoring Point and Objective when more than one objective is associated with the Monitoring Point.

Structures: Managing Water

Introduction:

The objective of the Managing Water module is to be able to query, add and maintain DWAF employee information and the persons in that structure relationship with the sites, monitoring points, or areas that they are responsible for managing. A person's responsibility level is determined by the level they have within the structure, i.e. either Executive/Responsible/ and or Managing level.

The Managing Water Structure can display the responsible person or organisation at a high level e.g. FREE STATE is a "Managing" level of the Middle Vaal Water Management Area and at a lower level e.g. Freddy Letsoko is the Executive Level responsible for the Tutunkon Power Station.

Executive Level - Officer level

Managing Level - Adjunct Director level

Responsible Level - Deputy Director level

A typical structure has the following format:

Organisation   DWAF

-    WESTERN CAPE - CAPE TOWN WATER QUALITY MANAGEMENT

-    **-** J C SMIT   Qualifying relationship   MANAGER

Business Rules:

i.   The system is set up so that only capital (upper case) letters may be used in this module. The reason for this is that the system searches are case sensitive.

ii.   Always perform a search for the Impactor/organisation you are interested in before you add a new entity – this is to reduce / avoid duplication.

iii.   Ensure that the detail added to the system is correct and comprehensive.

iv.   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

1   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Functional Structures** from the sub menu.

1.3   Select **Organisation and Person Functional Structure** from the **Functional Structures** sub menu.

1.4   This will open the **Organisation and Person Functional Structure** form.

2.   How to Search for a Managing Water Relationship:

2.1   Click the **Organisation check box**.

2.2   You can search for Managing Water Relationships in one of the following ways:

> ➢   Click on the **Organisation Type Zoom** button. This will open the **Class Type** form, select an Organisation Type that best describes the Organisation. Click the **Select** button and/or

> ➢   In the **Name** field, enter a name or a portion of the organisation name followed by an *. A search can also be done on any part of the **Name** e.g. for Water a search can be done on *at* and/or

> ➢   In the **Abbreviation** field, enter the organisation's abbreviation or a portion of the abbreviation followed by "*".

2.3   Click on the [icon] **Range** button.

2.4   In the bottom right of the form, scroll down under **Relation Structure Reason** until you find the **Impact Relationship** Structure.

3.   How to Add a Managing Water Relationship Structure to the Relation Structure Reason:

3.1 If a Managing Water Relationship Structure does not exist, create a new Managing Water Relationship Structure by clicking on the **New Relation Structure** button.

3.2 Click on the **Reason** ▦ **Zoom** button. This will open the **Class Type** form for "Relationships Reasons". Select the **Managing Water Structure** Type and click the **Select** button.

3.3 Enter the **Date** from which the structure is valid.

3.4 Enter an **Explanation** of what this function is, e.g. all license holders.

4. How to Add a Structure to the Managing Water Relationship Structure:

4.1 Click on the **Results Structure** tab.

4.2 Click on the ▦ **Add Root** button *(Note that clicking on the "Add" button adds the new organisation as a 'sub-ordinate' to the organisation on which the cursor is parked at the time, but this is not used, because of difficulties with maintaining this information on the system during resignations, retirements etc.)*

4.3 *S*croll to the organisation that you require and click on the ▦ **Select** button.

4.4 Enter the **From Date** in the top left of the form. This date is the date from which this organisation has been working in this rank in this structure. The 'To' date can be completed in if known e.g. upon resignation. (ccyy-mm-dd).

4.5 Click on the ✓ **Accept** button (or click on F9) to accept the Organisation in the structure.

4.6 Click on the ▦ **Zoom** button next to "Qualify Relationship" and select the correct rank or position.

4.7 Click on the ✓ **Accept** button (or click on F9) to accept the Rank.

4.8 An Address can be linked to the Organisation (See the Address Module).

5. How to Edit a Structure:

5.1 Click on the **Results Structure** Tab.

5.2 Click on the ▦ **Edit** button.

5.3 Change the specific information as required.

5.4 Click on the ✓ **Accept** button to accept the new information.

6. How to Delete a Structure:

6.1 Click on the **Results Structure** Tab.

6.2   Click on the information of the organisation or the organisation you want to be deleted.

6.3   Click on the Qualify Relationship and click on the **Delete** button.

6.4   Click on the **Accept** button (or click on F9) to accept the deletion.

Multimedia - Multimedia Library

Introduction:

The Multimedia Library module contains information about media types, like documents, audio clips, video clips, and image files. The media information is stored in the Multimedia Library, a central information repository to facilitate easy information referencing.

This module also allows for the storage of media relationship information between two media items, and between a media item and liaison entity(ies), for specific reasons.

The Related Multimedia module ensures effective correspondence management between organisations and/or persons. *(see Related Multimedia module)*

Business Rules:

i.   Electronic files must be available.

ii.   At least one Liaison Entity must have been registered, and linked to a multimedia record. e.g.

> ➢   The Responsible Water Quality Officer e.g. Dawie Maree
>
> ➢   The Legally Responsible Organisation e.g. Rustenburg Platinum Mine
>
> ➢   The Media Owner e.g. the consultant
>
> ➢   Authorization e.g. a governmental department like the Department of Mineral and Energy Affairs who gives authorisation for the activity, and where DWAF is only consulted on the subject.

iii. Enter information into as many non-compulsory fields as possible to ensure complete records.

1   Path:

1.1   Select **Result Management Information** from the Water Resource Management (Delphi Front-End) menu bar.

1.2   Select **Multimedia Management** from the menu.

1.3   Select **Library** from the sub menu.

1.4   This will open the **Multimedia Library Maintenance** form.

2 How to Search for a Multimedia Record:

You can search for a Multimedia record in one of the following ways:

2.1. Search by **Multimedia ID**: Click on the **Find on Media ID radio** button, enter the

Media ID and click on the [icon] **Range** button.

2.2. Search by **Multimedia Detail**: *This search can be refined by entering or selecting multiple field criteria.*

2.2.1. Click on the **Find by Media Detail** radio button, enter search criteria information or a portion of the information with * for one or more of the fields Electronic File Name, Description and Dwaf File No and click on the **Range** button. Or select

information by means of the [icon] **Drop Down** buttons for one or more of the fields Media Type, Media Purpose, Content Type, Cause/Trigger, Subject Area, or select the Generated From Date and Generated To Date from **Date/Time**

Picker Calendar and click on the [icon] **Range** button.

2.2.2. Search by **Liaison Entity Detail**: *This search can be refined by entering or selecting multiple field criteria.*

1.2.2.1 Click on **Person** checkbox, enter the Surname or a portion of the surname with a *, or enter Initials or a portion of the initials with *, click

on the **Titles** [icon] **drop down** button and select a title or enter the Preferred Name or a portion of the preferred name with * and click on the

[icon] **Range** button.

1.2.2.2 Click on **Organisation** checkbox, enter the Name or a portion of the name with a *, or enter Initials or a portion of the initials with *, click on the **Type** ▼ **drop down** button and select a title or enter the Abbreviation, Division, Area Office or ID or a portion of the preferred name with * and click on the 📄 **Range** button.

2.2.3. Search by **Correspondence**: Click on the **Correspondence** Checkbox until the **Y** option appears. Click on the Outgoing radio button and select information by means of the ▼ **Drop Down** buttons for one or more of the fields: Not Sent Reason, Status, or select the Expected Feedback From Date and Expected Feedback To Date from the Date/Time Picker Calendar and click on the 📄 **Range** button.

2.2.4. Search by **Calculation Method**: Click on the Calculation Method Checkbox until the **Y** option appears. Enter the Calculation Method ID and/or enter a Description or a portion of the Description with * and click on the 📄 **Range** button.

2.2.5. Search by **Liaison Entity Detail**: If this form is called from LE Details Result tab, via the links menu, the LE Detail will be displayed and you can refine the search by specifying the criteria. This search can be refined by entering or selecting multiple field combination search criteria except with the Liaison Entity Detail

🔲 **TIPS:**

It is advisable to use as many fields as possible so as to have a detailed search.

On the Multimedia Results tab, to scroll through the records at a faster pace, uncheck the Refresh Object on Scroll checkbox. The viewable media object will not be displayed. In order to view a specific media object, check the ☑ **Refresh Object on Scroll checkbox***, and then focus on the required multimedia record.*

3 How to Add a Multimedia record:

*Ensure the multimedia you want to add does not yet exist by first performing a **Search for the Multimedia***

3.1. If the Multimedia Item does not yet exit in the Results tab, click on the **Add** Button to open the Maintain Multimedia Form.

3.2.   In the **Media Type** field, click on the ⬛ **Drop Down** button, and select a media type by clicking on the required option.

3.3.   In the **Content Type** field, click on the ⬛ **Drop Down** button, and select a content type by clicking on the required option.

3.4.   In the **Electronic File Name** field, select the name by clicking on the **File** button to open the Open File dialogue box, and select the required file. *The Media Version Date and Media Creation Date should be automatically updated with the selection of the Electronic File name.*

3.5.   In the **DWAF File No** field; enter the file number.

3.6.   In the **Media Version Date** field, if the field has not yet been automatically updated,

        enter the media version date and time or click on the ⬛ **Calendar,** and select the correct date and time. In the Media Creation Date field, if the field has not yet been automatically updated, enter the media creation date and time or click on the calendar, and select the correct date and time.

3.7.   In the **Description** field enter description for the record.

3.8.   In the **Media Purpose** field, click on the ⬛ **Drop Down** button, and select a media purpose by clicking on the required option.

3.9.   In the **Cause/Trigger** field, click on the ⬛ **Drop Down** button, and select a cause/trigger by clicking on the required option.

3.10.   In the **Subject Area** field, click on the ⬛ **Drop Down** button, and select a subject area by clicking on the required option.

3.11.   In the **Reference** field enter a media reference e.g. the reference number on a letter.

3.12. If the record contains correspondence, continue with the steps 3.13 – 3.10, if not; click

on the ✓ **Accept** button to accept the new record.

    3.12.1. Check the **Correspondence** ☑ checkbox, and then click on either the Outgoing or Incoming Correspondence radio button.

    3.12.2. If the Incoming button has been selected, click on the ✓ **Accept** button to accept the new record. *The system will ask you to add at least one Liaison Entity to the Multimedia record for a specific reason.*

    3.12.3. Continue with the Addition of a relationship between a Multimedia and Liaison Entity.   See LINK/SELECT LE MEMBER for more detail.

    3.12.4. If the Outgoing radio button has been selected, continue with the relevant step 3.10.

3.13. ONLY THE RELEVANT field in STEPS 3.14.1 – 3.14.4 SHOULD BE COMPLETED before proceeding to STEP 3.14.4.

    3.13.1. After clicking on the Outgoing radio button, in the **Status** field click on the ▼ **Drop Down** button, and select a status by clicking on the required record.

    3.13.2. In the **Expected Feedback Date** field, enter the expected feedback date or

click on the 🗓 **Calendar**, and select the correct date and tab.

    3.13.3. Click on the ✓ **Accept** button to accept the new record.

For correspondence that has been auto generated but not sent, the following feature functionality is used:

993

3.13.4 In the **Not Sent Reason** field, click on the ▼ **Drop Down** button, and select a Reason for not sending the correspondence to the interested Liaison Entity.

3.13.5 In the **Not Sent Description** field enter a Description of the Reason for not sending the correspondence to the interested Liaison Entity.
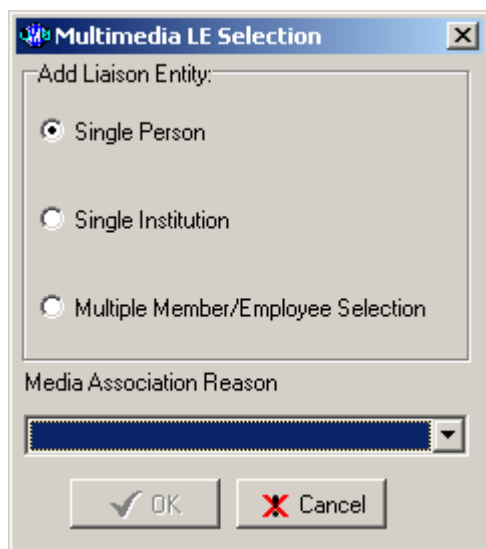
TIP: *When adding an Electronic file as the object, steps 3.4 and 3.8 are optional. However when adding a multimedia file for reference purposes WITHOUT LINKING the electronic object, step 3.3 must be ignored, but steps 3.4 and/or 3.8 become compulsory.*

Multiple multimedia records can be created with the same Electronic File Name, however the Version Date must always differ.

4 How to Link/Select LE Member:
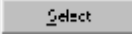
4.1. First do a Search for the Multimedia record. (If the Liaison Entity is received from the Liaison Entity form, clear the Received Liaison Entity ID before clicking on the **Range** button.)

4.2. Once you have found the record on the Results tab, click on the Liaison Entity tab, if the relationship between the Liaison Entity and the Multimedia record does not yet exist, click on the **Add** button to open the Multimedia LE Selection form.
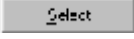
4.3. You can continue to **ADD EITHER A SINGLE PERSON/ORGANISATION, RECEIVED LIAISON ENTITY OR MULTIPLE EMPLOYEES OR MEMBERS** with the following steps:

4.4. **Add a Single Person:**

4.4.1. Click on the **Single Person radio** button.

4.4.2. Select a **Media Association Reason** by clicking on the ▼ **Drop Down** button, and clicking on the required Media Association Reason option.

4.4.3. Click on the **OK** button to open the Liaison Entity Person form. Select the required Liaison Entity and click on the **Select** button to return the

related Liaison Entity information. The new record should appear in the Multimedia Library Liaison Entity Results tab.

4.5. **Add a Received Liaison Entity:** *This option will only be available if the Multimedia Library form was opened from the Liaison Entity Links menu*.

   4.5.1. Click on the **Received Liaison Entity radio** button.

   4.5.2. Select a **Media Association Reason** by clicking on the ▼ **Drop Down** button and clicking on the required Media Association Reason option.

   4.5.3. Click on the **OK** button.

4.6.   **Add a Single Organisation:**

   4.6.1. Click on the **Single Organisation** radio button.

   4.6.2. Click on the **OK** button to open the **Organisation Selection** form. Perform a Search for the correct Organisation and click on the [Select] **Select** button.

   4.6.3. Close the form. The new record should appear in the Multimedia Library Liaison Entity Results tab.

4.7. **Add Multiple Members/Employees:**

   4.7.1. Click on the **Multiple Member/Employee Selection radio** button.

   1.7.2. Click on the **OK** button to open the **Multiple Member/Employee Selection** Form. This will open a **Multiple Member/Employee Selection** form.

   1.7.3. Perform a Search for the correct Organisation by clicking on the drop-down button on the **Organisation ID** field. This will open an **Organisation Selection** form. Perform a Search for the correct Organisation and click on the [Select] **Select** button.

   1.7.4. The **Multiple Member/Employee Selection** Form will open with the selected Organisation ID.

   1.7.5. Select the **Liaison Entity Multimedia Associated Reason** from the drop-down list.

   1.7.6. Close the form. The new record should appear in the Multimedia Library Liaison Entity Results tab.

5   How to Delete a Liaison Entity Association:

5.1   Click on the Liaison Entity record to be deleted, to highlight it.

5.2   If the multimedia is the last linked multimedia correspondence related record, click on

the [icon] **Delete** button. A warning message will be displayed with two delete options. Either click on the **Add a new Liaison Entity and then delete the current Liaison Entity** radio button or the **Delete the Liaison Entity and then delete the Multimedia that is linked to it** radio button and click the **OK** option to confirm the deletion.

5.3   If the multimedia is not correspondence related, or not the last record, click on the [icon] **Delete** button, a confirmation message will be displayed. Click on the **OK** option to confirm deletion.

6   How to Edit a Multimedia record:

Business Rules:

The Electronic File Name cannot be edited.

The Media Version Date field cannot be edited for Outgoing Correspondence records.

6.1   First search for the Multimedia record to be edited.

6.2   Click on the [icon] **Edit** button to open the Maintain Multimedia form.

6.3   Perform the necessary changes to the fields that require editing. *See How to Add a Multimedia record.*

6.4   Click on the [icon] **Accept** button to accept the new information.

[icon] **TIP:** *The status of outgoing correspondence can only be edited if the Auto Generated Checkbox is activated. If you have created a Reference Multimedia record, you can link the record to the real object via the Electronic File Name field.*

7   How to Delete a Multimedia record:

Business Rules:

If the record has been Auto Generated, it cannot be deleted.

If a Multimedia record is linked to either a Liaison Entity, Feature Survey, or another Multimedia record, the association links will have to be deleted before the deleting the record.

7.1   Click on the Multimedia record to be deleted, to highlight it.

7.2   Click on the **Delete** button, a confirmation message will be displayed to asking if you would like to delete the record. Click on the **OK** option to confirm the deletion.

8   How to View a Multimedia Object:

8.1.   First search for the Multimedia record.

8.2.   Click on the multimedia record in the Result tab. Click on the **View Media Object** button when it is enabled. The object will be displayed in read-only mode.

Multimedia - Related Multimedia

Introduction:

The Related Multimedia module is used to create relationships between multimedia records for specific reasons. An example of a Related Multimedia is a compliance letter (multimedia) sent to a Municipality (Liaison Entity) that may require a feedback report. When the letter explaining the compliance violation is received, the link between the compliance letter and feedback report can be created.

Four different types of relationships can exist:

➢ Outgoing/Incoming - correspondence related displayed a Master/Related.

➢ Incoming/Outgoing- correspondence related displayed as Related/Master.

➢ Master/Related - all types of multimedia records including correspondence with subsequent versions of the same document or related information.

➢ Related/Master- all types of multimedia records including correspondence with subsequent versions of the same document or related information.

Business Rules:

i.   The relevant multimedia records must already have been system generated or manually created in the MultiMedia Library **Maintenance** form.

1   Path:

1.1.   Select **Result Management Information** from the Water Resource Management (Delphi Front-End) menu bar.

1.2.   Select **Multimedia Library Maintenance** from the sub menu.

1.3.   This will open the **Multimedia Library Maintenance** form.

2   How to Search for a Related Multimedia Record:

2.1.   First perform a Search for a Multimedia record. *(See notes on Multimedia Library).*

2.2.   Click on the required record to highlight it for selection.

2.3.   Click on the **Links Menu** to display the option, and click on Related Multimedia. *(This will automatically open the Related MultiMedia form with all existing related multimedia records for the selected record.)*

2.4.   In the **Related Multimedia** form, if the selected record exists in the Master and Related position, a message will be displayed asking how you would like to view the record. You can click on the **OK** option to view all related records for the selected master record, or click on the **No** option to view all the master records for the selected related record.

2.5.   All the linked Multimedia records with associated Liaison Entities will be displayed.

3   How to Add a Related Multimedia Record:

3.1.   If the relationship between the records does not yet exist, click on the Related Information grid (the bottom grid). Records can only be added on the detail (bottom) grid.

3.2.   Click on the [icon] **Add** button to open the Multimedia Library Find form.

3.3. Search for the required multimedia record (See Search for a MultiMedia), and click on the ⬚ **Select** button. This will return the record to the Related Multimedia form.

3.4. A **Drop Down** list will automatically be displayed in the Related Multimedia Reason field. Click on the relevant Related Media Reason option.

3.5. Click on the ⬚ **Accept** button to accept the new record.

4 How to View a Multimedia object:

4.1. Click on the multimedia record in the top or bottom grid to highlight it, and click on the **View Document** button, the object will be displayed in read-only mode.

⬚ **TIP:** *Related Multimedia records cannot be edited.*

Geographical Feature Stakeholder

1   Path:

1.1   Select **Stakeholder Management** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Geographical Feature Stakeholders** from the sub menu.
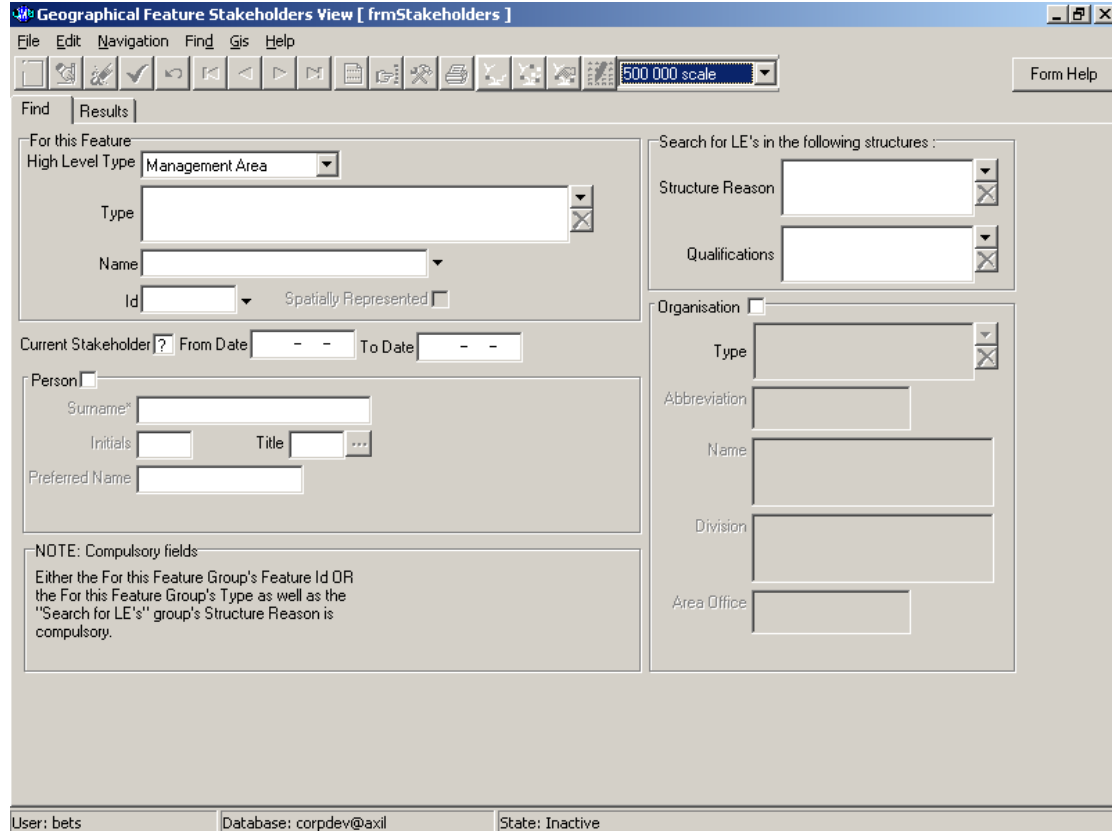
2   How to Search for a Geographical Feature Stakeholder

2.1   Click on the **Find** tab.

2.2   Select the **High Level Type** from a drop-down list.

2.3   Select the **Type** from the **Class Type** selection form.

2.4   Select the **Name** from a **Management Area Maintenance** selection form.

2.5   Enter the **To** and From **Dates.**

2.6   Click on the **Range** button to perform your Search.

NB! If you need to enter more selection criteria, you can do so, otherwise you can make a selection with just the minimum number of records.

2.7   A **Geographical Feature Stakeholder View** Form displays on the **Results** tab, with the required information.

Geographical Area

Introduction:

The Geographical Areas module is used to define management areas into groups with similar characteristics, e.g. office areas of a responsible officer can be defined and all features within that area can be defined.

Geographical Areas are areas that can be defined on a map by a line (which may or may not coincide with a feature on the ground) e.g. Political Boundaries such as Provinces, Magisterial, Municipal areas etc. or Water Management Areas, Forum areas, eco-systems, natural and catchment boundaries.

It is important to note that the Features in Geographical Area batch job must be run in order to link the sites you have registered to the relevant management area i.e. if I register a new mine in my Water Management Area, the batch job must be run before I can call up my Water Management Area in the Water Geographical Area module, and view the new mine within that area.

Business Rules:

i   Ensure that the detail added to the system is correct and comprehensive.

ii   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations etc.

iii   Data Owners for the different Geographical Areas will be implemented to prevent non Data Owners from updating or deleting other Organisations' Geographical Area information.

iv   Only the Data Owner may DELETE or UPDATE its Geographical Area record.

v   The Central Administrator may add any type of a Geographical Feature.

vi   Only the Central Administrator may cause the Quality Assurance date and the Close Date to be set to the system date.

vii   Quality Assurance Date of a group of records may be set by the Database Administrator on request from the Central Administrator.

viii   Regional WMS Users may only add Sub Catchments, DWAF Water Resource Officer Areas and Forum Areas.

ix   A Geographical Area record is uniquely identified by its name.

1   Path:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Geographical Area** from the sub menu.

2. How to Search for a Geographical Area using the Geographical Area Decision Criteria:

🖼️ *Note:* All the Filter Criteria forms will be opened from the Decision Criteria form, and they are also used for searching for geographical areas.

2.1   Open the **Geographical Area Decision Criteria** form.

2.2   Choose any of the relevant options to search for a **Geographical Area** and click on the **Next** button.

🖼️ *Note: None or any combination of a filter criteria can be specified before clicking on the Next button.*

2.3 How to Search for a Geographical Area using the Geographical Area Filter Criteria form.

2.3.1   On the **High Level Geographical Area Types**, select the **WMA**, **Sub-catchment**, **Drainage Region**, **DWAF Water Resource Officer Area**, the **Other Geographical Types** or the **None** option.

🖼️ *Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions*

and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared.

2.3.2   Enter the **Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the **Select** button to return your selection.

2.3.3   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.3.4 The **Feature Name** field will be automatically populated as it is linked to the Feature ID.

2.3.5 Enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
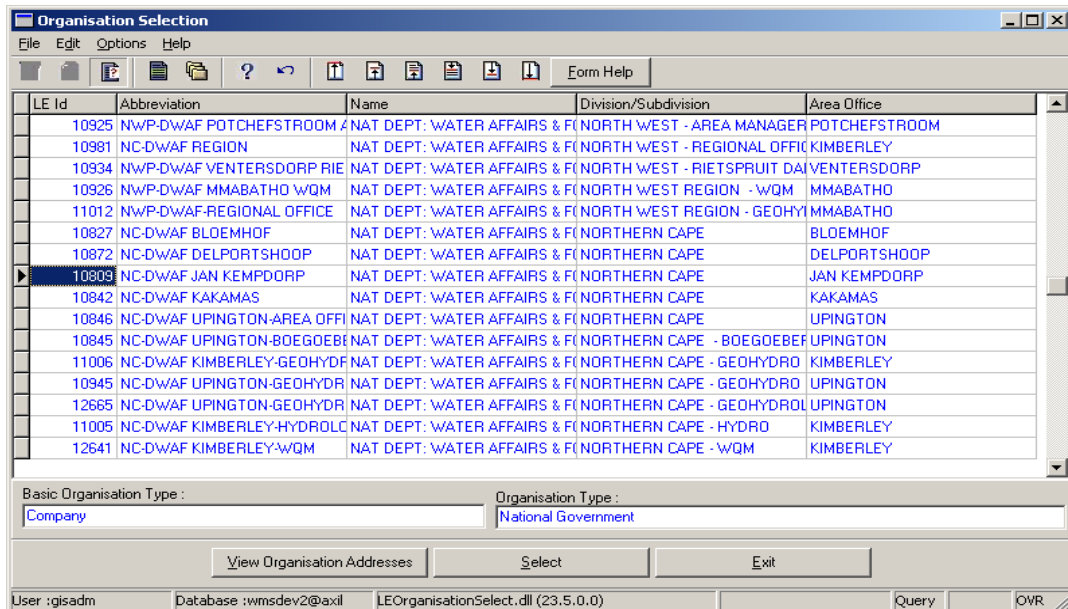
2.3.6 The **Management Authority Organisation Abbreviation** and the **Management Authority Organisation Name** fields will be automatically populated as they are linked to the Management Authority Organisation ID**.**

2.3.7   Enter the **Belong to WMA ID** or click on the ZOOM **Zoom** button to open the **Geographical Area Hierarchy Selection** form, select the applicable record and click on the Select **Select** button to return your selection.
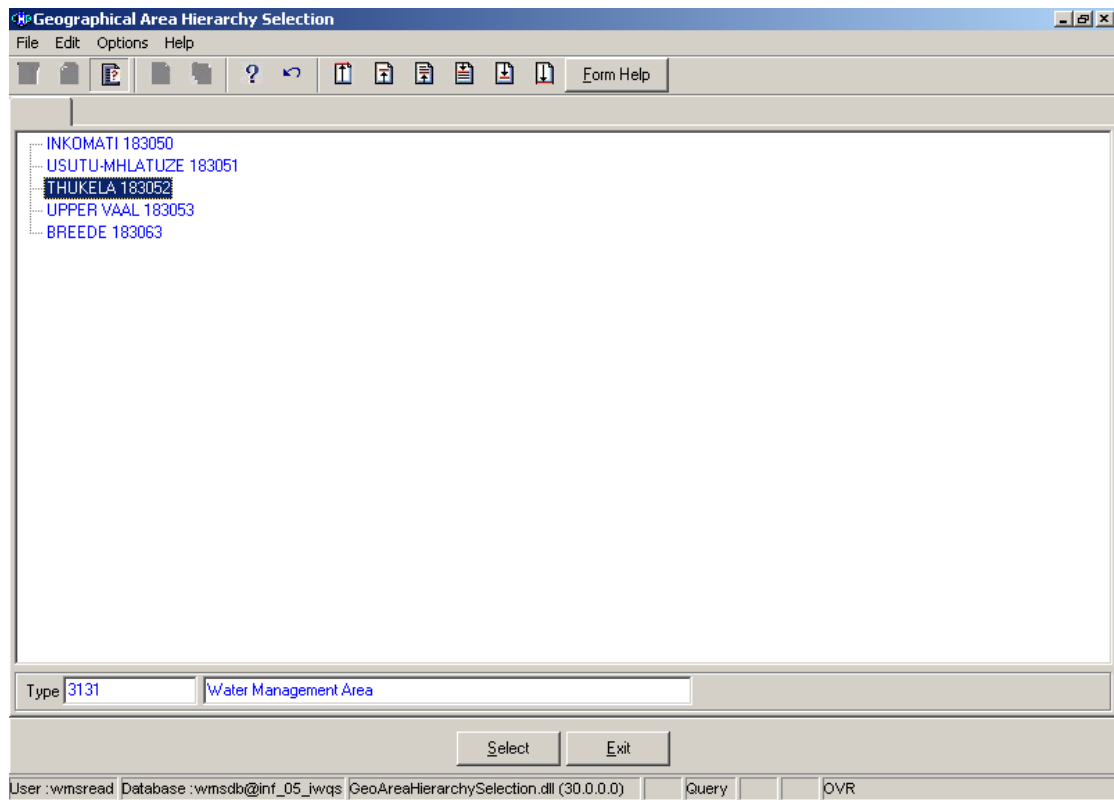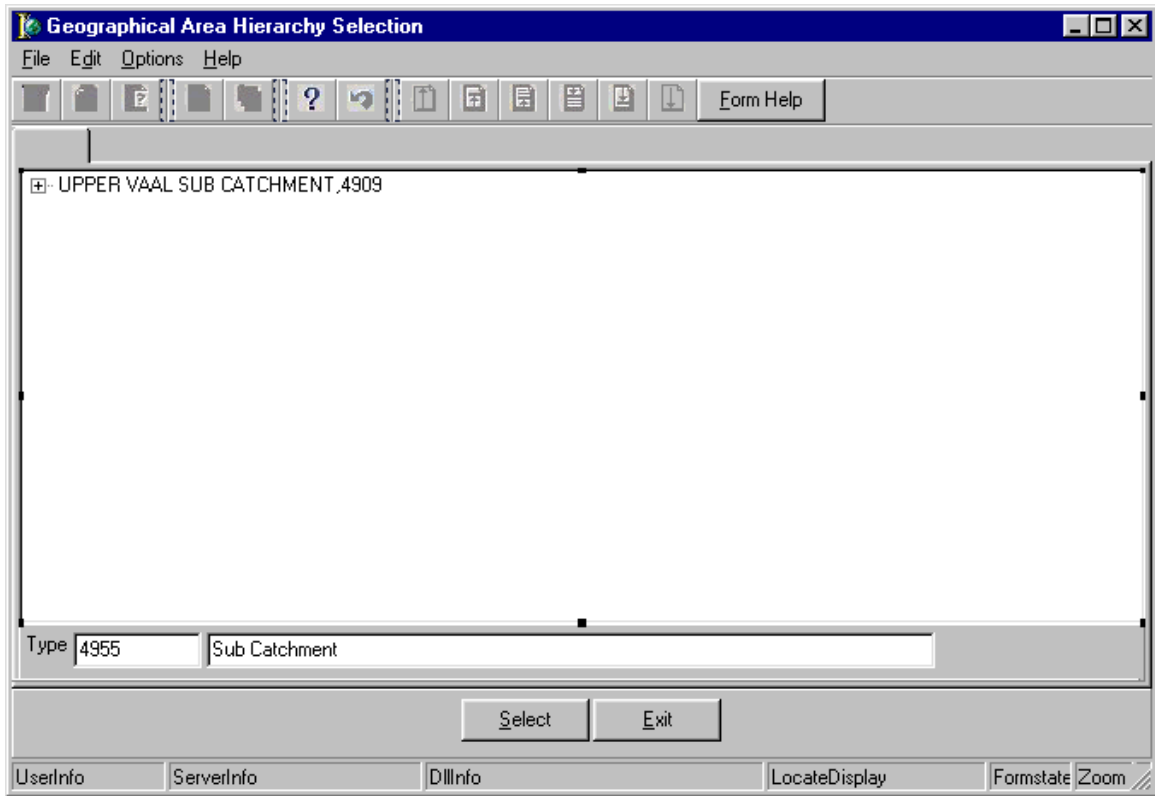
2.3.8 The **Belong to WMA Name** field will be automatically populated as it is linked to the Belong to WMA ID.

2.3.9 Enter the **Data Owner Organistion ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.
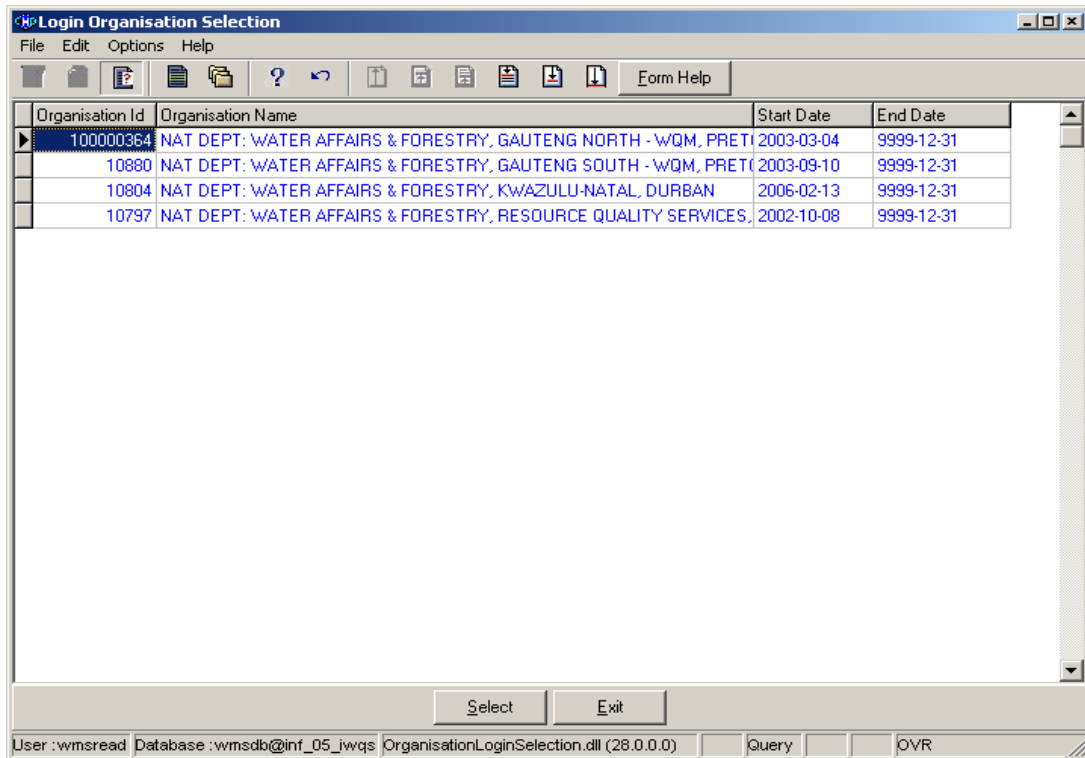
2.3.10 The **Data Owner Organisation Abbreviation** and the **Data Owner Name** fields will be automatically populated as they are linked to the Data Owner Organisation ID**.**

*Note: Click on the **Back** button to return to the Decision Criteria form*.

2.3.11 Click on the **Next** button to open the **Geographical Area Maintenance** form with records for the specified Filter criteria.

2.3.12 Click on the **Exi**t button to go to the main menu.

2.4 How to Search Geographical Area using the Geographical Area History Filter Criteria form.

2.4.1 On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region, DWAF Water Resource Officer Area**, **Other Geographical Types** or the **None** radio buttons to select a specific High Level Geographical Area Type.

Note: The Selection of WMA, Subcatchments or DWAF Water Resources Officer Area will bring up only one Geographical Type default value and the Drainage Regions and other Geographical Type selection will bring up an Associated Classes – Type Selection form with a list of applicable types to choose from. When you change the High Level Geographical Area Type from Subcatchment or DWAF Water Resources Officer Area to any other type that is not related to WMA, the Belong to WMA field will be cleared.
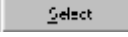
2.4.2 Enter the **Feature Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the **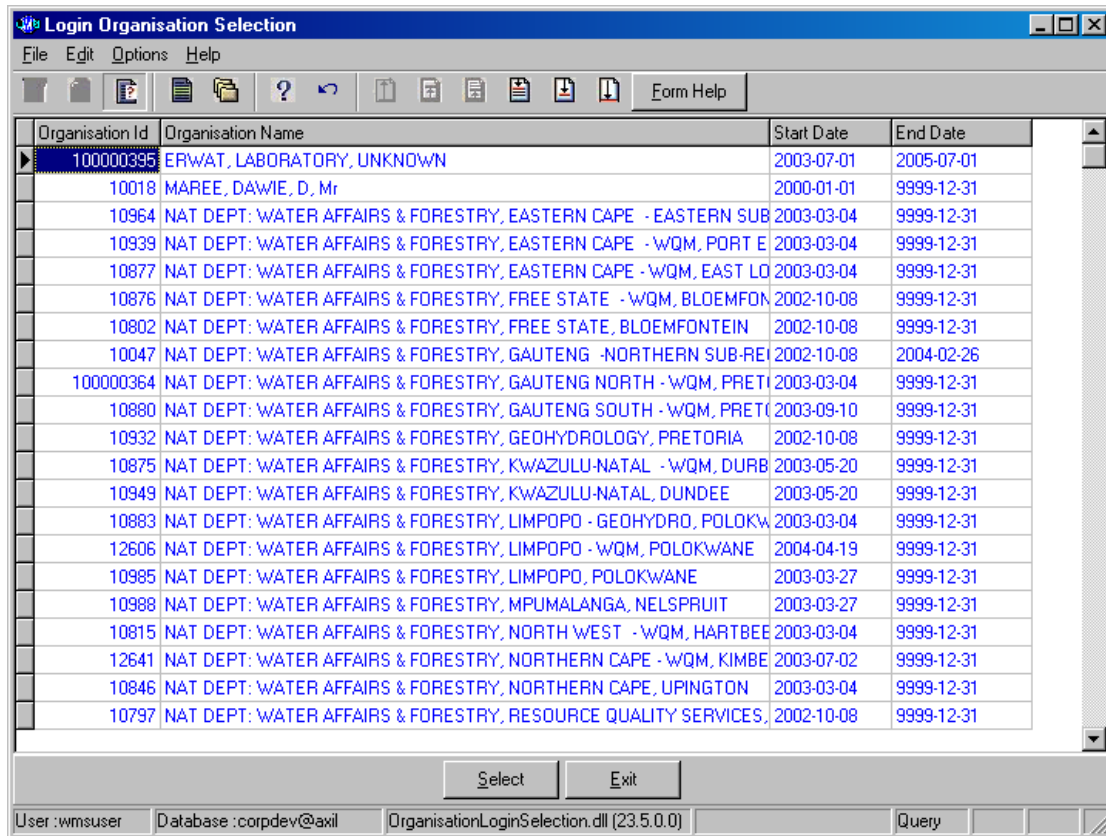Select** button to return your selection. *Note: Only Geographical Area Types on this History table is available for selection.*
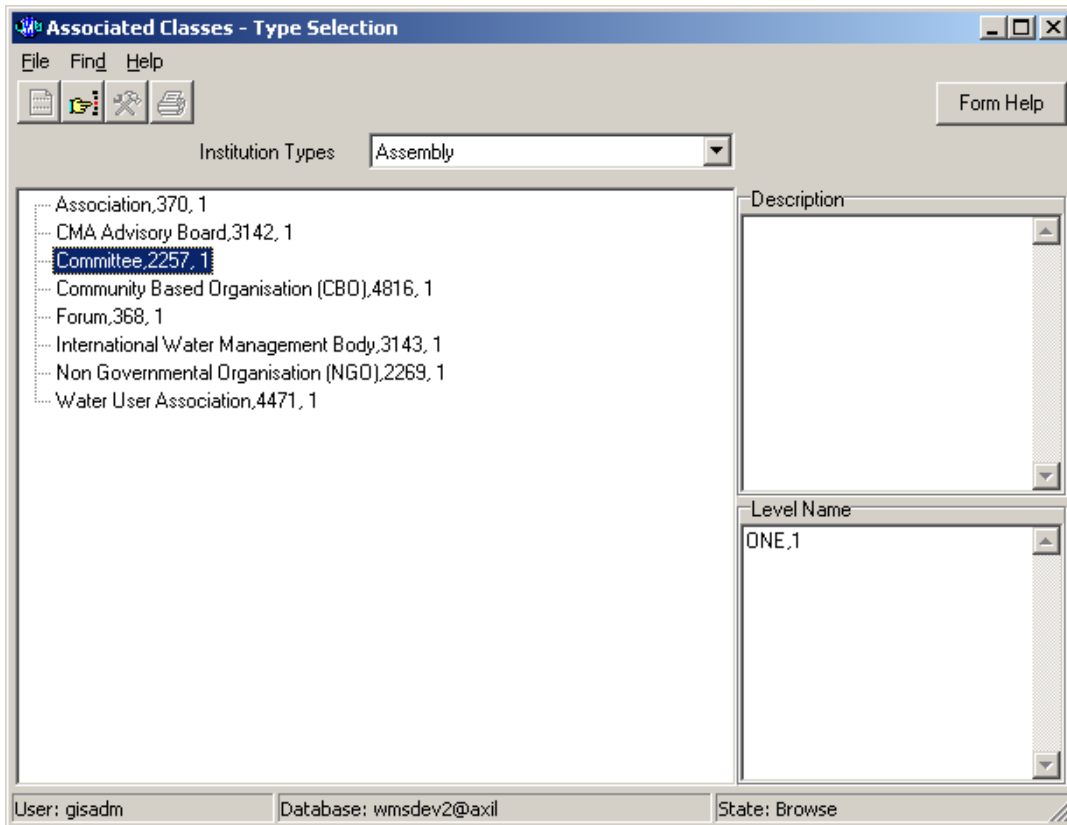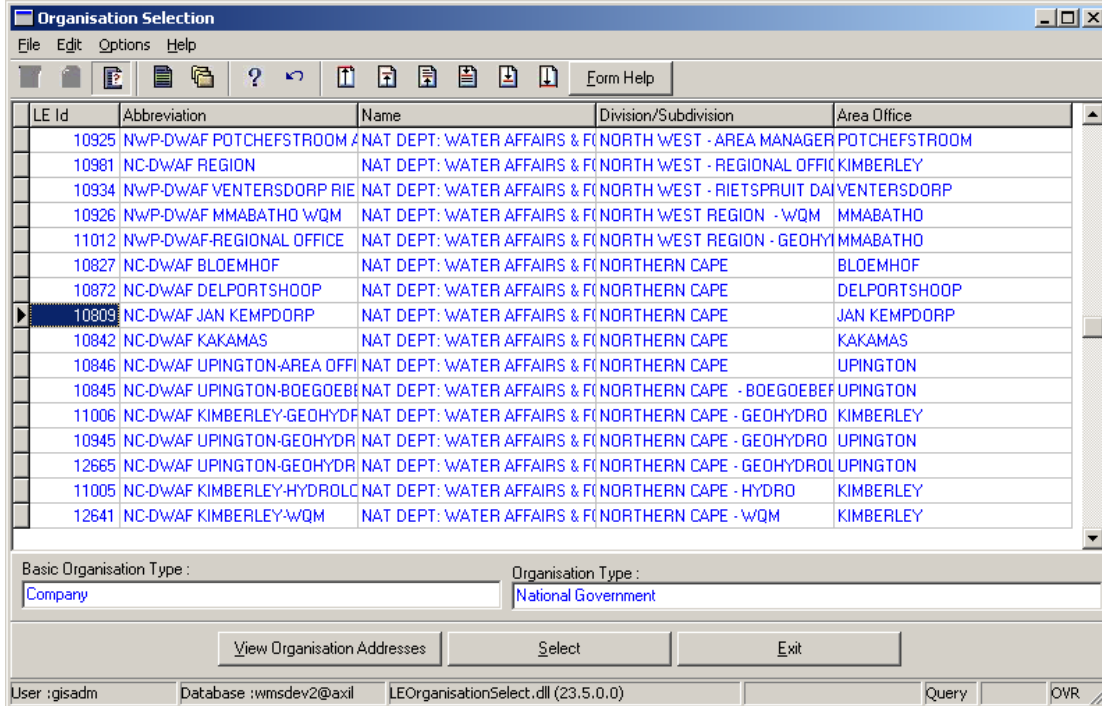
2.4.3   The **Feature Type Name** field will be automatically populated as it is linked to the Feature Type ID.

2.4.4   Enter the **Feature ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area History Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.4.5   The **Feature Name** field will be automatically populated as it is linked to the Feature ID.

2.4.6   Enter the **Management Authority Organisation ID** or click on the ZOOM **Zoom** button to open the **Organisation selection** form, select the applicable record and click on the ‎ Select ‎ **Select** button to return your selection.

Note: *Only Management Authority Organisation applicable on the History table is available to select from.*

2.4.7   The **Management Authority Organisation Abbreviation** and the **Management Authority Organisation Name** fields will be automatically populated as they are linked to the Management Authority Organisation ID**.**

2.4.8   Enter the **Data Owner Organistion ID** or click on the ZOOM **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the ‎ Select ‎ **Select** button to return your selection. **Note:** *Only Data Owner Organisation applicable on the History table is available to select from.*

2.4.9   The **Data Owner Organisation Abbreviation** and the **Data Owner Name** fields will be automatically populated as they are linked to the Data Owner Organistion ID**.**

2.4.10 Enter the **Change User Login** or click on the **ZOOM** **Zoom** button to open a **User Selection** form, select the applicable record and click on the [Select] **Select** button to return your selection. **Note:**_Only Change User Login records applicable on this History table will be available for selection._

2.4.11 The **Change User Name** field will be automatically populated as it is linked to the Change User Login.

2.4.12 Enter the **Change User Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

Note: *Only Change User Organisation applicable on the History table is available to select from.*

2.4.13 The **Change User Organisation Name** and the **Change User Organisation abbreviation** fields will be automatically populated as they are linked to the Change User Organisation ID.

Note: *Click on the **Back** button to return to the Decision Criteria form.*

2.4.14 Click on the **Next** button to open the **Geographical Area History Selection Wizard** with records for the specified filter criteria.

2.4.15 Click on the **Exi**t button to go to the main menu.

2.5 How to Search for Geographical Area option using the Geographical Feature in Geographical Area Filter Criteria form.

2.1.1 On the **High Level Geographical Feature Types**, click on the **Reach**, **Sector**, **Water Body**, **Monitoring Point**, **River**, **Groundwater Point**, **Transfer Feature**, **Water Use Site**, **Geographical Area** or the **All Features** (or None) option to filter out records associated with a selected type of Geographical Feature.

*Note: The **Water Use Site**, **River**, **Groundwater Point**, **Monitoring Point**, **Sector** and Reach **High Level Geographical Feature Types** are for future implementations. When you select the **All Features** or **None** options, the Geographical Feature Type field will be disabled.*

2.1.2   Enter the **Geographical Feature ID** or click on the ZOOM **Zoom** button to open the following forms, select the applicable record and click on the ▢ Select **Select** button to return your selection.

- **Geographical Feature Selection** form (When you select the **All Features** option)

- **Geographical Area Selection** form (When you select the **Geographical Area** option)

- **Transfer Feature Selection** form (When you select the **Transfer Feature** option)

- **Water Use Site** form (When you select the **Water Use Site** option)

- **River Selection** form (When you select the **River** option)

- **Groundwater Point Selection** form (When you select the **Groundwater Point** option)

- **Water Body Selection** form (When you select the **Water Body** option)

- **Monitoring Point Selection** form (When you select the **Monitoring Point** option)

- **Sector Selection** form (When you select the **Sector** option)

- **Reach Selection** form (When you select the **Reach** option)

2.1.3   On the **High Level Geographical Area Types**, click on the **WMA**, **Sub-catchment**, **Drainage Region**, **DWAF Water Resource Officer Area, Other Geographical Types** or the **None** option to filter out records associated with a selected type of Geographical Feature.

2.1.4   Enter the **Geographical Area ID** or click on the ZOOM **Zoom** button to open the **Geographical Area Selection** form, select the applicable record and click on the ▢ Select **Select** button to return your selection.

2.1.5 The **Geographical Area Name** will be automatically displayed as it is linked to the Geographical Area ID.

2.1.6 Click on the **Next** button to open the **Geographical Feature in Geographical Area Selection** form with the focused or no records.

2.1.7 Click on the **Back** button to go to the **Geographical Area Decision Criteria** form.

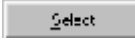2.1.8 Click on the **Exi**t button to go to the main menu.

2.6 Select the Geographical Area Forum (Organisation) option to open the Forum Area Filter Criteria form.
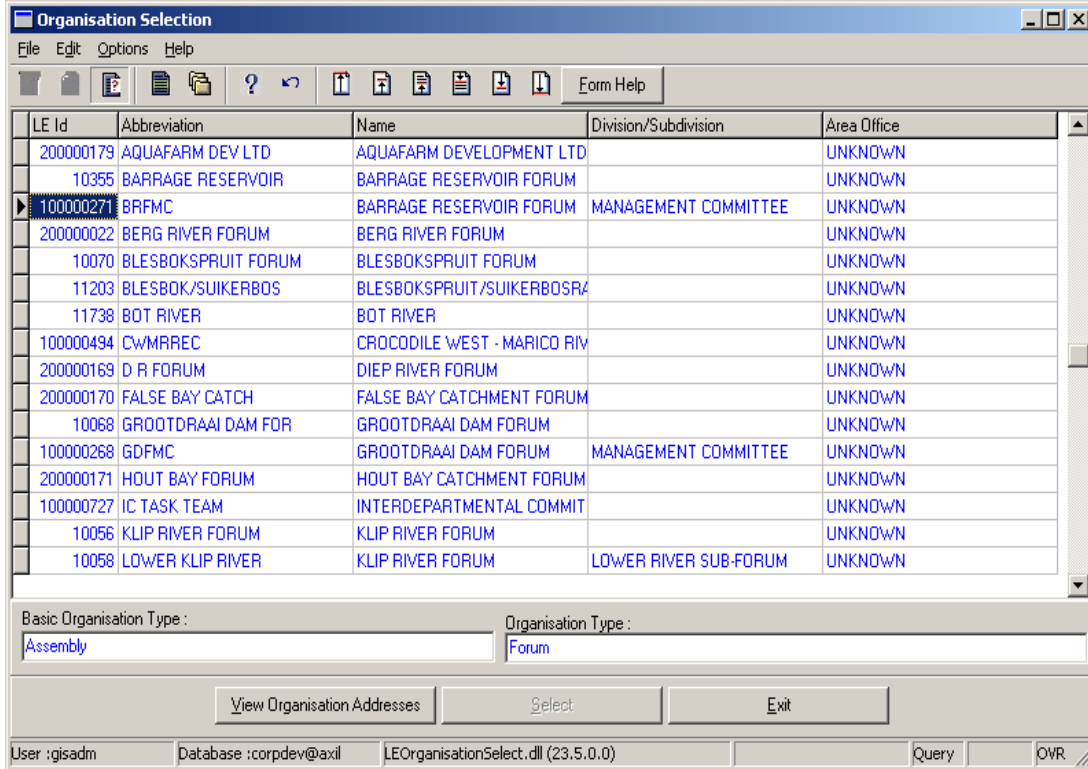

2.1.1 Enter the **Area ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

Note: Only Geographical Areas with type Forum shall be selectable.

2.1.2 The **Area Name** field will be automatically displayed as it is linked to the Area ID.

2.1.3 Enter the **Forum Organisation** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

 Note: Only Organisation with type of forum shall be selectable.

2.1.4 Enter the **Data Owner** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.1.5   The **Data Owner Name** and **Abbreviation** fields will be automatically displayed as they are linked to the Data Owner ID.

2.1.6   Click on the **Next** button to open the **Forum Area Selection** form for the focused or no record.

2.1.7   Click on the **Back** button to go to the **Geographical Area Decision Criteria** form.

2.1.8   Click on the **Exit** button to close the form.

Note: When no filter criteria is specified and the Next button is activated, the Forum Area selection Wizard form will display with all the forum areas.
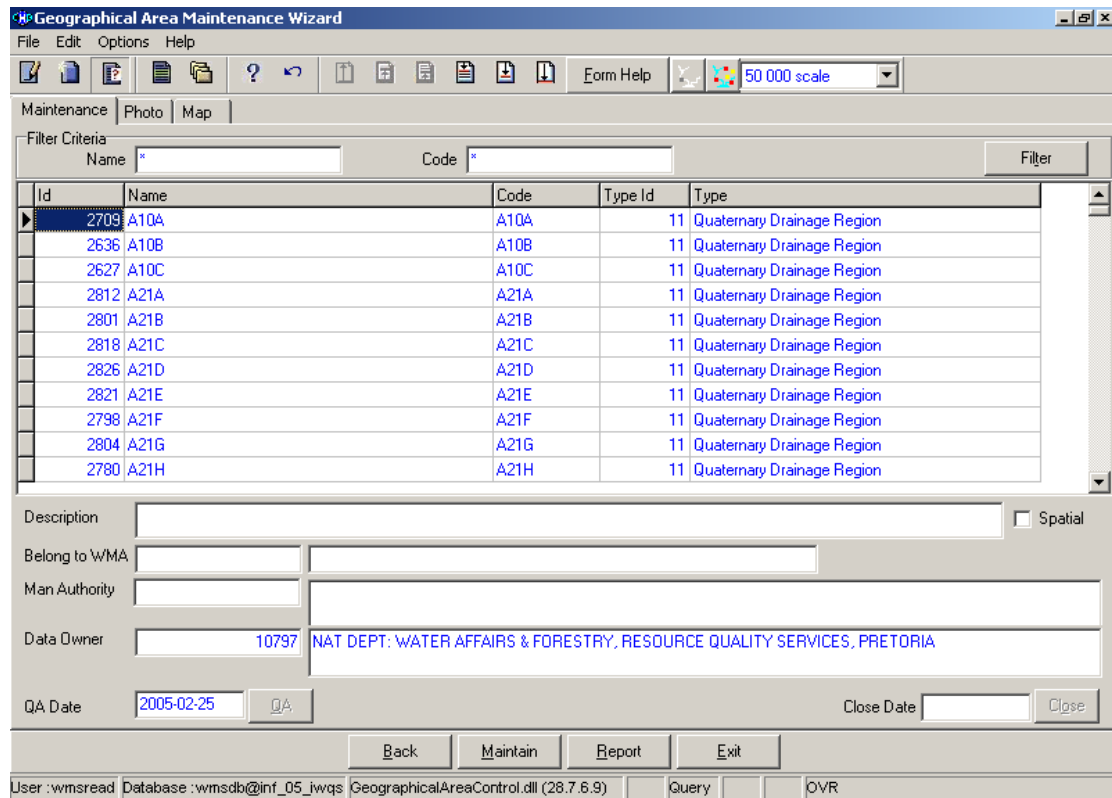
3.   How to Add a new Geographical Area:

3.1   Click on the **Create** button to add a new record.

3.2   An empty line displays to allow the addition of a new record.

3.3   *The **Geographical Area ID** will be automatically generated by the system.*

3.4   Enter the **Geographical Area Name**. *Note: The **Geographical Area Name** shall be unique for all the **Geographical Area** records.*

3.5   Enter the **Geographical Area Type ID** or click on the **ZOOM** **Zoom** button to open the **Associated Classes – Type Selection** form, select the applicable record and click on the **Select** button to return your selection.

3.6   The **Geographical Area Type** will be automatically displayed as it is linked to the Geographical Area Type ID.

3.7   Enter the **Geographical Area Code**.

3.8   Enter the **Description** for the Geographical Area.

3.9   While focusing on the Sub-catchment or DWAF Water Resource Officer Area, enter the **Belong To WMA ID** or click on the **ZOOM** **Zoom** button to open the **Geographical Area Hierarchy Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

3.10 The **Belong to WMA Name** will be automatically displayed as it is linked to the **Belong to WMA ID.**

3.11 While focusing on the **Management Authority Organisation ID** field, enter the **Management Authority Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select the applicable record, and click on the **Select** **Select** button to return your selection. *Note: Only of Basic Organisation Type of Company and Organisation Type of National Government or Catchment Management Authority Organisation records are available for selection.*

3.12 The **Management Authority Organisation Name** will be automatically displayed as it is linked to the Management Authority Organisation ID.

*Note: By default the **Data Owner Organisation** is the same as the **Login Organisation ID**. When you insert a new record, the Data Owner for the Geographical Area will automatically be created with the Login Organisation ID, but you may change it.*

3.13 To change the Data Owner Organisation, enter the **Data Owner Organisation ID** or click on the **ZOOM** **Zoom** button to open a **Login Organisation Selection** form, select the applicable record, and click on the **Select** **Select** button to return your selection. *Note: Only active organisations with passwords are available for selection.*

1024

3.14 The **Data Owner Organisation Name** will be automatically displayed as it is linked to the Data Owner Organisation ID.

*3.15 The **QA Date** field, will by default be empty when creating the record.*

3.16 Click on the **QA** button to indicate that the Geographical Area's information is Quality Assured on WMS and populates the QA date field with the system date, even if the date has a value. *Note: This can only be performed by the Central Administrator. This button is only enabled when you are in a Modify State.*

3.17 *The **Close Date** will by default be empty when creating the record.*

3.18 Click on the **Close** button to indicate that the Geographical Area is no longer active for WMS usage. *Note: This can only be performed by the Central Administrator.*

3.19 Tab to accept the newly created record.

3.20 Click on the **Repor**t button to generate a .csv file with all the information of the records retrieved according to the parameters received as input to this form.

3.21 Click on the **Back** button to return to the previous **Filter Criteria** or **Selection** form.

3.22 Click on the **Exit** button to go to the main menu.

4. How to Edit a Geographical Area:

Note: Data Owners for the different Geographical Areas will be implemented to prevent non Data Owners from editing other Organisations' Geographical Area information. Only the Data Owner may edit its Geographical Area record.

4.1   On the Maintenance Tab click on the record to be edited to highlight it, and click on the 📝 **Modify Records** button.

❓*Note: If you want to assign the new Data Owner to the record, enter the **Data Owner Organisation ID**, or click on the* ⏠ZOOM⏡ *Zoom button to open the **Login Organisation Selection** form,* make your selection and click on the ⏠Select⏡ **Select** button to return your selection.*

Organisation Id	Organisation Name	Start Date	End Date
100000395	ERWAT, LABORATORY, UNKNOWN	2003-07-01	2005-07-01
10964	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - EASTERN SUB	2003-03-04	9999-12-31
10939	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, PORT E	2003-03-04	9999-12-31
10877	NAT DEPT: WATER AFFAIRS & FORESTRY, EASTERN CAPE - WQM, EAST LO	2003-03-04	9999-12-31
10876	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE - WQM, BLOEMFON	2002-10-08	9999-12-31
10802	NAT DEPT: WATER AFFAIRS & FORESTRY, FREE STATE, BLOEMFONTEIN	2002-10-08	9999-12-31
10047	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG -NORTHERN SUB-RE(	2002-10-08	2004-02-26
100000364	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG NORTH - WQM, PRET(	2003-03-04	9999-12-31
10880	NAT DEPT: WATER AFFAIRS & FORESTRY, GAUTENG SOUTH - WQM, PRET(	2003-09-10	9999-12-31
10932	NAT DEPT: WATER AFFAIRS & FORESTRY, GEOHYDROLOGY, PRETORIA	2002-10-08	9999-12-31
10875	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL - WQM, DURB	2003-05-20	9999-12-31
10949	NAT DEPT: WATER AFFAIRS & FORESTRY, KWAZULU-NATAL, DUNDEE	2003-05-20	9999-12-31
10883	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO - GEOHYDRO, POLOKW	2003-03-04	9999-12-31
10985	NAT DEPT: WATER AFFAIRS & FORESTRY, LIMPOPO, POLOKWANE	2003-03-27	9999-12-31
10988	NAT DEPT: WATER AFFAIRS & FORESTRY, MPUMALANGA, NELSPRUIT	2003-03-27	9999-12-31
10815	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTH WEST - WQM, HARTBEE	2003-03-04	9999-12-31
12641	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE - WQM, KIMBE	2003-07-02	9999-12-31
10846	NAT DEPT: WATER AFFAIRS & FORESTRY, NORTHERN CAPE, UPINGTON	2003-03-04	9999-12-31
10797	NAT DEPT: WATER AFFAIRS & FORESTRY, RESOURCE QUALITY SERVICES,	2002-10-08	9999-12-31
10947	NAT DEPT: WATER AFFAIRS & FORESTRY, WASTE DISCHARGE AND DISPO!	2002-10-08	9999-12-31
10944	NAT DEPT: WATER AFFAIRS & FORESTRY, WESTERN CAPE - GEOHYDRO, C	2002-10-08	9999-12-31

User :gisadm   Database :wmsdev2@axil   OrganisationLoginSelection.dll (23.5.0.0)   Query

4.2   Edit the record as required.

4.3   Click on another record to accept the newly modified record.

❓*Note: The focused record's Photo Media ID is edited on the Photo Tab and the Map Media ID is edited on the Map Tab*

4.1   Click on the applicable Photo or Map Tab to enter the Media Id of the Feature's Photo or Map or Zoom from the Media Id to open the Multimedia Library Maintenance form make your selection and click on the Select button to return your selection

4.2   Click on the Accept button to accept the changes

❓*Note: A linked Photo or Map image can be viewed on the form by checking the Refresh Object on scroll checkbox. A linked Photo or map image can be viewed in an Editor by clicking on the View Media Object button.*

5.   How to Delete a Geographical Area:

Note: Data Owners for the different Geographical Areas will be implemented to prevent non Data Owners from deleting other Organisations' Geographical Area information. Only the Data Owner may delete its Geographical Area record.

5.1   Click on the record to be deleted, to highlight it.

5.2   Click on the   **Delete** button. *Note: When records are referenced elsewhere in the system, the delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the **OK** option to confirm the deletion.

6.   How to link a Geographical Area of type Forum Area to one or more Forums (Organisations/Assemblies):

6.1   Click on the **Forum Area M** button to open the **Forum Area Maintenance** form.

6.2   Enter the **Forum ID** or click on the **ZOOM** button to open the **Organisation Selection** form , select the applicable record, and click on the **Select** **Select** button to return your selection. *Note: Click on the **Forum M** button to create a new forum if it does not exist.*

6.3   The **Forum Abbreviation** and the **Forum Name** fields will be automatically populated as they are both linked to the Forum ID.

6.5   The **Data Owner Organisation** and **Data Owner Abbreviation** fields will be automatically populated, because it is the same as the organisation logged in, but you may change it.

6.6   Click on the **Repor**t button to select the applicable report option. The information of the records that you retrieved according to your input parameters to this form will display on your report. *Note: The Report is enabled when one or more records are retrieved according to input parameters.*

Forum Area

Introduction:

The Forum Geographical Area enables you to associate Forum Organisation with Geographical Areas.

Business Rules:

i.   Ensure that the detail added to the system is correct and comprehensive.

ii.   Follow the "General Business Rules for WMS" for the use of hyphenation, space, abbreviations, etc.

iii.   Data Owners for the different Forum Areas will be implemented to prevent non Data Owners from updating or deleting other Organisations' Forum Area information.

iv.   Only the Data Owner may DELETE or UPDATE Forum Area record.

v.   The Central Administrator may add any type of a Forum Area.

Path 1:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Forum Area** from the sub menu.

1.3   This will open the **Forum Area Filter Criteria** form.

Path 2:

1.1   Select **Water Network Management** from the **Water Resource Management** menu bar.

1.2   Select **Geographical Area** from the Sub menu.

1.3   Through any Filter Criteria Form, open the **Geographical Area Maintenance** form.

1.4   While focusing on an **Area** of type **Forum**, activate **Forum Area Maintenance** form from the **Forum M** button.

Note: When the Forum Area Maintenance form is activated from the Forum M button on the Geographical Area Maintenance form, then the form will be opened with the focused record's Area ID as a parameter.

The Geographical Area's information will be displayed in a non-editable group on the top of the Forum Area Maintenance form. You may only add forum organisations for the specified Geographical Area record.

Path 3:

1.1 Select **Stakeholder Management** from the **Water Resource Management** menu bar.

1.2 Select **Organisation** from the **Stakeholder Management** menu.

1.3 This will open the **Organisation Maintenance** form.

1.4 While focusing on **Organisation** of type **Forum**, activate **Forum Area Maintenance** form from the **Forum M** button.

Note: When the Forum Area Maintenance form is activated from the Forum M button on the Organisation Maintenance form, then the form will be opened with the focused record's Organisation ID as a parameter.

The Organisation of type Forum's information will be displayed in a non-editable group on the top of the Forum Area Maintenance form. You may only add forum areas for the specified Organisation of type Forum record.

2. How to Search for Forum Areas using the Forum Area Filter Criteria:

Note: When this form is called from a Water Network Forum Area menu, it will have an OK button, and when you click on the OK button the Forum Area Maintenance form will be opened.

*When no **Filter Criteria** is specified and the **OK** button is activated, all the Forum Areas will be displayed on the **Forum Area Maintenance** form.*

2.1 Enter the valid **Area ID** or click on the [ZOOM] **Zoom** button to open the **Geographical Area Selection** form as a normal selection form, select the applicable record and click on the [Select] **Select** button to return your selection.

2.2 The **Area Name** field will be automatically displayed as it is linked to the Area ID.

2.3 Enter the valid **Forum Organisation ID** or click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

2.4 The **Forum Name** and the **Forum Abbreviation** fields will be automatically displayed as they are linked to the Forum Organisation ID.

2.5   Enter the **Data Owner ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** button to return your selection.
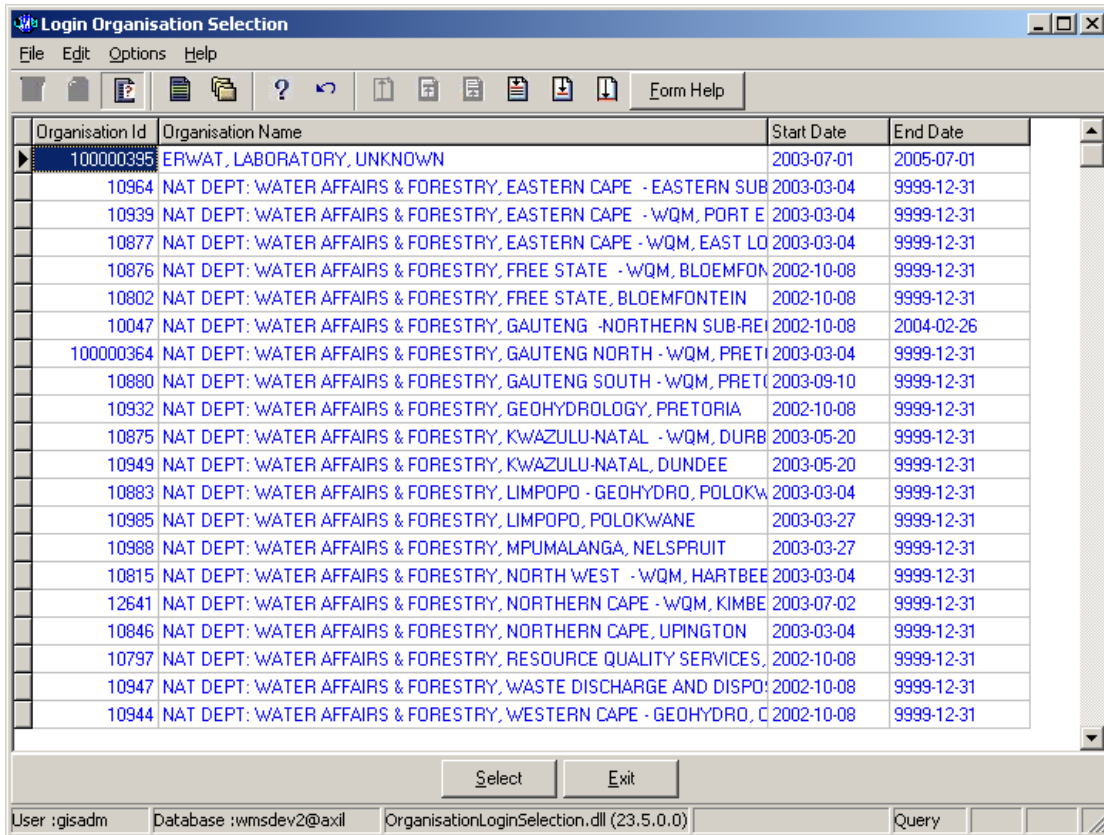
2.6   The **Data Owner Name** and the **Data Owner Abbreviation** fields will be automatically displayed as they are linked to the Data Owner ID.

2.7   After entering the applicable filter criteria, click on the **OK** button. The **Forum Area Maintenance** form will be opened filtering out the data as received from the input parameters from the filter criteria form.

2.8   Click on the **Exit** button to close the form.
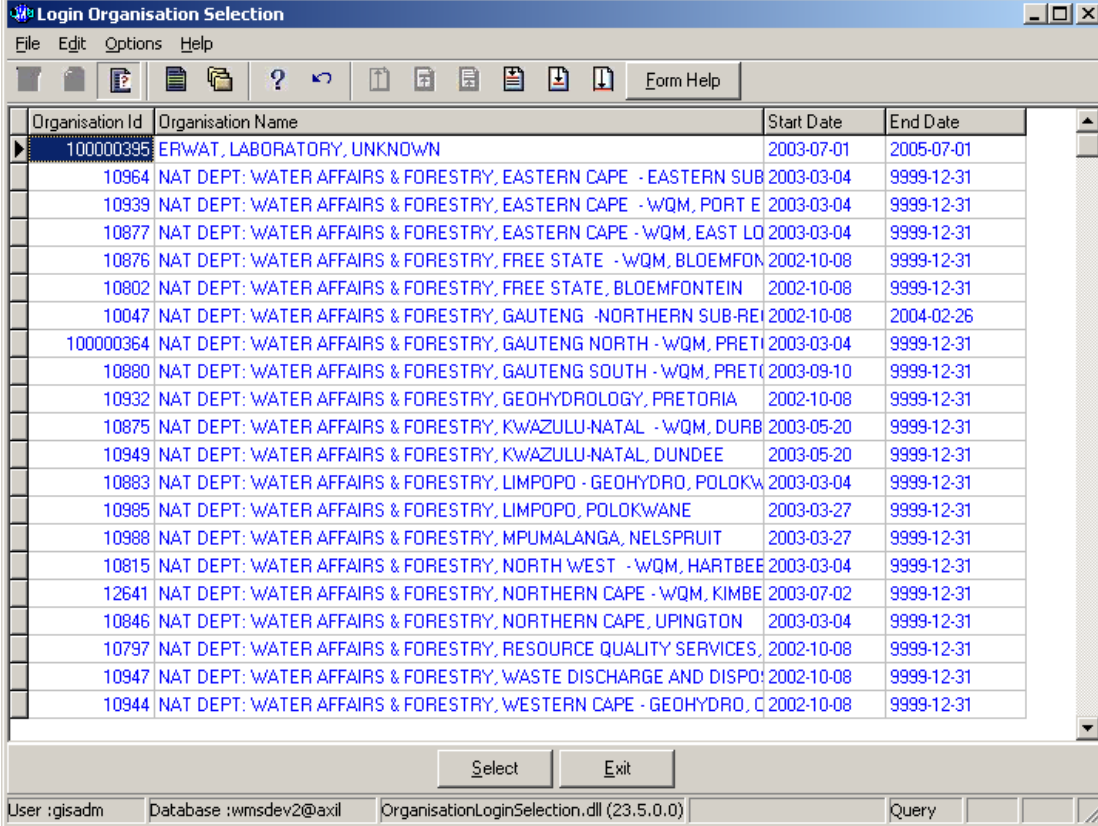
3   How to Create a Forum Area:

3.1   Open the **Forum Area Maintenance** form.

3.2   Click on the ⬛**Create** button.

3.3   A new line displays to allow the addition of a new record.

3.4   When a form is opened receiving a **Geographical Area ID** as a parameter, eg. from the **Geographical Area Maintenance** form, then the **Area ID** will not be editable and will not be displayed in the grid. When the **Area ID** is in the grid, then enter the **Area ID** or click on the `ZOOM` **Zoom** button to open a **Geographical Area Selection** form, select the applicable record and click on the `Select` **Select** button to return your selection*.*

3.5   The **Area** name field will be automatically populated as it is linked to the Area ID.

3.6   When the form is opened receiving a **Forum ID** as a parameter, eg. from the
       Organisation Maintenance form, then the **Forum ID** will not be editable and will not
       be displayed in the grid. When the **Forum ID** is in the grid, enter the **Forum ID** or
       click on the **ZOOM** **Zoom** button to open the **Organisation Selection** form, select
       the applicable record and click on the **Select** **Select** button to return your
       selection.

3.7 The **Forum Abbreviation** and the **Forum Name** fields will be automatically populated as they are both linked to the Forum ID.

3.8 Enter the **Data Owner ID** or click on the **ZOOM** **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

3.9 The **Data Owner Organisation** and **Data Owner Abbreviation** fields will be automatically displayed as they are linked to the Data Owner ID.

3.10 Tab to accept the newly created record.

3.11 Click on the **Area M** button to create a new area if it does not exist.

3.12 Click on the **Organisation M** button to create a new forum if it does not exist.

3.13 Click on the **Repor**t button to select the applicable report option. The information of the records that you retrieved according to your input parameters to this form will display on your report. *Note: The Report is enabled when one or more records exist.*

4. How to Edit a Forum Area:

Note: Only the Data Owner may Update its own records. When Area and Forum combination is incorrect, delete the record and create it again.

4.1 Click on the record to be edited to highlight it, and click on the **Modify Records** button.

4.2 Focus on the **Data Owner Organisation ID** field.

4.3   Enter the **Data Owner Organisation ID** or click on the `ZOOM` **Zoom** button to open the **Login Organisation Selection** form, select the applicable record and click on the `Select` **Select** button to return your selection.
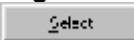

Note: *Only the newly assigned Data Owner may change this updated record after the update.*

4.4   Tab or focus on another record to accept the modified record.

5.   How to Delete a Forum Area:

Note: *Only the **Data Owner** may Delete its own records.*

5.1   Click on the record to be deleted, to highlight it.

5.2   Click on the **Delete** button. **Note:** *When records are referenced elsewhere on the system the Delete option will be disabled.*

5.3   A confirmation message will be displayed asking if you would like to delete the record.

5.4   Click on the **OK** option to confirm the deletion of the record.

5.5   Click on the **Yes** option if you want to delete the record, otherwise select the **No** option to cancel the deletion.

Opening SDE Layers in ArcMap

Introduction:

SDE and ArcGIS are two new, but very helpful concepts. Looking at Open Layer Selection (OLS) forms, the main objective of OLS is to give the user a selection form to make selections of registered layers for GIS. From the OLS form, you will be able to make a few choices and have the option to open the selected layers in ArcGIS. Depending on the selection, all the selected layers will be opened in ArcGIS with or without all the specified Background Layers.

Layers can be registered in WMS in one of the following layer types.
-Work Layers
-Orientation Layers
-Generated Layers

The Used state of layers can be Current or Historical. Layers may be registered as Initiated as well, but these layers will not be visible in the OLS forms.

In the OLS forms, you will be able to view permissions for all layers, as well as all attribute permissions granted to your role per SDE table.

You will be able to view tracking history and descriptive data of all registered layers which include disclaimer and copyright information for the selected layer in OLS. You will also be able to view all preceding and superceded layers of the selected layer.

Business Rules:

i.   When you want to filter on a part of or the whole layer name, check the radio button for one of the above-mentioned options, enter a part or the whole layer name in uppercase and click on the Range button.

ii.   You have the option to view only the active layer(s) (according to the linked superceded layer), by checking the 'Only Active Layer' checkbox.

iii.   To view all the layers (currently and previously used) with the other criteria, the 'Only Active Layers' checkbox must be unchecked.

iv.   When no record is selected in the Master grid, 'Layer Permissions', Tracking History', 'Preceding Layers', and 'Open' buttons will be disabled.

v.   As soon as any record is selected in the Master grid, 'Layer Permissions', 'Tracking History', 'Preceding Layers', 'Open' buttons will be enabled.

vi.   By default only the main layer selected in the Master Grid of Open Layer Selection form will be activated in ArcGis display form.

vii.   The Maintain functionality on ArcGIS WMS Spatial display form is disabled when SDE Layer is selected.

viii.   All the layers will by default be displayed in a grid with its type.

ix.   When you select the 'WMS Orientation Layer' option, all the WMS Orientation layers will be displayed in the master grid. The focused WMS Orientation layer will be opened, as well as the additional background layers selected from 'Background Layer Selection' form, if available.

x.   When you select the 'WMS Generated Layer' option, all the WMS generated layers will be displayed in the master grid and the source layer for Reach and Sector WMS generated layer in the detail grid will automatically be displayed if specified. The focused WMS Generated layer with the source and background layers selected from the 'Background Layer Selection' form will be opened.

xi.   When you select 'WMS Work Layer' option, all the work layers will be displayed in the master grid. The focused WMS work layer will be opened, as well as the additional background layers selected from the 'Background Layer Selection' form.

1.   Path:

1.1   Select **File** from the **Water Resource Management** menu bar.

1.2   Select **Arc View** from the sub menu.

1.3   Select the **Load SDE** Layers option.

                    OR

1.1   Click on the **Start** button.

1.2   Select **Programs**.

1.3   Select **ArcGIS**.

1.4   Select **ArcMap** to open the **ArcMap** window.
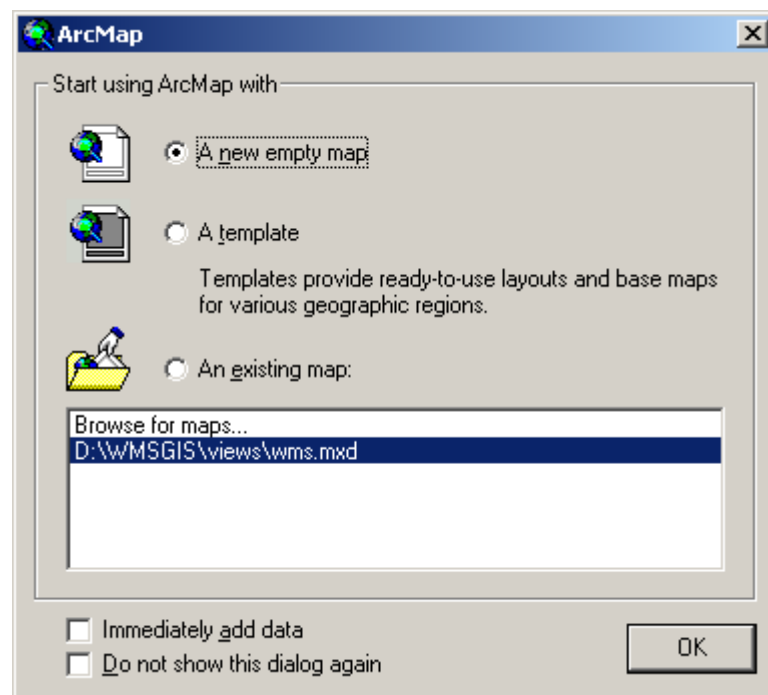
1.5   Select the applicable option and click **OK** to display the ArcMap – ArcInfo screen, with the WMS Logo.
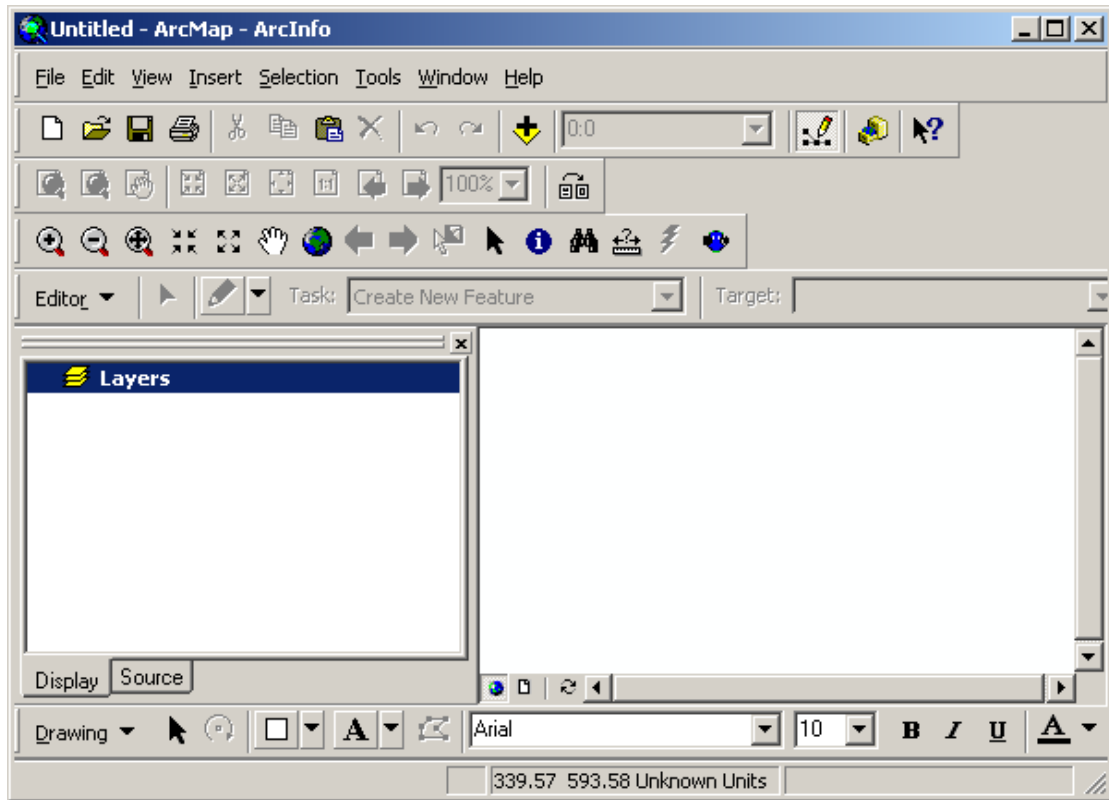
1.6 Click on the **WMS** button to open the **WMS – Database Login** screen, and logon as normal.
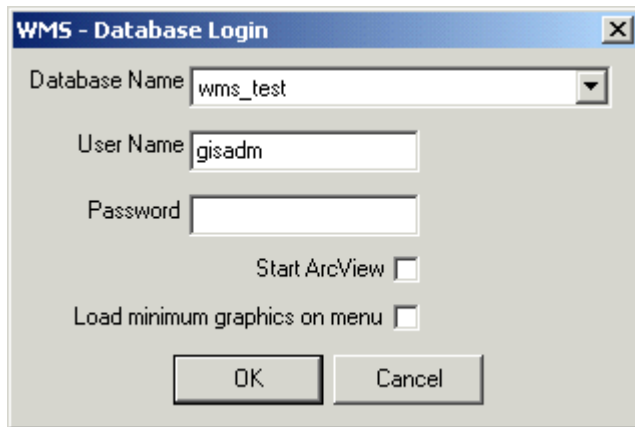
2. How to Open SDE Layers in ArcGIS:

2.1   Open the **WMS Function** form.
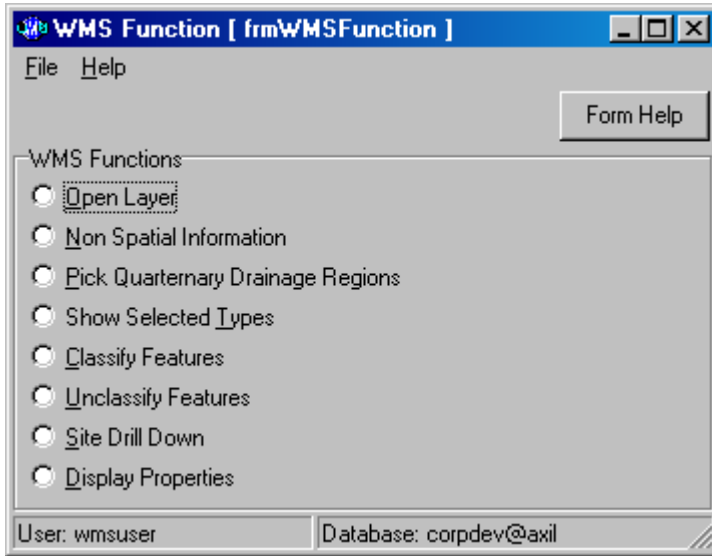
2.2   To select the **Open Layer** option, click on the ⊙ **Radio** button in front of Open Layer.

Note: The other options will be used in future releases.

2.3   An **Open Layer Selection** form displays.
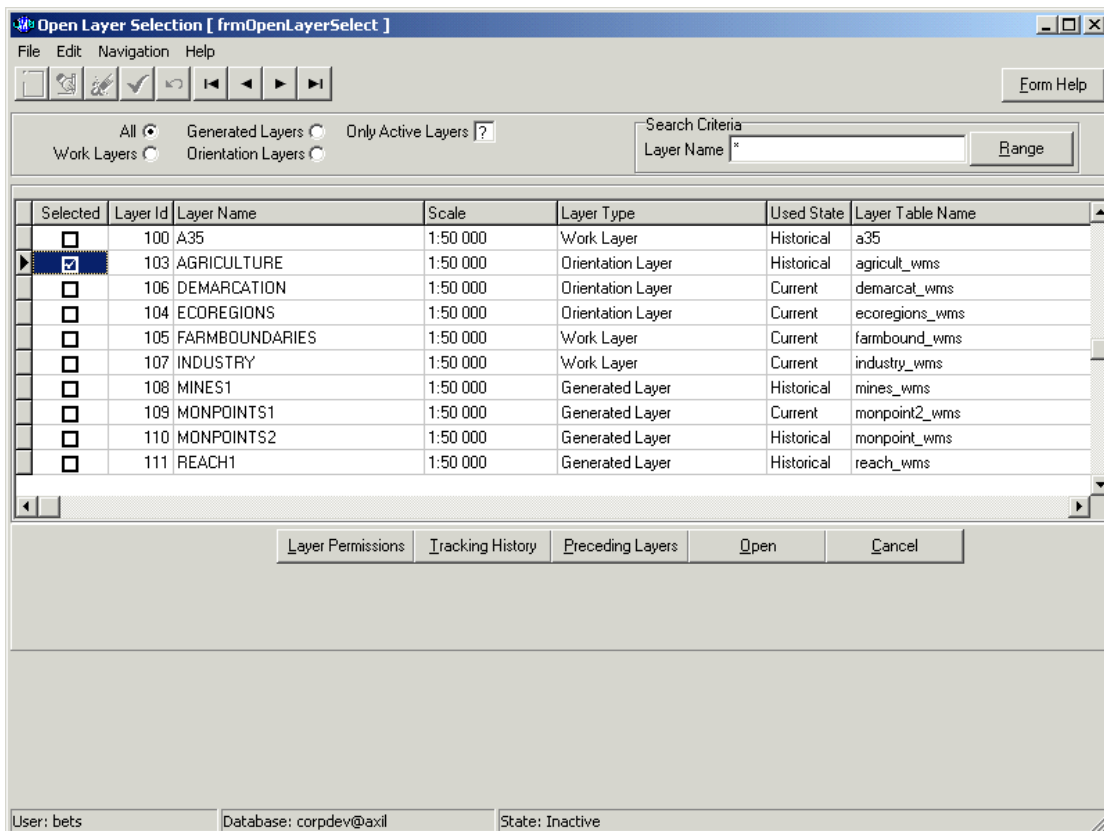
*Note: If you select the **All** option, all layer types will be displayed. If you select the **Y** option on the **Only Active Layers** checkbox, all the Layers that are currently active will be*

*displayed, if you select the **N** option, only the layers that are not active will be displayed, and if you select the ? option, all the layers will be displayed, regardless of whether they are currently active or not.*

Note: Only Active Layers Indicator: This indicator shows the layer's used state. Each layer can be defined as:

- *Current: Currently active layers which will be used and maintained by WMS.*

- *Historical: Layers with the status of Historical will be available to you, but no data or spatial information will be maintained. These layers are for displaying only.*

3. How to View the Layer Permissions:

*Note: When you activate the 'Layer Permission' button, all the permissions according to your associated role(s), and permissions per focused layer according to permissions on the 'Shape' column will be displayed. Although you may select more than one layer, only the first selected record will have focus at a specific time. You have the option to view the permissions granted for the 'Shape' column, on Layer Permissions view as well as the permissions for the other columns or fields on **Attribute Permissions View** form.*

3.1   On the **Open Layer Selection** form, click on the **Layer Permission** button.

3.2   This will open the **Layer Permissions View** form.

3.3   Layer permissions will display all your rights and your role for the selected layer. If you do not have any rights on the layer on 'Shape' column, the **Attribute Permissions** button will be disabled.

[?] *Note: As seen above, user Bets has **ADD, COPY, DELETE** and **READ** rights for the layer AGRICULTURE.*

4 How to View the Attribute Permissions:

4.1 On the **Layer Permission** form, click on the **Attribute Permission** button.

4.2 This will open the **Attribute Permissions View** form.

[?] Note: Attribute permissions will display all your rights for the selected layer's attributes. If you do not have any rights on the layer, the grid will be empty. As seen above, user 'Bets' has rights for the following attributes for the layer AGRICULTURE.

Feat_id: COPY, DELETE, ADD, READ and UPDATE

Shape: ADD, COPY, DELETE, READ

Type: READ, UPDATE

5. How to View the Tracking History:

5.1 Open the **Tracking History and Description** form, by clicking on the **Tracking History** button.

Note: *This form displays all the information of the selected layer, and it will also display information on the Description, History, Disclaimer and the Copyright. When you activate the 'Tracking History' button, the tracking history, description, disclaimer and copyright information of the focused layer will be displayed. This form will close when the **OK** button is clicked. No Updates are allowed on this form. When more than one layer is selected, the applicable information of the focused layer will be displayed when activating the button.*

6. How to View the Preceding Layers:

Note: *When you activate the 'Preceding Layer' button, the Preceding and Superceded layer(s) for the focused layer will be displayed in descending order according to the time period of the superceded layer. Although you may select more than one layer, only one record will have focus at a specific time. When you focus on a historical layer, the focused layer must be selected on the 'Preceding Layer' form. The focused layer's Preceding and Superceded layers will be displayed on the list.*

6.1 On the **Open Layer Selection** form, open the **Preceding Layer View** form by clicking on the **Preceding Layers** button.
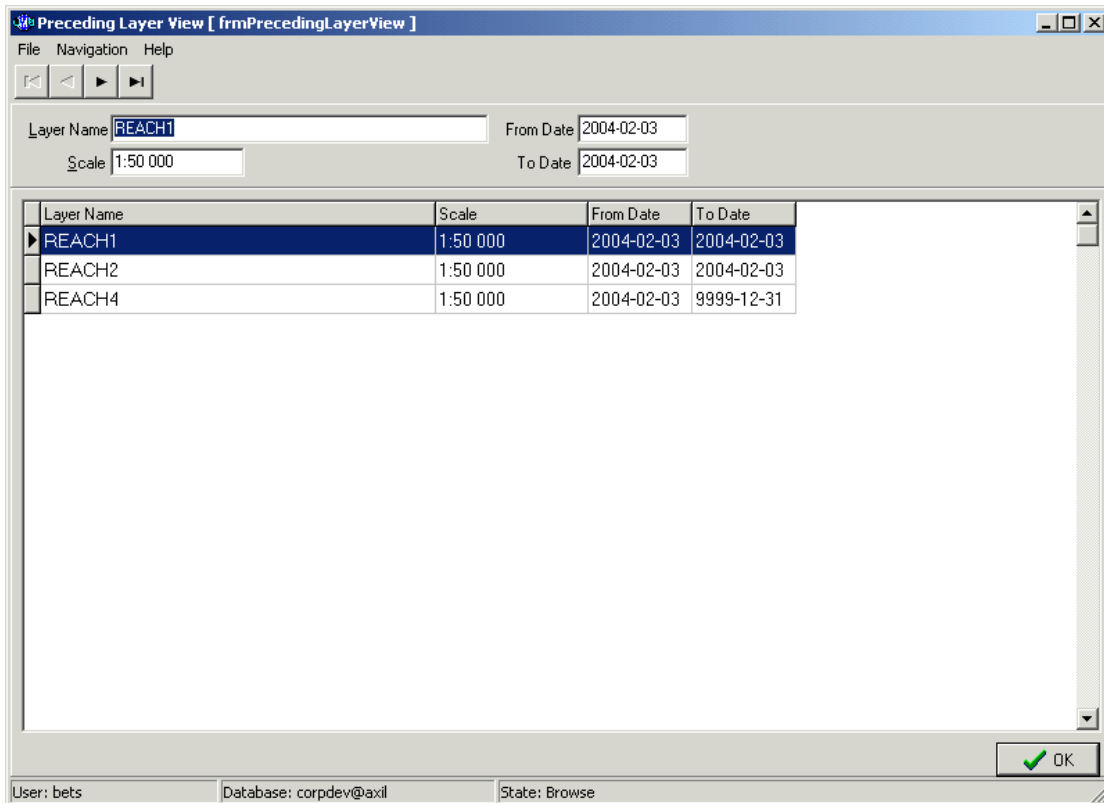
Note: *This form displays layers that are preceding each other. Example: As seen above, the selected layer REACH 1 is preceded by REACH 2 and REACH 4. REACH4 and REACH 2 will be OUT OF USE as it is being superceded by REACH1 that is now implemented, and can be maintained on ArcGIS by a User with Maintenance rights on the Reach's Shape column.*

7.   How to View the Background Layers:

7.1   On the **Open Layer Selection** form, click on the **Open** button to open the **Background Layer Selection** form.
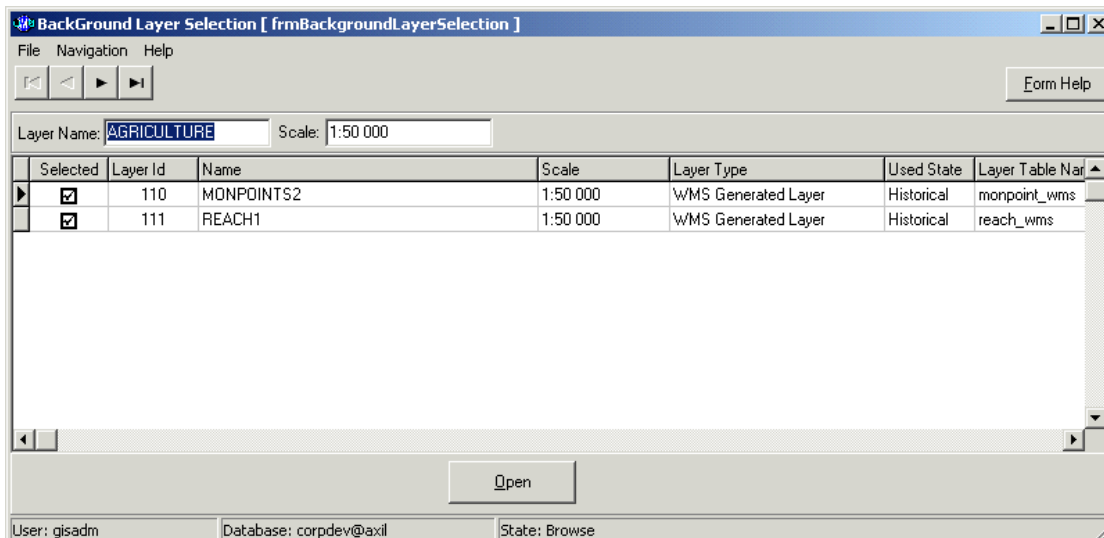
Note: *If a foreground layer was selected, and background Layers for the selected layer were specified, the Background layer selection form will be opened. If no background layers*

were specified for the selected layer, the Background layer selection form will not be displayed. These background layers can be selected or de-selected. If selected, these layers will be opened, together with the foreground layer in ArcGIS. The WMS GIS Administrator will set up the background layers for a specific WMS Layer in the Layers Directory functionality.

8.   How to view the ArcMap – ArcInfo:

8.1   On the **Open Layer Selection** form click on the **Open** button, or the **Background Layer** form to open layers in **ArcGIS** (**ArcMap).**
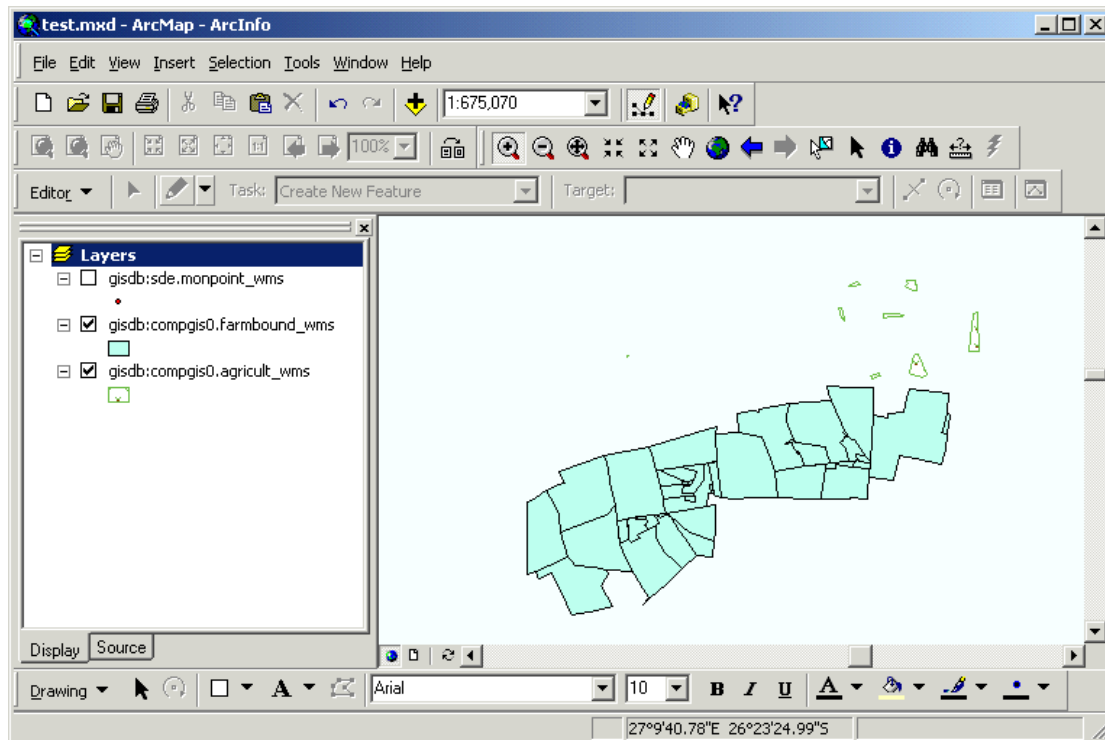
Note: *All the layers that were selected in Open Layer selection and/or Background Layer Selection will be displayed in ArcGIS. As seen above, MONPOINT_WMS, FARMBOUND_WMS and AGRICULT_WMS were selected, and are displayed in ArcGIS. The selected layer, source and the selected background layers with display properties (.lyr file) defined by WMS GIS Administrator will display in ArcMap on the left hand side, and ONLY the focused foreground layer will be activated.*

9.   How to Cancel an Open Layer:

Note: *On the Open Layer Selection form, when you click on the 'Cancel' button, the focus will return to the calling form, the WMS Function form.*
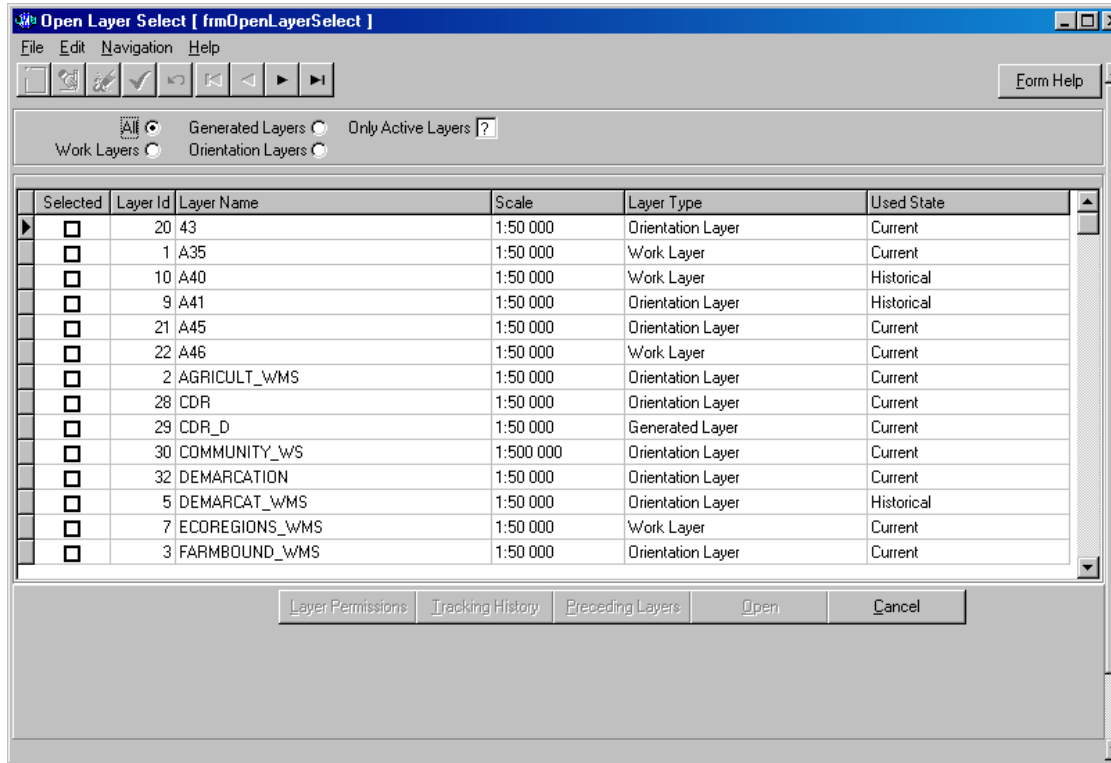
9.1   Click on the **Cancel** button to close the form.

Water Care Works Integration

Introduction:

The purpose of this system is to identify you (a user is the owner of the water care work), its water care works, their location of user, process of water/effluent treatment, sensitivity of the water into which purified or treated effluent is discharged, design capacity of the plant, population served, number and qualification of persons employed to operate the water care work.

Business Rules:

The first step is Registering an Owner and then Classifying a Water Care Work.

i.   The owner of a water care work must be registered, before the water care work and the operators are registered.

ii.   A user number is required for the registration of the owner of a water care work as well as a work number for the Water Care Work.

1.   HOW TO CREATE AN OWNER

1.1   Click on the **Classifications Menu** and select the **Register an Owner** submenu. An **Owner** form displays with a list of all the Owners.

1.2   Click on the Options Menu and select **Create Records** submenu. A blank Owner form displays.
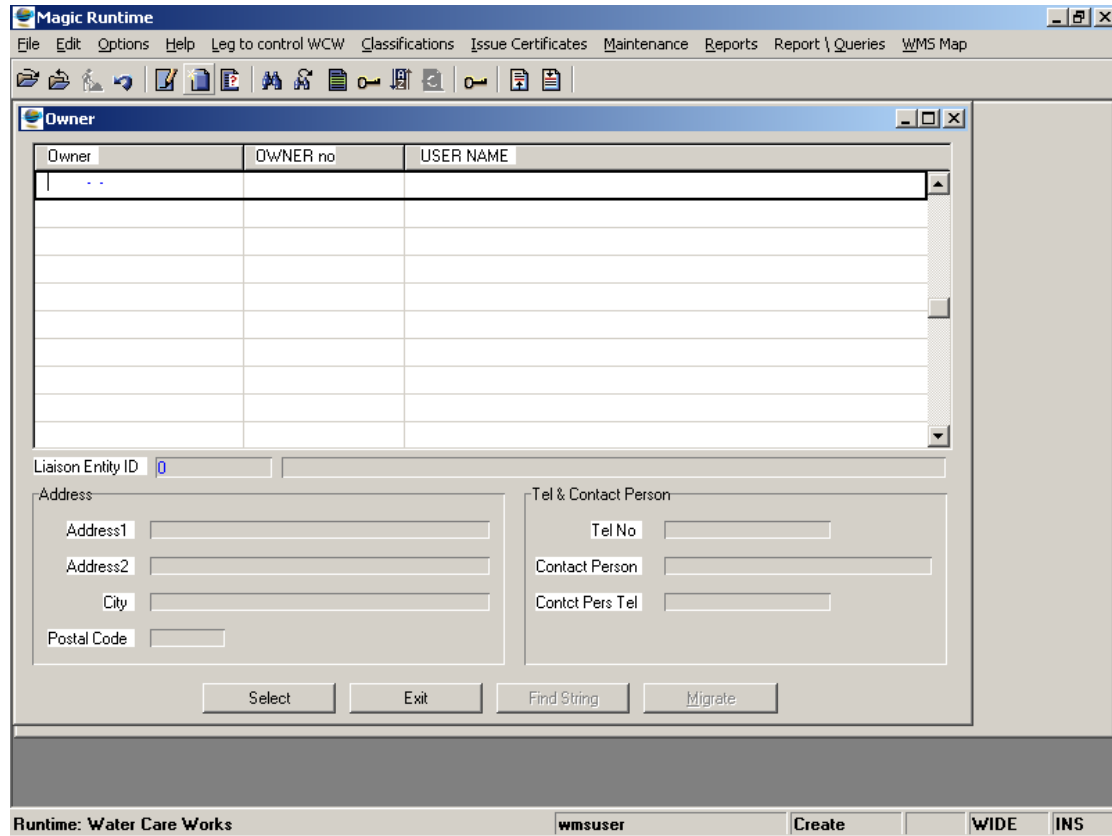
1.2   Enter the **Owner Number** and you **Name** and tab.

1.3   Enter the **Address** details and the **Telephone and Contact** details and tab.

1.4   Click **F10** to accept the new Owner.

2. HOW TO EDIT AN OWNER

2.1   Click on the **Classifications Menu** and select the **Register an Owner** submenu. An **Owner** form displays with a list of all the Owners.

2.2   Select the Owner that you want to change.

2.3   Click on the Options menu and select the **Modify Records** submenu. Make the changes to the record.

2.4   Click **F10** to accept the changes.

3. HOW TO DELETE AN OWNER

3.1   Click on the Classifications Menu and select the Register an Owner submenu. An Owner form displays with a list of all the Owners.
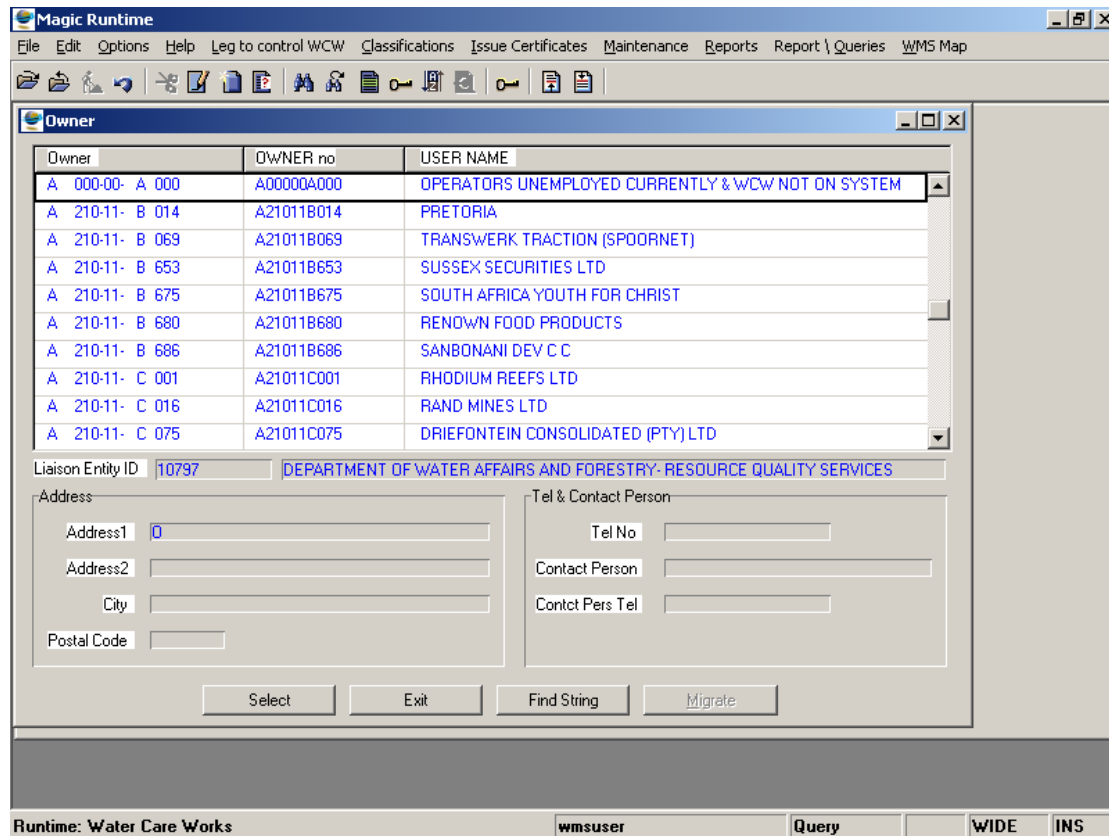
3.2   Select the Owner that you want to delete.

3.3   Click on the Options menu and select the **Modify Records** submenu. Click on the Edit Menu and select the Delete line submenu. Make the changes to the record. A message is displayed asking you to confirm the deletion. Click **Yes**.
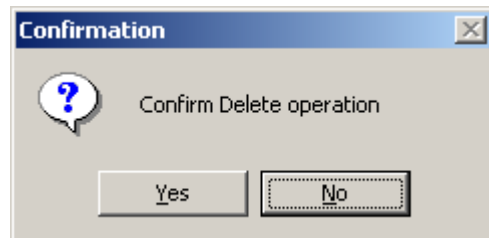
3.4   Click **F10** to accept the changes.

4.   HOW TO REGISTER AND CLASSIFY A NEW POTABLE WATER CARE WORK

4.1   Click on the Classifications Menu and select the Class Water Care Work submenu. A Classify a Water Care Work form displays.

4.2   Click on Options Menu and select the **Create Records** submenu. A blank form displays.

4.3   Enter the **Work Number** and tab.

4.4   Enter the **Work Name** and tab.

4.5   Enter the **Owner Number** or click on the **ZOOM** **Zoom** button to select the Owner Number, and tab.

4.6   Enter the **Province** or click on the **ZOOM** **Zoom** button to select the Province, and tab. A **Treatment Process WCW** form displays.
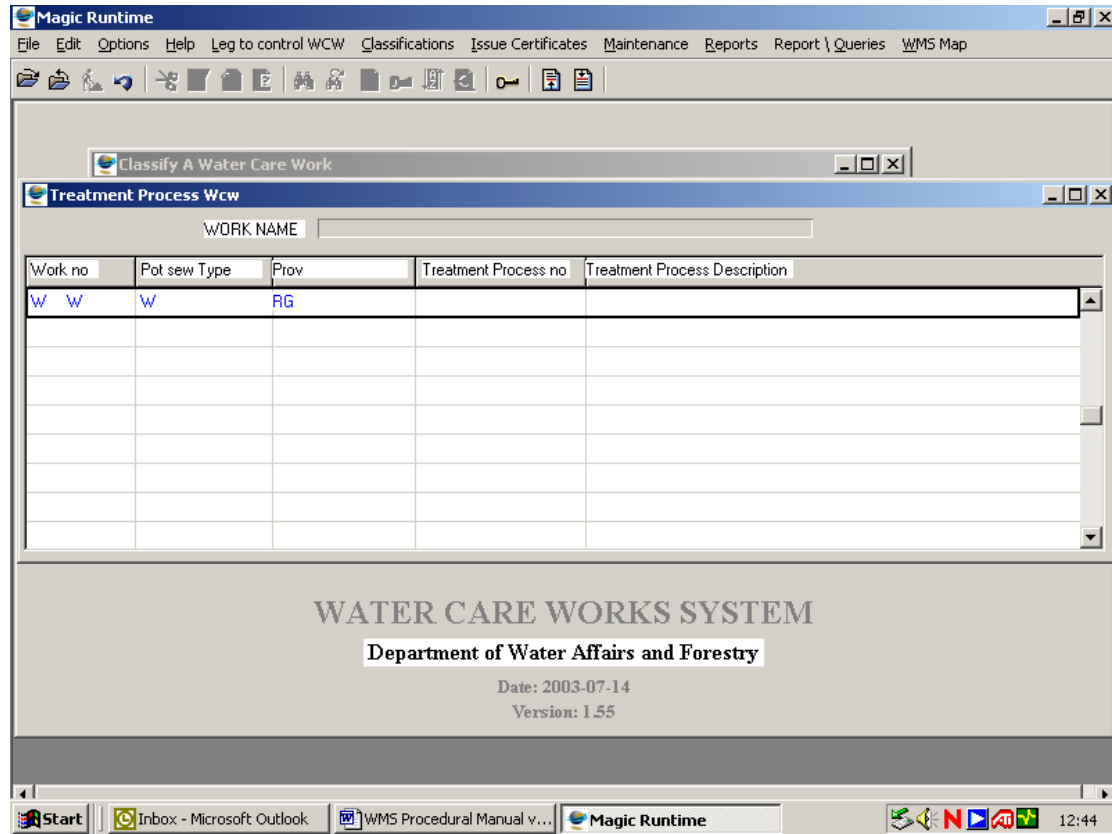
4.7   Enter Process Number or click on the **ZOOM** **Zoom** button to select the Process Number.

4.8   Click on **F10** to accept the changes. A **WCW_Potable** form displays.

Version 9.0: 2007 dated 30 August 2007
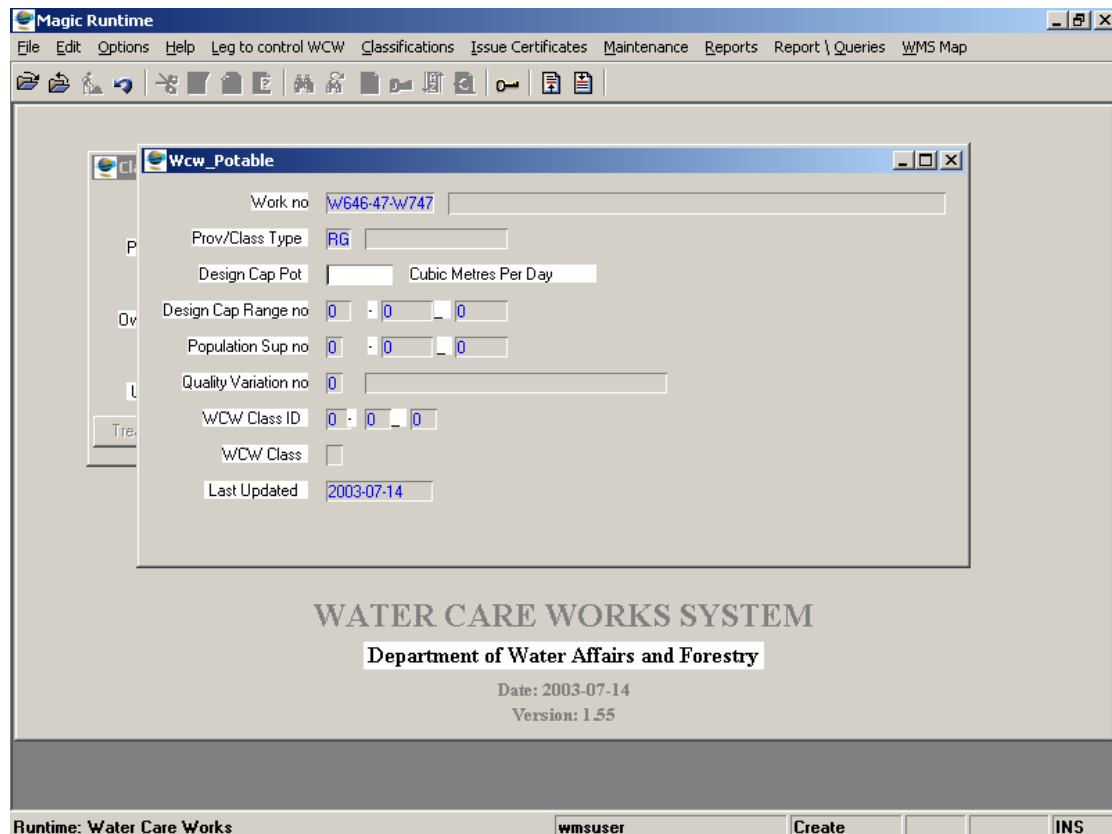
4.9 Enter the number or click on the **ZOOM** **Zoom** button to select the applicable information.

4.10 Do not click on F10 to exit this screen, click on the **Issue Certificates Menu** and select the **Print New WCW Certificate.**

5. HOW TO REGISTER AND CLASSIFY A NEW SEWAGE WATER CARE WORK

5.1 Click on the Classifications Menu and select the Class Water Care Work submenu. A Classify a Water Care Work form displays.

5.2 Click on the **Options Menu** and select **Create Records** submenu. A blank form displays.

5.3 Enter the **Work Number** and tab.

5.4 Enter the **Work Name** and tab.

5.5 Enter the **Owner Number** or click on the **ZOOM** **Zoom** button to select the Owner Number, and tab.

5.6 Enter the **Province** or click on the **ZOOM** **Zoom** button to select the Province, and tab. A **Treatment Process WCW** form displays.

1053
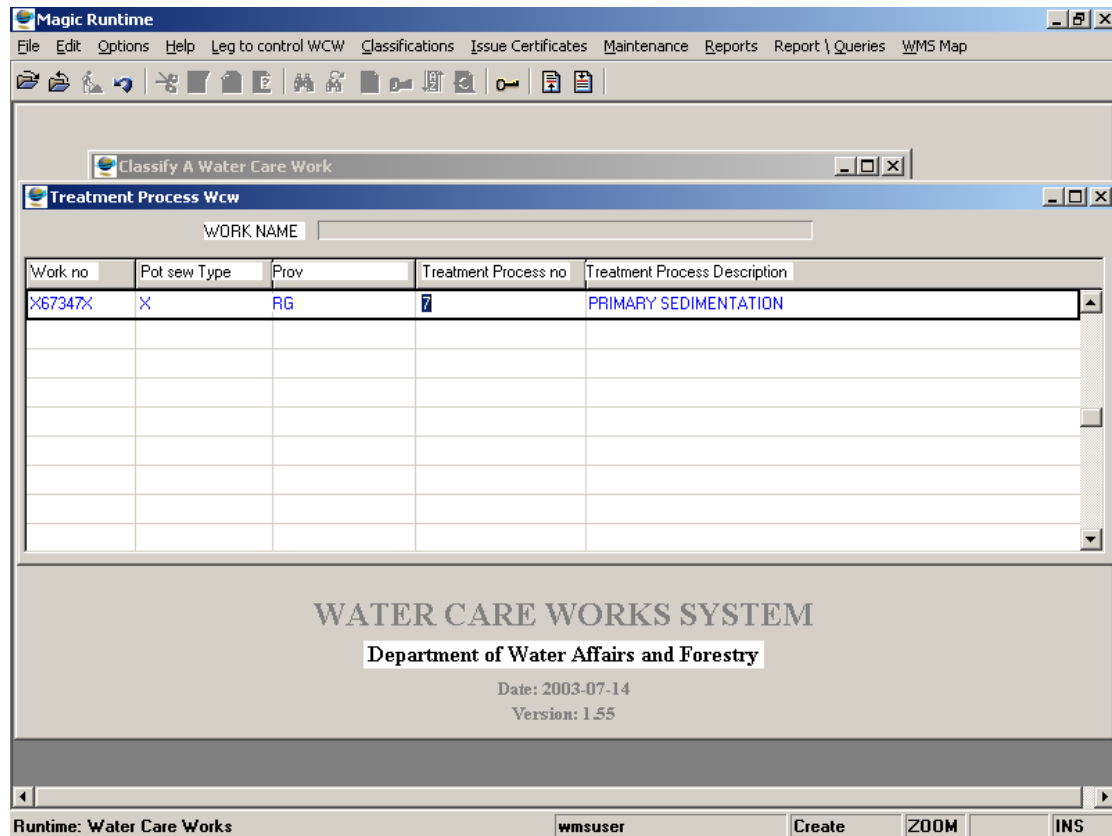
5.7 Enter Process Number or click on the **ZOOM** **Zoom** button to select the Process Number.

5.8 Click on **F10** to accept the changes. A **WCW_Sewage** form displays.

5.9 Enter the applicable information and number or click on the **ZOOM** **Zoom** button to select the applicable information. Do not click on F10 to exit this screen, click on the **Issue Certificates Menu** and select the **Print New WCW-Certificate**.

6.   HOW TO EDIT A WATER CARE WORK

6.1 Click on the **Locate Record** button, if you know the works number, or click on the **Find String** button on the **Classify a Water Care Work** form and select the correct works.

6.2 Click on the **Modify Records** button.

6.3 Select the record that you want to modify.

6.4 Click **F10** to accept the changes.

7.   HOW TO DELETE A WATER CARE WORK

7.1 Click on the **Locate Record** button or click on the **Find String** button on the **Classify a Water Care Work** form and select the correct works you want to delete.

7.2 Click on the **Edit Menu** and select the **Delete Line** Submenu.

7.3   A message is displayed asking you to confirm deletion.
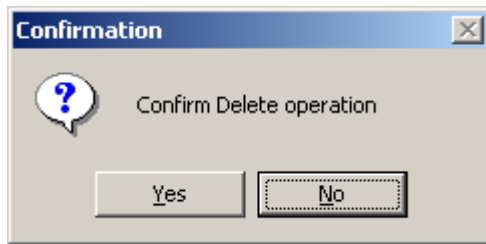
7.4   Click on the **Yes** option.

*Please Note! You can identify a Sewage Work from a Potable Work by a **Pot_sew Type Code**. The Code is **X** for a **Sewage Work** and **W** for a **Potable Work**. This all shows on the **Classify a Water Care Work** form.*

8.   HOW TO MAP A WATER CARE WORK

8.1   Click on the **WMS Map** Menu and select the **Map Work** submenu.

8.2   A **Map Work Maintain** form displays.
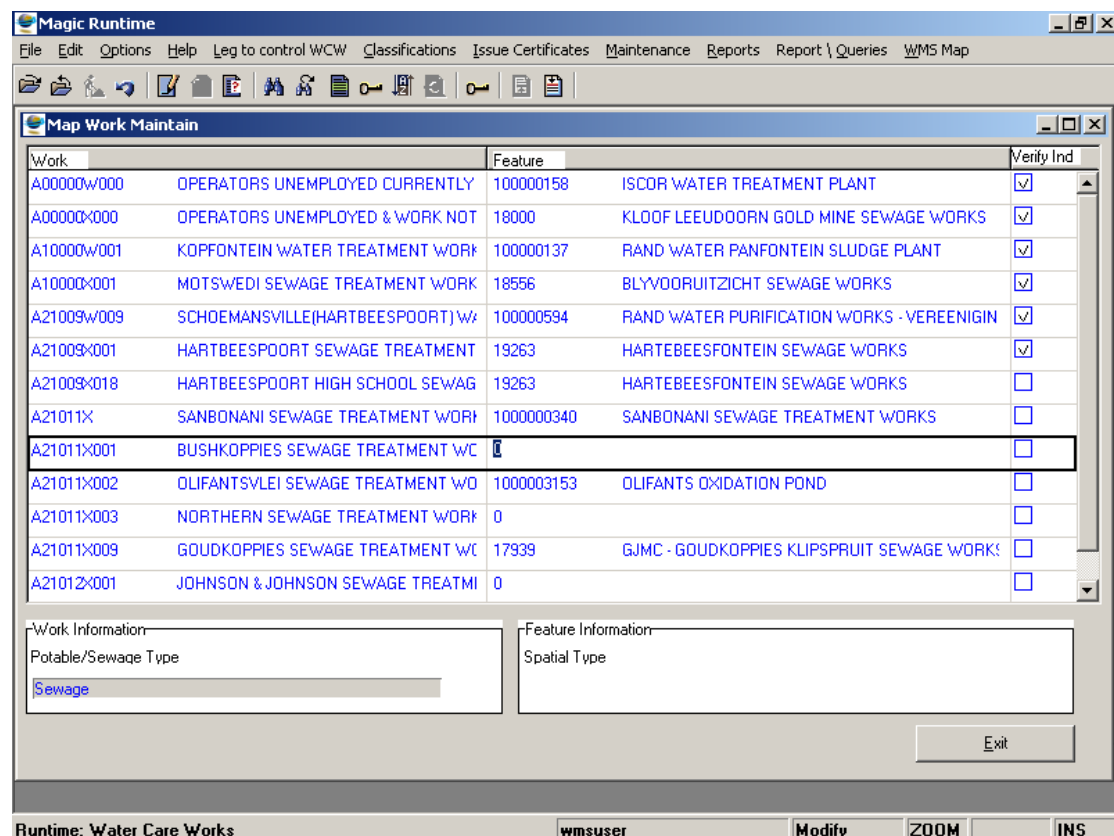
8.3   Click on the specific work that you want to map.

8.4   Click on the **ZOOM** **Zoom** button to select the Work that you are mapping to.

8.5 A **Lookup Feature** form displays with the capability for searching for a specific work that you want by using **String for Instring Search.**

8.6 Type in the first few letters of the Work that you want in the **String for Instring Search** field. A **Lookup Feature** form displays with the applicable search criteria.

Click on the works that you want to select and then click on the [Select] **Select** button.
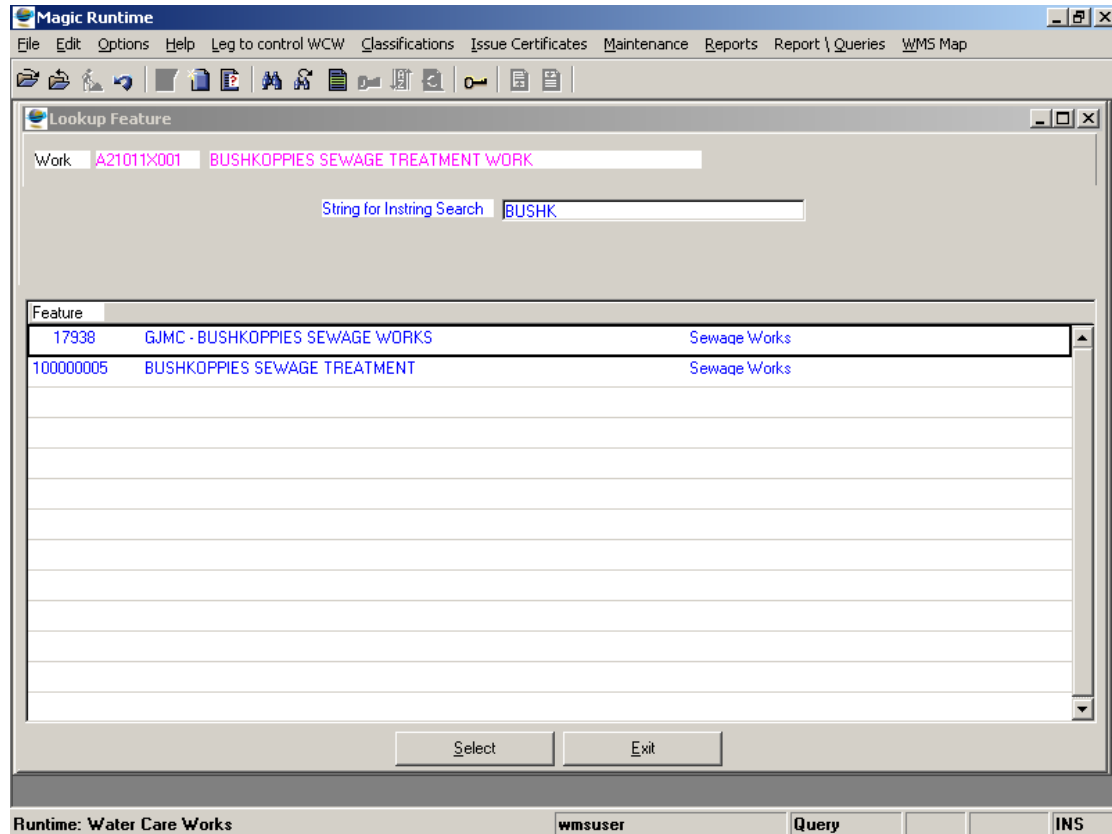
8.7 A **Warning** screen displays. The reason for this is that the wording in **WMS** is different from the wording in **Water Care Works** in some instances. Click **OK**.
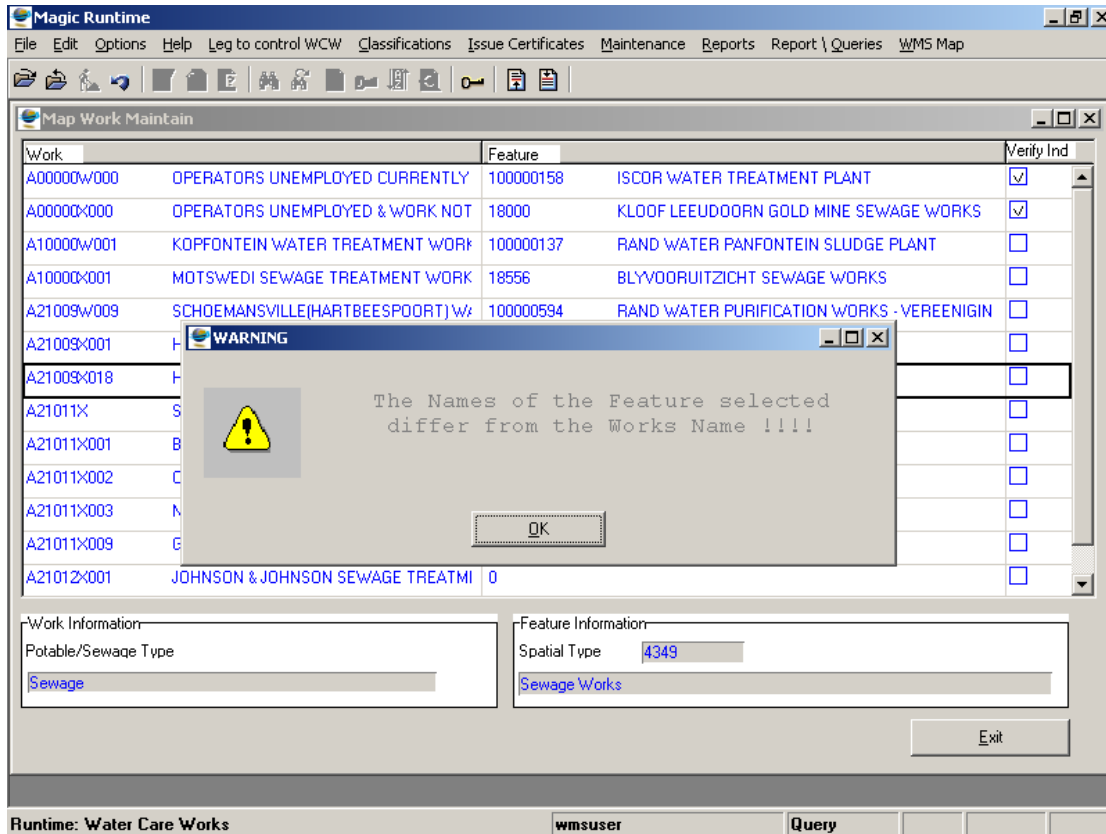
8.8   A **Map Work Maintain** form displays with the mapped information.
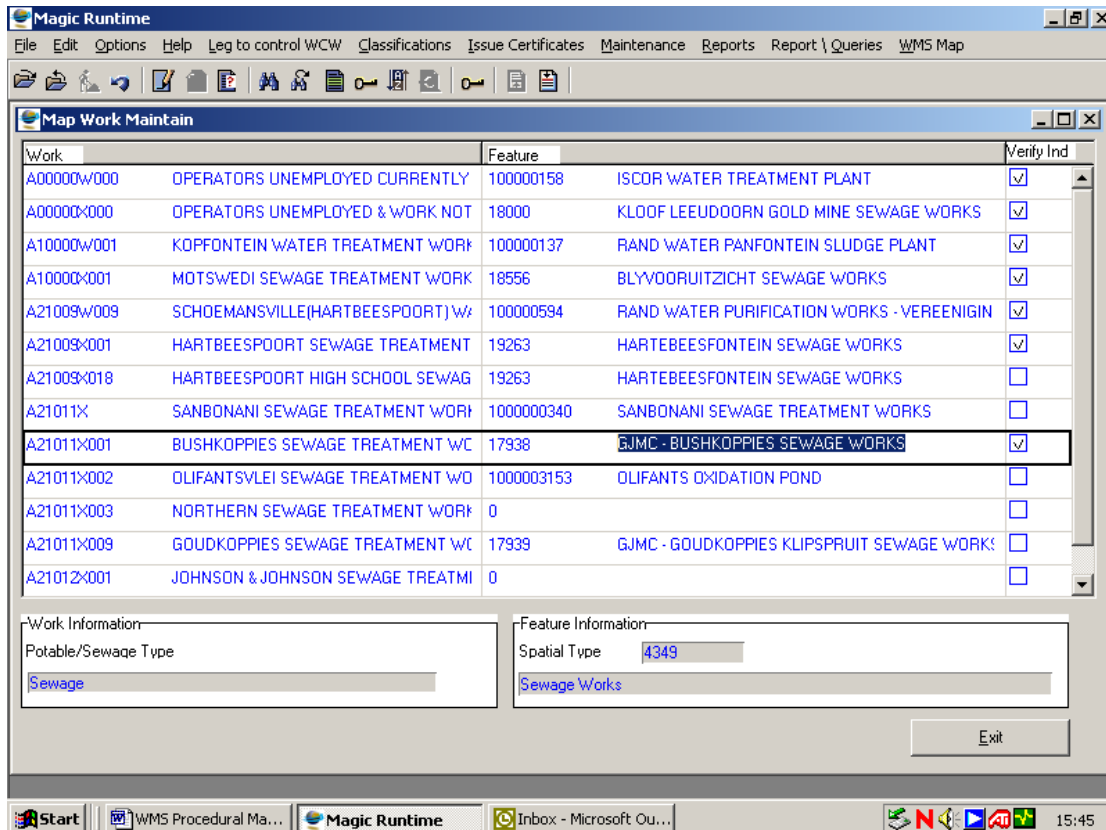
8.9   Click on the **Verify Ind** checkbox to verify that the mapping was done accurately. The Supervisor is the only one with the rights to click on this checkbox.

8.10   Click **F10** to accept the changes.

9.   HOW TO MIGRATE A WORK

Click on the Classifications Menu and select Class Water Care Work submenu.

A Classify a Water care Work form displays with the Feature ID field empty.
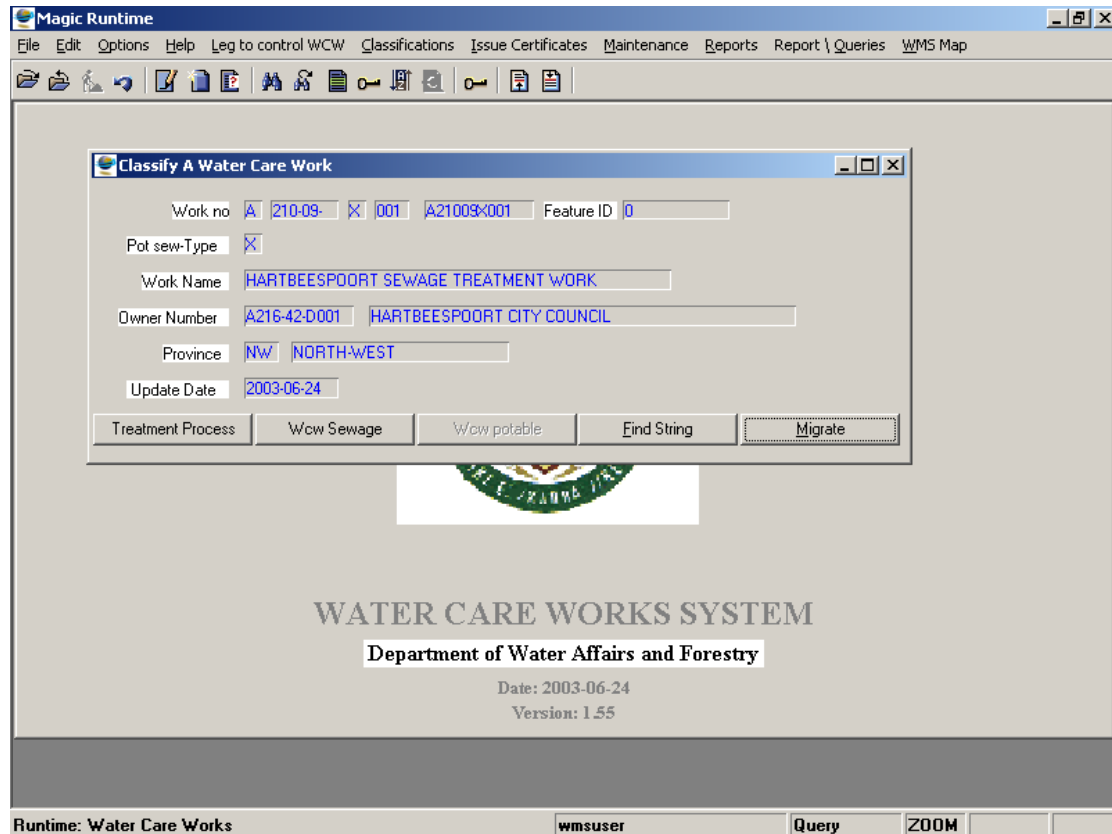
Click on the Migrate button.

A Warning screen might be displayed. The reason for this is that this specific work has not been mapped yet or it has been mapped, but not verified yet. This has to be done before Migration can take place.
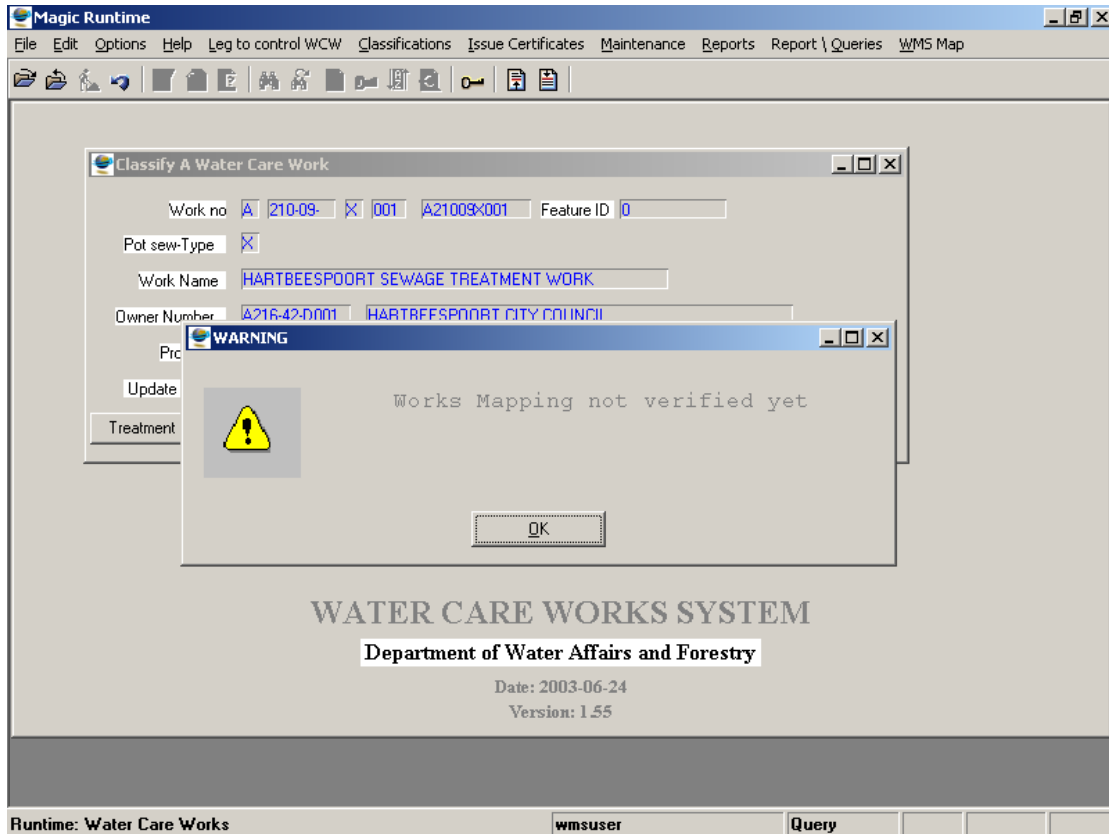
9.5   Click on the **Migrate** button. An Error Message displays. Click **Yes**.
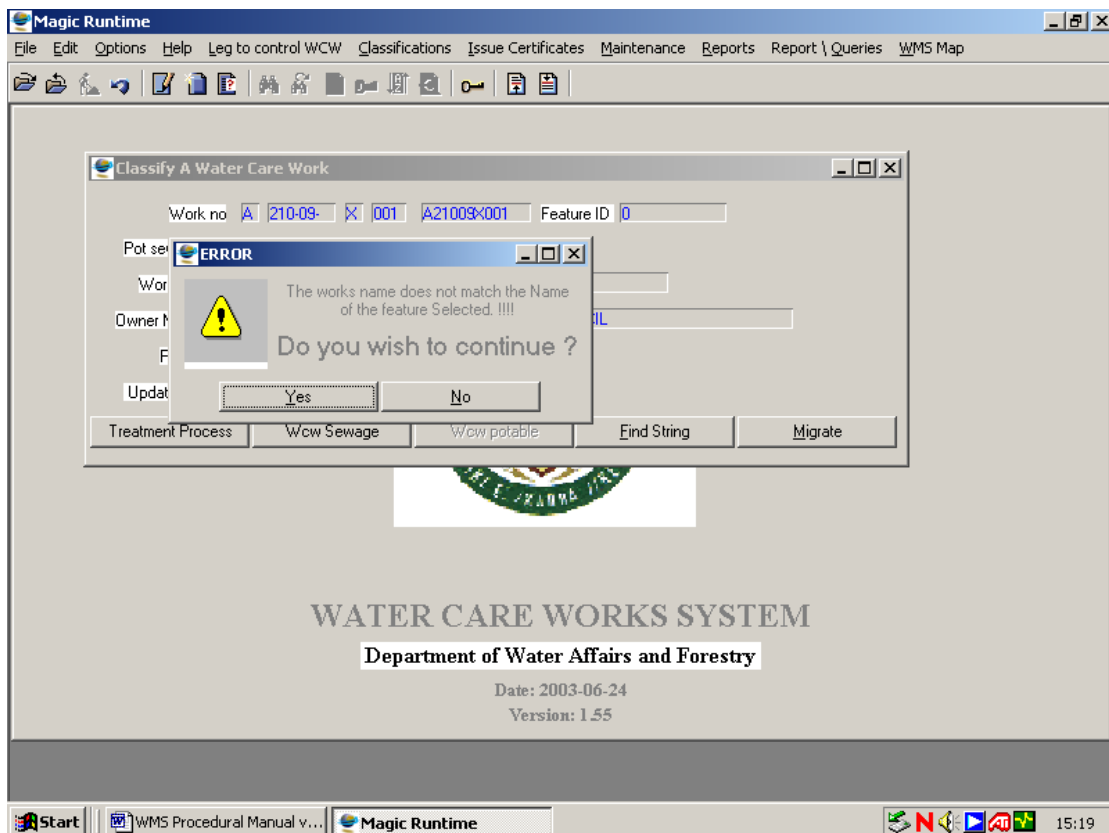
9.6   A **Warning** screen displays. Click **OK.**
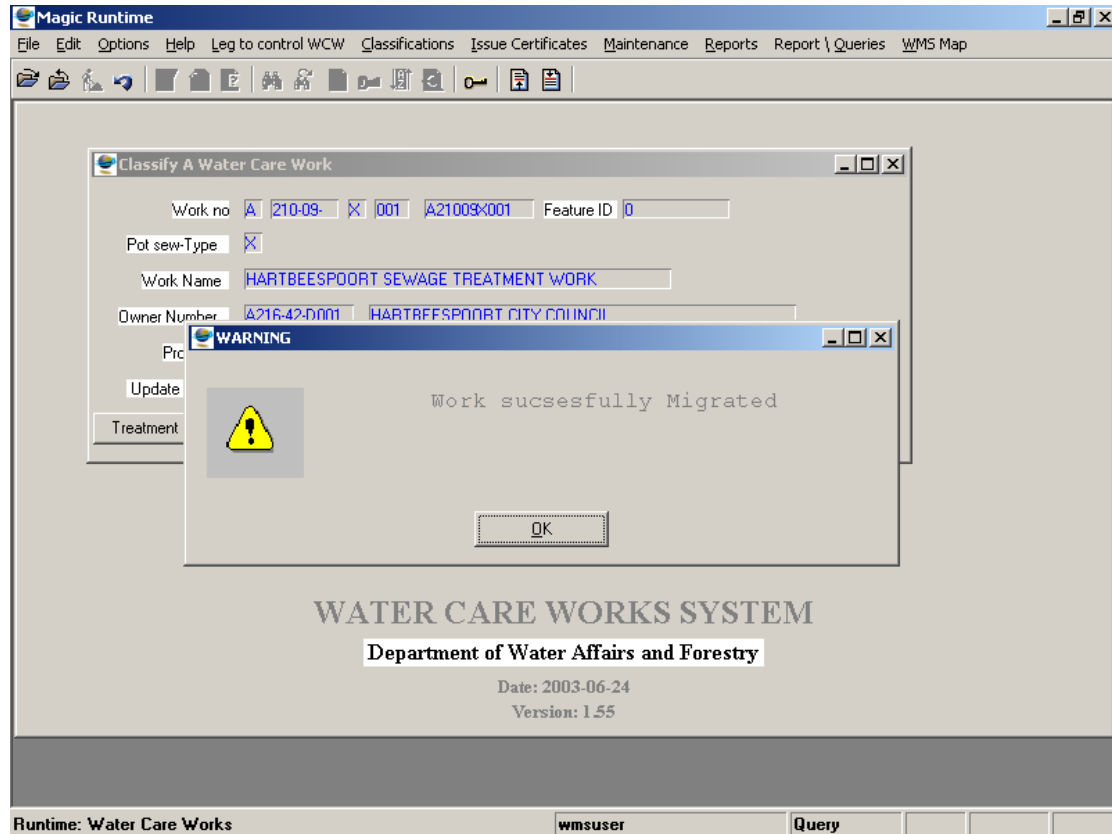
9.7   A **Classify a Water Care Work** form displays with the **mapped ID** in the **Features ID** field.
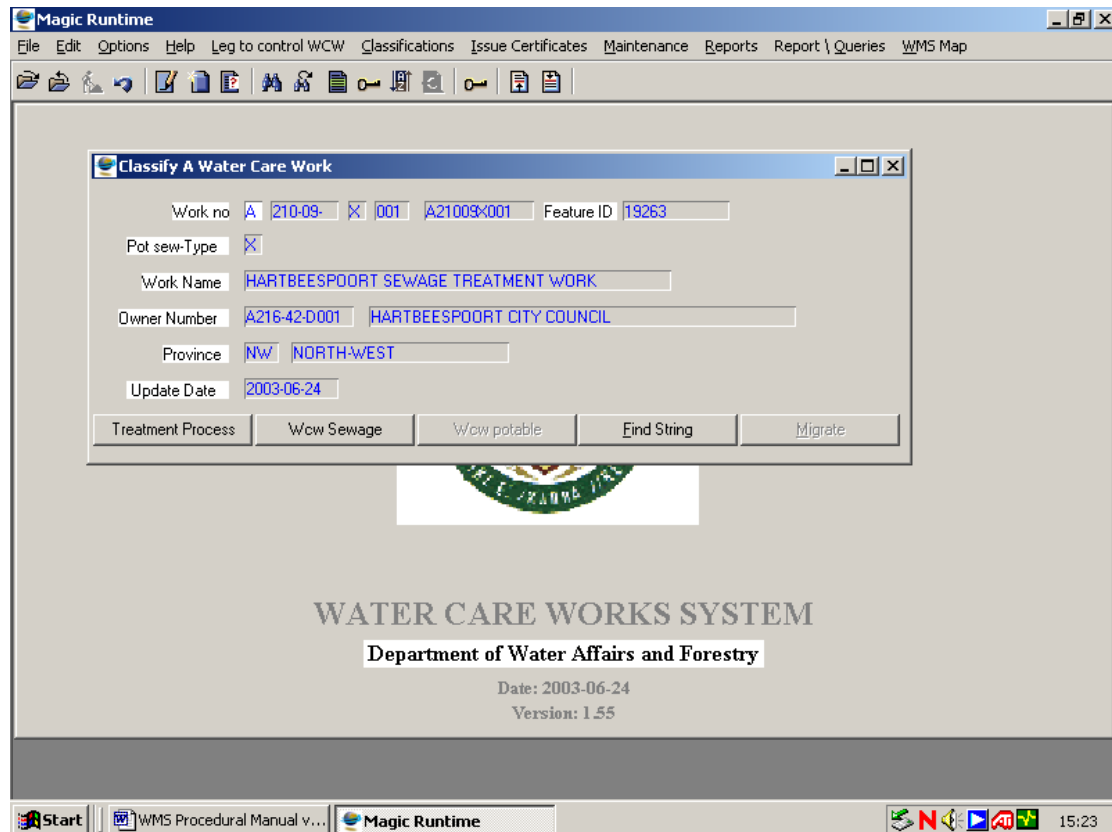
*Please Note: You can only **Migrate** a Work that has been **Mapped** and **Verified.***

10. HOW TO MAP AN OWNER TO AN INSTITUTION

10.1 Click on the **WMS Map** menu and select the **Map Owner** submenu.

10.2 A **Maintain Map Owner** form displays.

10.3 Click on the specific owner that you want to map.

10.4 Click on the **ZOOM Zoom** button to select the Institution that you are mapping the Owner to.

10.5 A **Lookup Institution** form displays with the capability for searching for a specific owner that you want by using **String for Instring Search.**
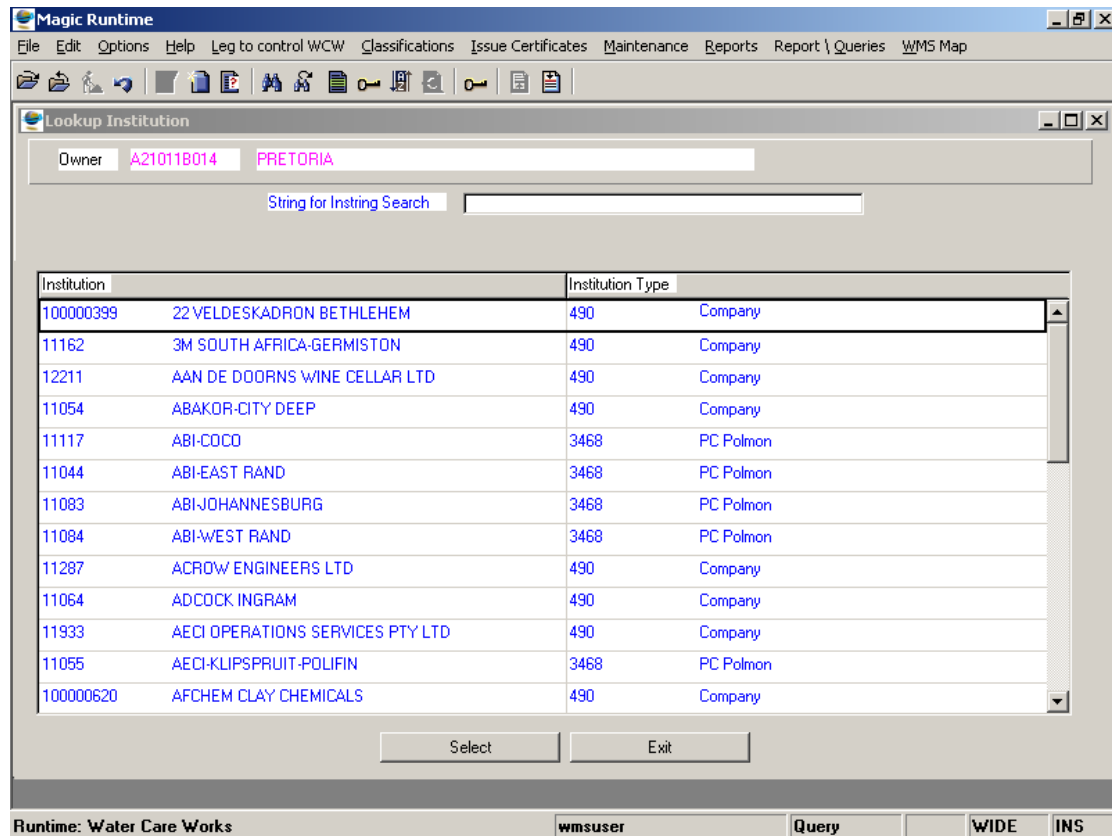
10.6   Type in the first few letters of the Institution that you want in the **String for Instring Search** field. A **Lookup Feature** form displays with the applicable search criteria. Click on the owner that you want to select and click then on the ⟨Select⟩ **Select** button.

10.7   A **Warning** screen displays. The reason for this is that the wording in **WMS** is different from the wording in **Water Care Works** in some instances. Click **OK**.
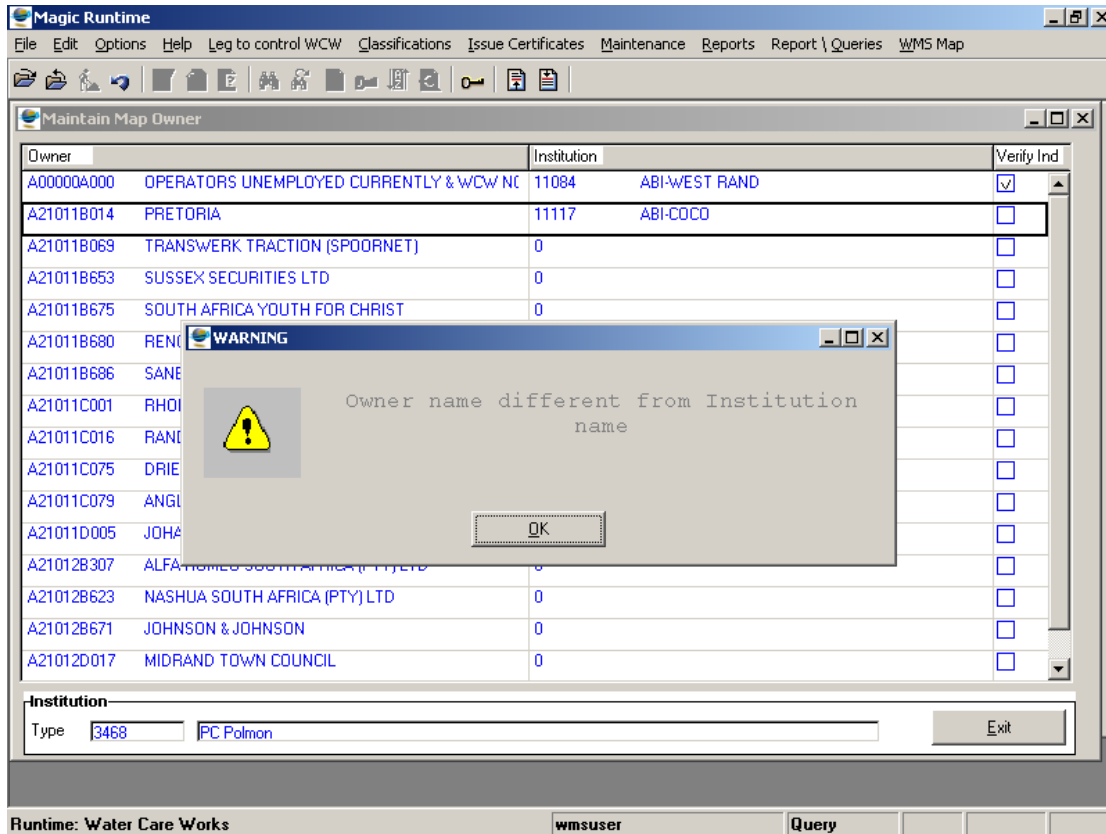
10.8   A **Maintain Map Owner** form displays with the mapped information.
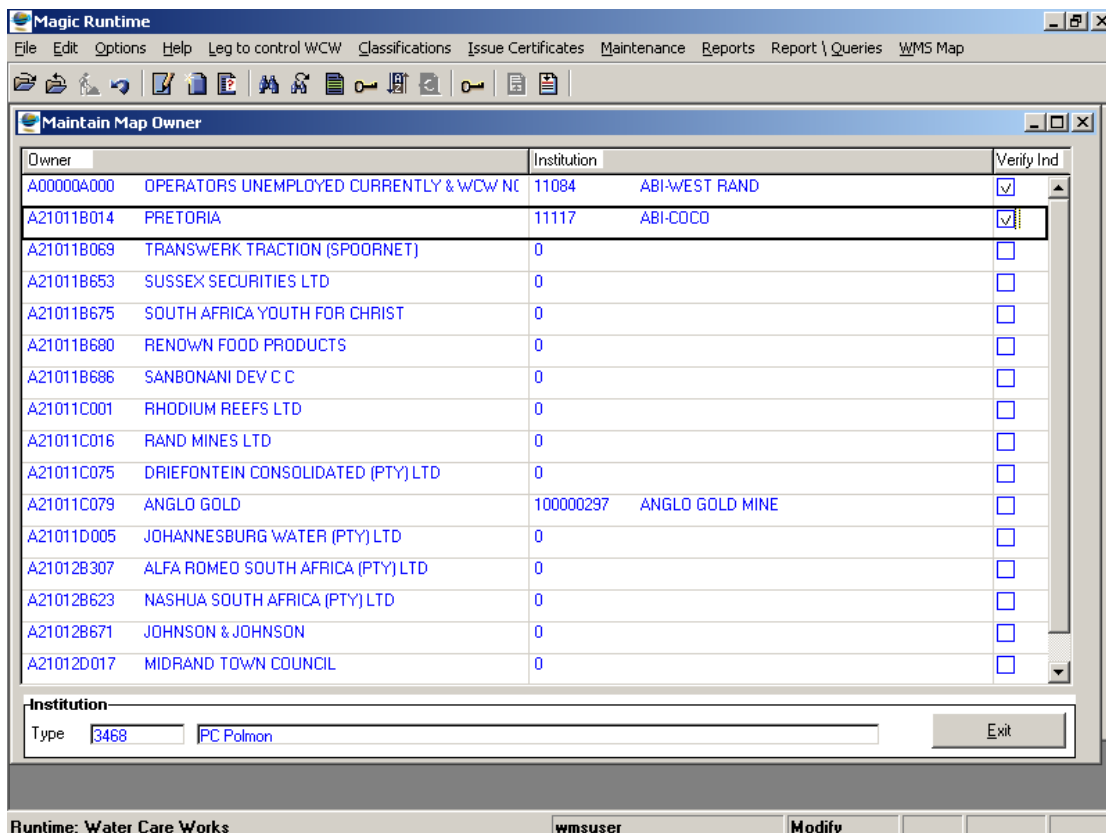
10.9   Click on the **Verify Ind** checkbox to verify that the mapping was done accurately. The Supervisor is the only one with the rights to click on the checkbox.

10.10 Click **F10** to accept the changes.

11. HOW TO MIGRATE AN OWNER

11.1 Click on the **Classifications** menu and select the **Register an Owner** submenu.

11.2 An **Owner** form displays with the **Feature ID** field empty.

11.3 Click on the [icon] **Modify Records** button.

11.4 Click on the **Migrate** button.

11.5 A **Warning** screen might be displayed. The reason for this is that this specific owner has not been mapped yet or it has been mapped, but not verified yet. This has to be done before Migration can take place.
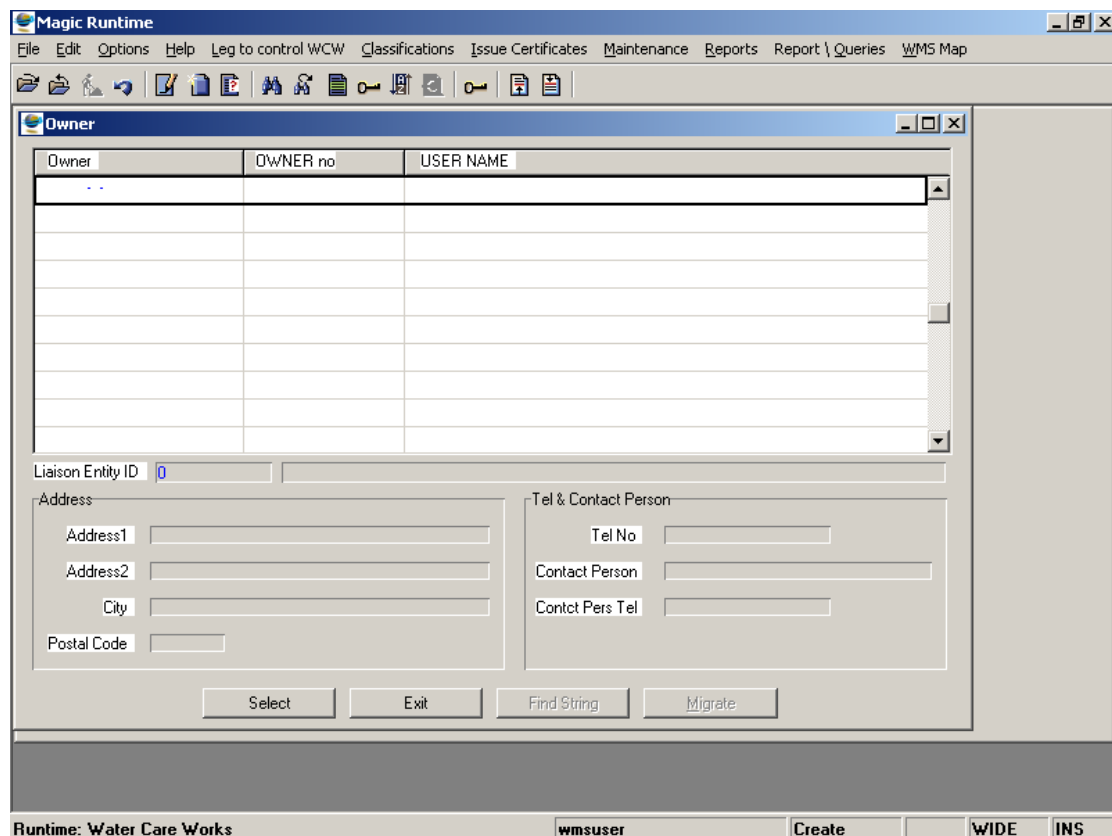
11.6 Click on the **Migrate** button. An Error Message displays. Click **Yes.**

11.7 A Warning screen displays. Click **OK**.

11.8 An Owner form displays with the mapped ID in the Features ID field.

[icon] *Please Note: You can only Migrate an Owner that has been Mapped and Verified.*

11.9 Enter the required information.

11.10 Click **F10** to accept the change.

Master Lists Overview

The **Master Lists** management component is used to create and maintain standard reference information and standard processes in WMS, for the Resource Management sub-system, Monitoring Management and ArcView. In Master Lists you will find classification structures where information is categorised into logical groupings, data sources, and templates/methods of environmental characteristic surveys, spatial display components like colours and symbols, standard seasonal parameters, and standard correspondence templates.

Note: Making changes to the System Administrator modules can result in inconsistencies between the WMS and its Manual and Help. Should necessary change be identified, please log a call to ensure that changes on the system are reflected in Manual and Help

The Master List management component deals with the following modules:

➢ Classification Management

➢ Source Providing Data Maintenance Overview

➢ Environmental Survey Method Setup

➢ Map Display Properties

➢ Seasonal Date Ranges

➢ System Administration

➢ Stakeholder Administration

➢ Layer Administration

➢ Address Code Administration

Importantly, the information entered into **Master Lists** sets the standard for reference data and defines the processes in WMS. To ensure consistency of information, all data is entered at a central point. All new information or changes are first submitted to an Operational User Group for agreement between WMS Stakeholders. Contact your WMS Superuser to submit new or changed information.

NOTE: (MASTER LISTS MODULES HAVE NOT YET BEEN INCLUDED IN THIS PROCEDURAL MANUAL!)

Address Code Administration

Business Rules:

A User is not allowed to exit a compulsory field without specifying a value.

i.   When you maintain the record, you must specify the value of this field.

ii.   Central Administration has full rights, and all Super Users and Users have rights that allow either creation or view or modify depending on the module.

Path:

1.1   Select **Master List** from the Water Resource Management menu bar.

1.2   Select **Address Code Administration** from the sub menu.

How to Add a Postal Code

1.3   Select **Postal Codes** from the **Address Code Administration** sub menu.

1.4   A **Postal Code Area Maintenance** form displays.

Postal Code Area Id	Postal Code Type	Postal Code	Verify Ind	Country Town Suburb Id	Suburb	Town	Country
1	PO Box	0001	☐	1		PRETORIA	SOUTH AFRICA
18	PO Box	0002	☐	1		PRETORIA	SOUTH AFRICA
4	PO Box	0002	☐	4	CLYDESDALE	PRETORIA	SOUTH AFRICA
2	Street Code	0002	☐	2	BEREA PARK	PRETORIA	SOUTH AFRICA
3	Street Code	0002	☐	3	CENTRAL	PRETORIA	SOUTH AFRICA
5	Street Code	0002	☐	5	DEFENCE FORCE AF	PRETORIA	SOUTH AFRICA
6	Street Code	0002	☐	6	GOEDEHOOP	PRETORIA	SOUTH AFRICA
7	Street Code	0002	☐	7	MARABASTAD	PRETORIA	SOUTH AFRICA
8	Street Code	0002	☐	8	MUCKLENEUK	PRETORIA	SOUTH AFRICA
9	Street Code	0002	☐	9	PRINCE'S PARK	PRETORIA	SOUTH AFRICA
10	Street Code	0002	☐	10	PRISON AREA	PRETORIA	SOUTH AFRICA
11	Street Code	0002	☐	11	RAILWAY RESERVE	PRETORIA	SOUTH AFRICA
12	Street Code	0002	☐	12	RIVERDALE	PRETORIA	SOUTH AFRICA
13	Street Code	0002	☐	13	SALVOKOP	PRETORIA	SOUTH AFRICA
14	Street Code	0002	☐	14	SKANSKOP	PRETORIA	SOUTH AFRICA
15	Street Code	0002	☐	15	SUNNYSIDE	PRETORIA	SOUTH AFRICA
16	Street Code	0002	☐	16	TREVENNA	PRETORIA	SOUTH AFRICA
17	Street Code	0002	☐	17	ZWAVELDSPOORT	PRETORIA	SOUTH AFRICA
19	Private Bag Code	0003	☐	18	UNISA	PRETORIA	SOUTH AFRICA
20	Private Bag Code	0004	☐	19	CITY COUNCIL	PRETORIA	SOUTH AFRICA
21	Private Bag Code	0005	☐	20	ALKANTRANT	PRETORIA	SOUTH AFRICA
22	Private Bag Code	0006	☐	21	ATTERIDGEVILLE	PRETORIA	SOUTH AFRICA
23	Private Bag Code	0007	☐	22	ARCADIA	PRETORIA	SOUTH AFRICA
28	Private Bag Code	0008	☐	26	MOFOKENG	ATTERIDGEVILLE	SOUTH AFRICA
29	Private Bag Code	0008	☐	27	PHOMOLONG	ATTERIDGEVILLE	SOUTH AFRICA
31	Private Bag Code	0008	☐	29		CONCERN	SOUTH AFRICA

User :bets   Database :corpdev@axil   PostalCodeAreaMaintain.dll (21.0.0.0)   Query   OVR

1.5   Click on the **Create** button.

1.6   A new line displays allowing the addition of a new record.

1.7   Select the **Postal Code Type** from a drop-down list, and tab.

1.8 Enter the **Postal Code**, and tab.

1.9 Click on the **Verify Ind** checkbox, if applicable, and tab.

1.10 Click on F5 to Select the **Country/Town/Suburb ID**.

1.11 A **Country/Town/Suburb Selection** Form displays.

1.12 Select the applicable record by clicking on the [Select] **Select** button, double-click while focusing on the record and the form will return back to the Postal code Maintenance form.

1.13 Tab to accept the changes.

How to Edit a Postal Code

Note: Please do not change the Postal Code type, Code or Country after linking it to a Postal or Physical Address.

1.1 Highlight the record to be modified.

1.2 Click on the **Modify Records** button.

1.3 Make the changes as required.

How to Delete a Postal Code

Note: When a Postal Code is used and was incorrectly created, and the Supervisor wants to delete the record, the incorrect record will be displayed for the Supervisor to unlink.

1.1   Highlight the record to be deleted.

1.2   Click on the F3 button for deletion.

1.3   A message displays asking you to confirm deletion.

Confirm

Confirm Delete Operation

[Yes]   [No]
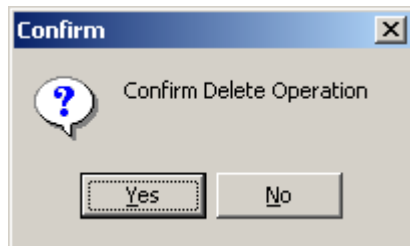
1.4   Click on the **Yes** option.

How to Add a Dialling Code

1.1   Select **Postal Codes** from the **Address Code Administration** sub menu.

1.2   A Dialling Code Maintenance form displays.

Dialing Code Maintanance

File   Edit   Options   Help

| Exchange Name	Dialing Code	First Three Numbers	Start Number	End Number	Dialing Procedure
AASVOELKOP	011	280	6400	6599	Automatic
AASVOELKOP	011	280	8500	8699	Automatic
AASVOELKOP	011	380	3600	3899	Automatic
AASVOELKOP	011	380	7300	7699	Automatic
AASVOELKOP	011	431	0	4499	Automatic
AASVOELKOP	011	476	0	999	Automatic
AASVOELKOP	011	476	1000	9999	Automatic
AASVOELKOP	011	478	0	5999	Automatic
AASVOELKOP	011	478	9000	9999	Automatic
AASVOELKOP	011	678	0	9999	Automatic
AASVOELKOP ABSA DLC30	011	476	1000	9999	Automatic
AASVOELKOP ABSA DLC30	011	478	0	5999	Automatic
AASVOELKOP ABSA DLC30	011	678	0	9999	Automatic
ABATTOIRS (CATO RIDGE)	031	784	1000	1999	Automatic
ABATTOIRS (CATO RIDGE)	031	784	6000	6049	Automatic
ABBOTSDALE	022	487	7000	7999	Automatic
ABERDEEN	049	846	0	999	Automatic
ABERDEEN (DECT)	049	846	9000	9099	Automatic
ABERFELDY	058	661	0	99	Automatic
ABERFELDY	058652				Ask for required exc
ABERSETHIN	058	313	0	999	Automatic
ACORNCOURT RT 2/6-7	013	708	0	2699	Automatic
ACORNHOEK	013	797	0	999	Automatic
ACORNHOEK - VSAT	013	795	0	99	Automatic
ADDO	042	233	0	2999	Automatic
ADELAIDE	046	684	0	1999	Automatic
ADELAIDE DECT	046	684	9000	9999	Automatic

User :bets   Database :corpdev@axil   DialingCodeMaint.dll (21.0.2.0)   Query   WIDE OVR

1.3   Click on the **Create** button.

1.4   A new line displays allowing the addition of a new record.

1.5   Enter the **Exchange Name**, and tab.

1.6   Enter the **Dialling Code,** and tab.

1.7   Enter the **First Three Numbers**, and tab.

1.8   Enter the **Start Number**, and tab.

1.9   Enter the **End Number,** and tab.

1.10   Select the **Dialling Procedure** from a drop-down list.

1.11   Tab to accept the changes.

How to Edit a Dialling Code

1.1 Highlight the record to be modified.

1.2 Click on the [icon] Modify Records button.

1.3 Make the changes as required.

How to Delete a Dialling Code

[icon]*Note: Telecommunication Address is not linked to a dialling code. Dialling Codes will only be used for validation purposes. When a dialling code is used, Liaison Entity administrator/ user may delete a used record.*

1.1 Highlight the record to be deleted.

1.2 Click on the F3 button for deletion.
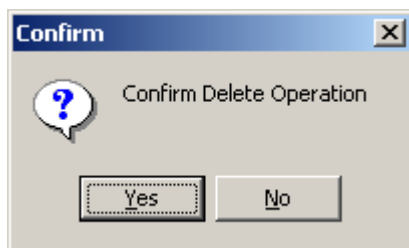
1.3 A message displays asking you to confirm deletion.

1.4 Click on the Yes option.

How to Add a Country/Town/Suburb

[icon]*Note: Will be used on Physical Addresses that will not be used for Postal purposes. Will also be used as an additional detail for postal codes.*

1.   Select **Postal Codes** from the **Address Code Administration** sub menu.

2.   A Country/Town/Suburb Maintain form displays.

3. Click on the ☐**Create** button.

4. A new line displays allowing the addition of a new record.

5. Enter the **Primary Place**.

6. Enter the **Secondary Place.**

7. Enter the **Country.**

8. Tab to accept the changes.

How to Edit a Country/Town/Suburb

Note: When a country/town/suburb id is used in postal code or physical address, make sure that you change the primary and secondary place for an id.

1. Highlight the record to be modified.

2. Click on the **Modify Records** button.

3. Make the changes as required.

How to Delete a Country/Town/Suburb

1. Highlight the record to be deleted.

2. Click on the **F3** button.

3. A message displays asking you to confirm deletion.
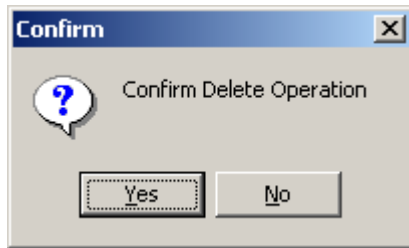
4. Click on the **Yes** option.

Source Providing Data

Introduction:

The purpose of the Source Providing Data Maintenance form is to maintain a record of computerised or manual sources from which data is imported, or can be obtained.

Business Rules:

i.   Only unique names may be used.

ii.   The Custodian of each Source providing Data must exist in the person or organisation Details form.

iii.   The required Data Type must exist in the Class Types form.

iv.   A Source Providing Data must always have at least one Data Type specified.

Path:

1.1   Select **Master List** from the **Water Resource Management** (Delphi Front-End) menu bar.

1.2   Select **Source Providing Data Maintenance** from the sub-menu.

How to Search for a Source Providing Data

2.1   Enter a name, or a portion of the name with an * in the Source Providing Data Name

field, and click on the ▯ **Range** button.

2.2   Click on the **Zoom** button, next to the Custodian of Data field.

2.3   This will open the **Organisation Selection** form.

2.4   Enter the required search criteria, and select the correct organisation from the person

or organisation tab by clicking on the record and clicking on the ▭ Select ▭ **Select**
button.

2.5   This will return you to the **Source Providing Data Maintenance** form. Click on the
Range button.

2.6   Click on one of the **Commission Status** indicators (Out of Commission, In

Commission or Both) and click on the ▯ Range button.

How to Add a Source Providing Data

3.1   Click on the **Add New** button.

3.2   A New Line displays allowing addition of a new record.

3.3   Enter the **Source Providing Data Name** and tab.

3.4   To enter the **Custodian**, click on the enquiry button to open the **Organisation
Selection** form.
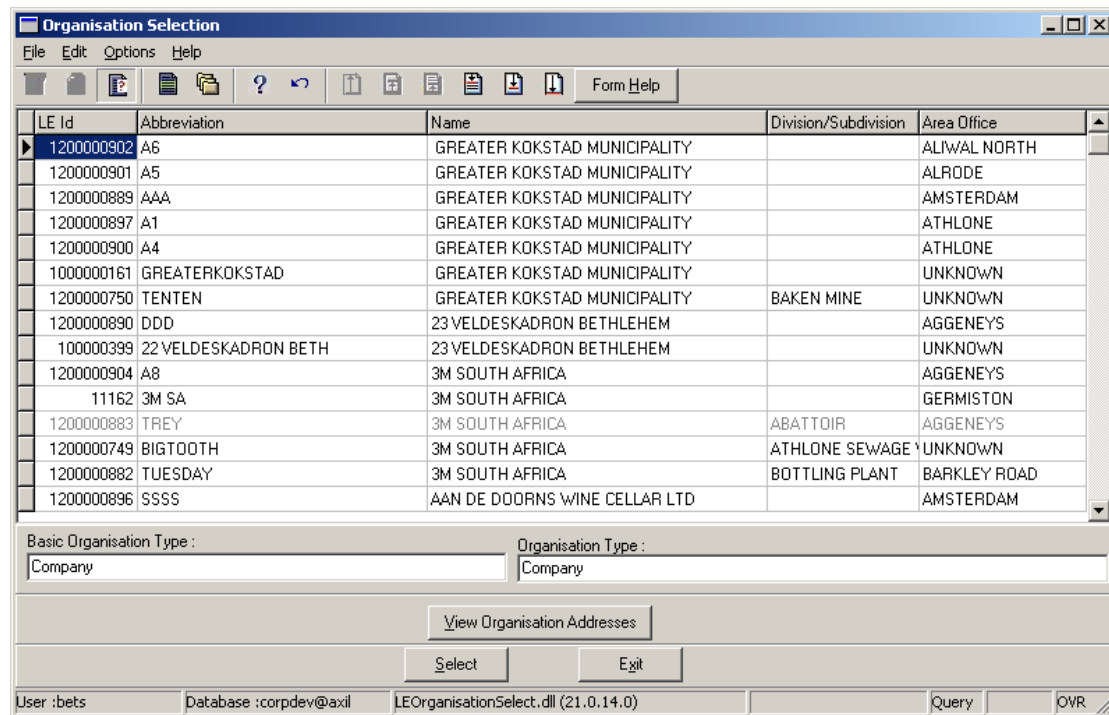
3.5   Select the applicable **Organisation** and click on the **Select** button to return the selection, and tab.

3.6   Tick the **Out of Commission** checkbox, if applicable, and tab.

3.7   Enter the **Out of Commission Date** by using the **Date Picker**.
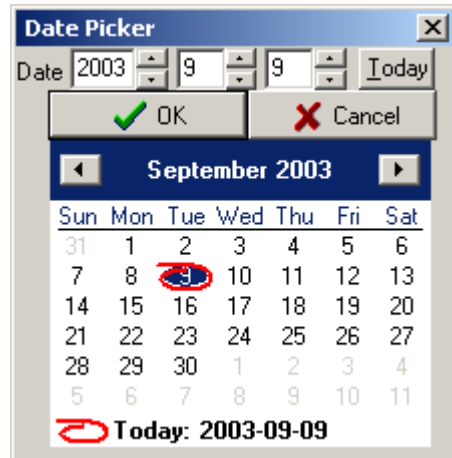
3.8   Click on the **Accept** button to accept the changes.

How to Edit a Source Providing Data

4.1   Click on the record to be edited.

4.2   Click on the **Edit** button.

4.3   Edit the record as required.

4.4   Click on the **Accept** button to accept the changes.

How to Delete a Source Providing Data

4.1   Click on the record to be deleted.

4.2   Click on the **Delete** button.

4.3   A message is displayed asking you to confirm deletion.
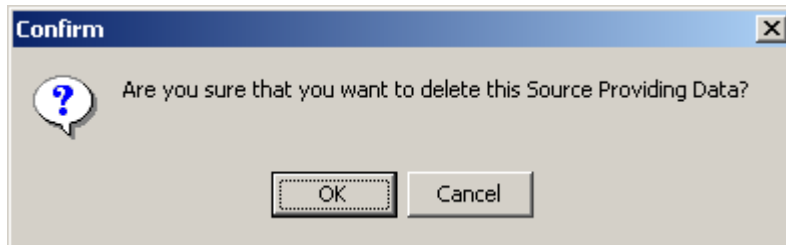
4.4   Click **OK**.

Note: Data Sources used elsewhere in the system cannot be deleted.

Software Items

Introduction:

Software Items represents any unit of software registered in WMS such as forms, reports, format of reports, DLL's, etc. These Software Items can be related to each other for different purposes or reasons. Relations between software is used by calling programs to determine different options/routes whereby a program is executed. It could also provide a list of options displayed for the user on a Decision Criteria form.

Business Rules:

i.   A Software Item cannot be related to itself.

ii.   Two Software Items may be related to each other more than once, but for different reasons.

iii.   Only the Central Administrator or Analyst can Add, Edit and Delete records.

1.   Path:

Select **Master List** from the Water Resource Management menu bar.

Select **System Administration** from the drop down menu.

Select **Software Item** from the sub menu.

This will open the **Software Item Decision Criteria Wizard** form.
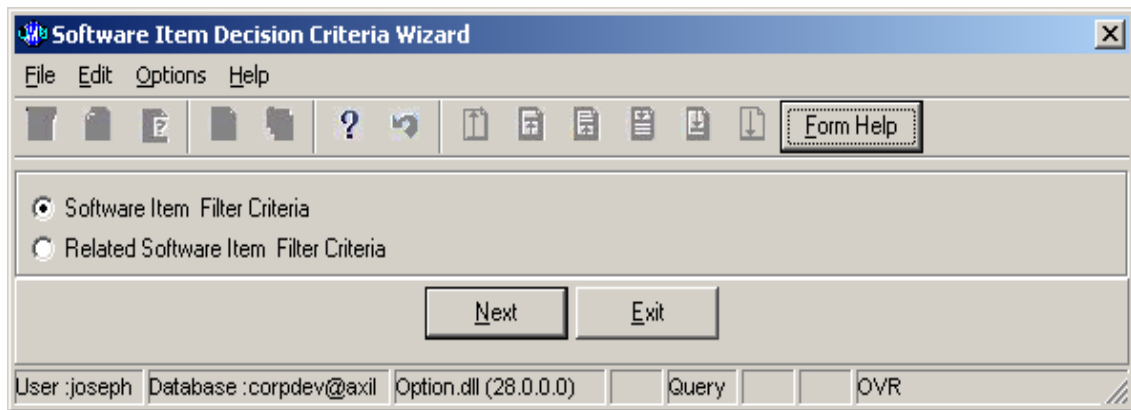
2.   How to Search for a Software Item:

Note: *There are different options that can be used to search for Software Items. A user can use Software Item Filter Criteria or Related Software Item Filter Criteria to search records.*

OPTION 1: Software Item Filter Criteria option

[?] *Note: This option enables the user to provide the filter criteria that will take him/her to the* **Software Item Maintenance** *(Main-form) from where software item records can be maintained.*

Open the **Software Item Decision Criteria Wizard** form.

Select the **Software Item Filter Criteria** option and click on the **Next** button to open the **Software Item Filter Criteria Wizard** form.

[?] *Note: When no filtering (searching) is specified on the Software Item Filter Criteria Wizard form, you can proceed by clicking on the* **Next** *button to display all available software items on the Software Item Maintenance form. Else a user can specify the filter criteria parameters as follows:*

In the **Software Item** field, enter the Software Item ID, alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Software Item Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

The **Software Item Description** will be automatically displayed as it is linked to the Software Item ID.

In the Software Type field, enter the Software Type ID, alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Associated Class Type Selection** form, select the applicable record and click on the **Select** button to return your selection.

The **Software Type Description** will be automatically displayed as it is linked to the Software Type ID.

Click on the **Next** button to open the **Software Item Maintenance Wizard** form with all software items for the specified filter criteria.

Note: *The **Back** button will take you to the previous form (Software Item Decision Criteria Wizard) and the **Exit** button will close the form and return to the main menu.*

OPTION 2: Related Software Item Filter Criteria option

Note: *This option is used to search for software items that are related for a particular reason. It enables the user to provide the filter criteria that will take him/her to the **Related Software Item Maintenance** form (sub-form) via **Related Software Item Selection** (view) from where related software item records can be maintained.*

2.1   Open the **Software Item Decision Criteria Wizard** form

2.2   Select the **Related Software Item Filter Criteria** option and click on the **Next** button to open the **Related Software Item Filter Criteria Wizard** form.

Note: *When no filtering (searching) is specified on the Related Software Item Filter Criteria Wizard form, a user can proceed by clicking on the **Next** button to display a list of all related software items on the Related Software Item Selection form. Else a user can specify the filter criteria parameters as follows:*

2.3   In the **Software Item** field, enter the Software Item ID, alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Software Item Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

Note: *Only the software items that have other software items related to them will be displayed on the Software Item Selection form.*

2.4 The **Software Item Description** will be automatically displayed as it is linked to the Software Item ID.

2.5 In the **Related Software Item** field, enter the Related Software Item ID, alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Software Item Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection. *Note: Only the Software Items that are related to other Software Items will be displayed on the Software Item Selection form.*

2.6 The **Related Software Item Description** will be automatically displayed as it is linked to the Related Software Item ID.

2.7 In the **Related Type Reason** field, enter the Related Type Reason ID, alternatively, press **F5** or click on the **ZOOM** **Zoom** button to open the **Related Reason Selection** form, select the applicable record and click on the **Select** **Select** button to return your selection.

Note: Only the Related Type Reasons that are used to relate Software Items will be available/displayed.

2.8   The **Related Type Reason** will be automatically displayed as it is linked to the
       Related Type Reason ID.

Click on the **Next** button to open the **Related Software Item Selection Wizard** form with all
       the related software items for the specified filter criteria.

Select the applicable record and click on the **Next** button to open the **Software Item
Maintenance Wizard** form with the selected record's information. *Note:
Focus will be on the selected related Software Item record on the **Related
Software Item Maintenance** (sub-form).*

*Note: The **Back** button will take you to the previous form and the **Exit** button will close the form and return to the main menu.*

3.   How to Add/Create a Software Item (Main Item):

Note: Please refer to Business Rules. The Software Item description must be unique per software item, regardless of the case (i.e. case insensitive)

Open the **Software Item Maintenance** form.

*Note: If the user is not sure of whether the software item they want to add already exists, he/she can first perform a search for the software item by entering the **Software Item Name** and/or the **Software Item Description** and click on the **Filter** button to filter the records accordingly.*

Note: Ensure that the cursor is on the top-grid (Main Software Item) before proceeding with the following steps:

Click on the **Create** button to add a new record.

In the Software Item **Type ID** field, enter the Software Type ID, alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Associated Class Type Selection** form, select the applicable record and click on the **Select** button to return your selection.

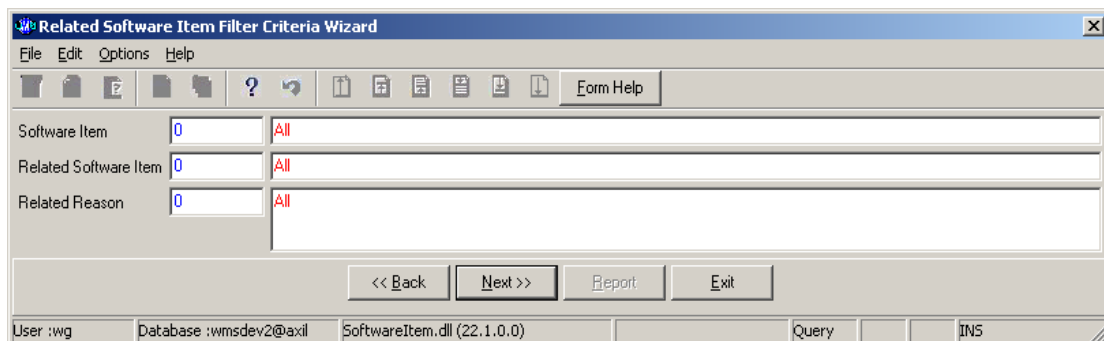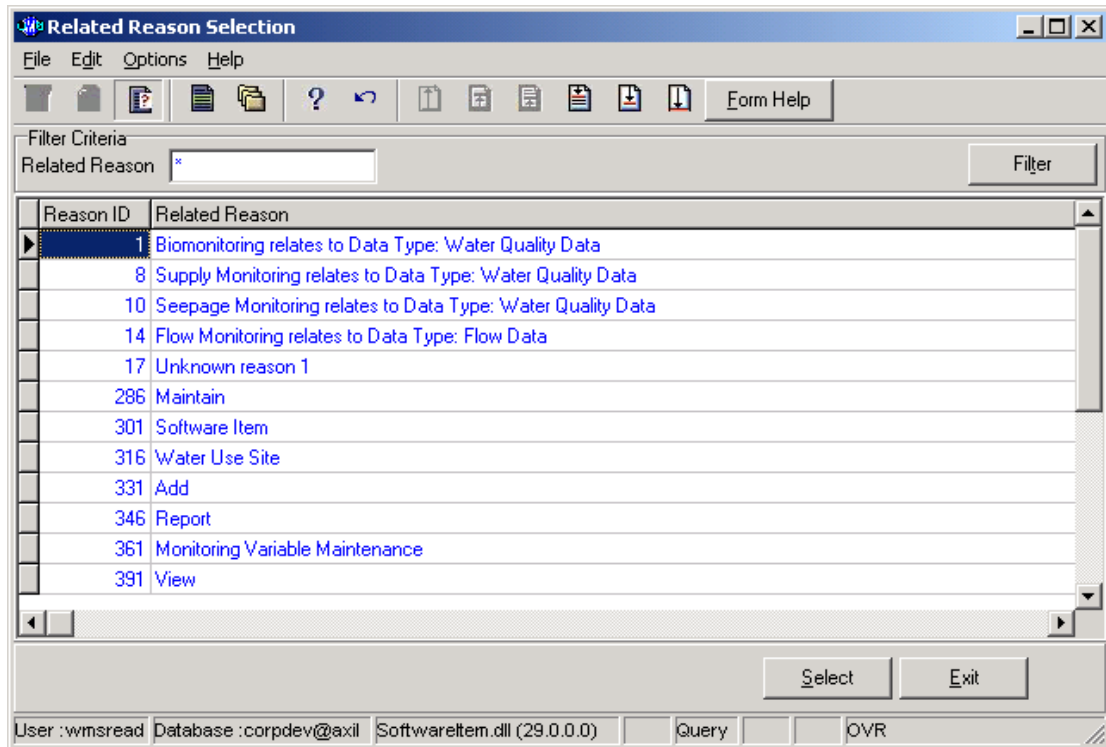The Software Item **Type Name** will be automatically displayed as it is linked to the Software Item Type ID.

In the **Software Item Name** field, enter the physical name of the software item without any

invalid' characters, e.g., ", []. *Note: In the case of Delphi DLL's, it will contain the name of the DLL and in the case of a Magic Program, it will contain the Public Name of the Magic program.*

In the **Software Item Description** field, enter the logical name of the software item without

any invalid' characters, e.g., ", []. *Note: This is also the name to be used on the Decision Criteria form as one of the given options to choose from and it must be unique per Software Type.*
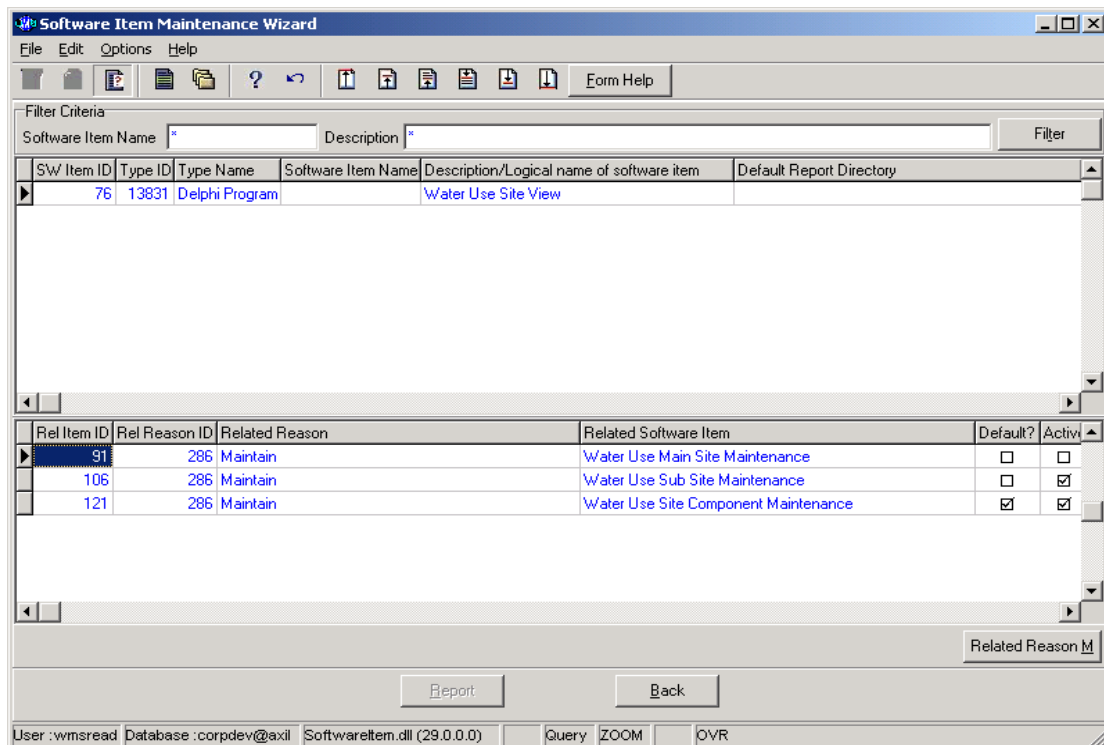
In the **Default Report Directory** field, enter the default directory a report should be saved to. This field should be provided for software items representing reports.

Tab to accept the new record.

*The **Software Item ID** will be automatically created by the system.*

4.   How to Relate Software Items to each other:

Open the **Related Software Item Maintenance** sub-form (*bottom-grid*).

*Note: For the focused Software Item (Main-Item) on **Software Item Maintenance** form (top-grid), the user will have to choose the software item he/she wants to relate to the main item, as well as the reason. If the related reason does not exist, the user can click on the Related Record M button to Add/Create a new Related Reason. Please refer to 5. How To Add/Create a Related Reason.*

Note: Ensure that the cursor is on the bottom-grid (Related Software Item) by clicking on the bottom-grid before proceeding with the following steps:

Click on the **Create** button to add a new related Software Item record.

In the **Related Software Item ID** field, enter Related Software Item ID, alternatively, press **F5** or click on the ZOOM **Zoom** button to open the **Software Item Selection** form, select the applicable record and click on the ⬚ Select ⬚ **Select** button to return your selection.
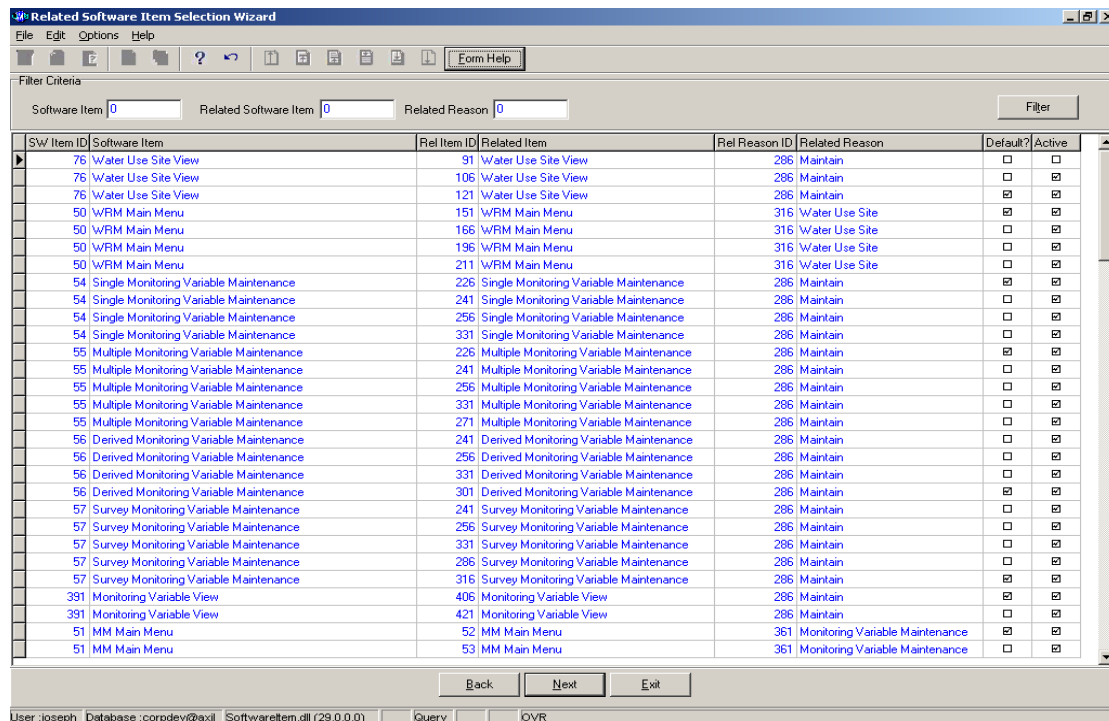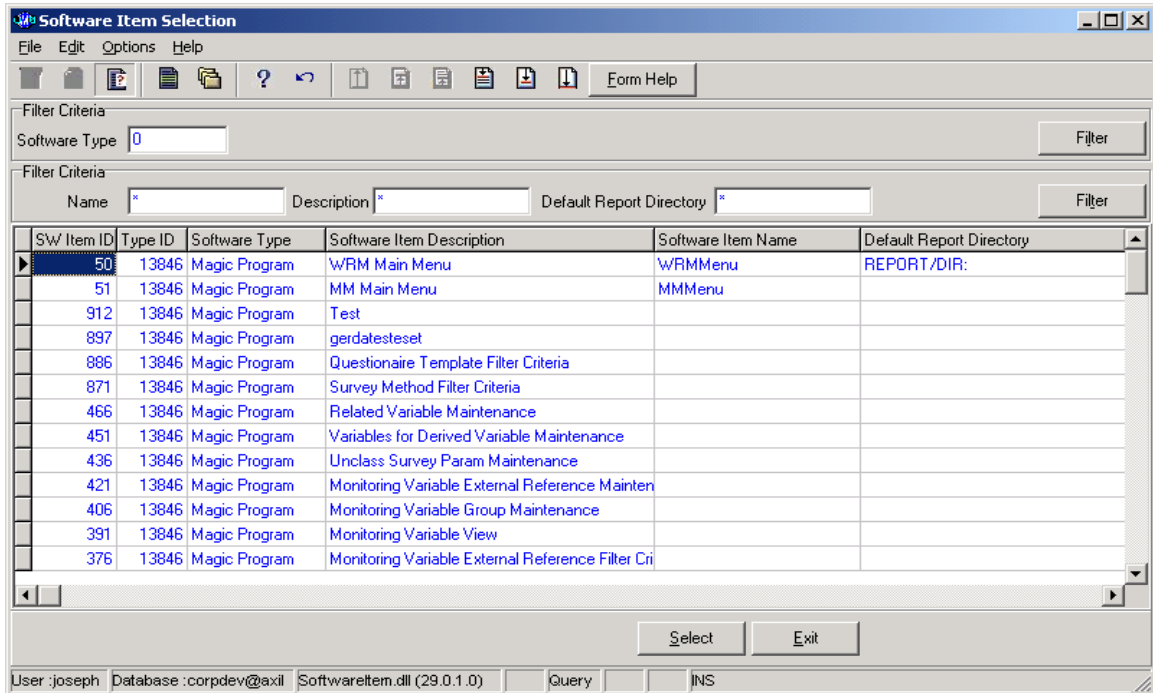

The **Related Software Item Description** will be automatically displayed as it is linked to the Related Software Item ID.

In the **Related Type Reason ID** field, enter Related Type Reason ID or click on the ZOOM **Zoom** button to open a **Related Reason Selection** form, select the applicable record and click on the ⬚ Select ⬚ **Select** button to return your selection.
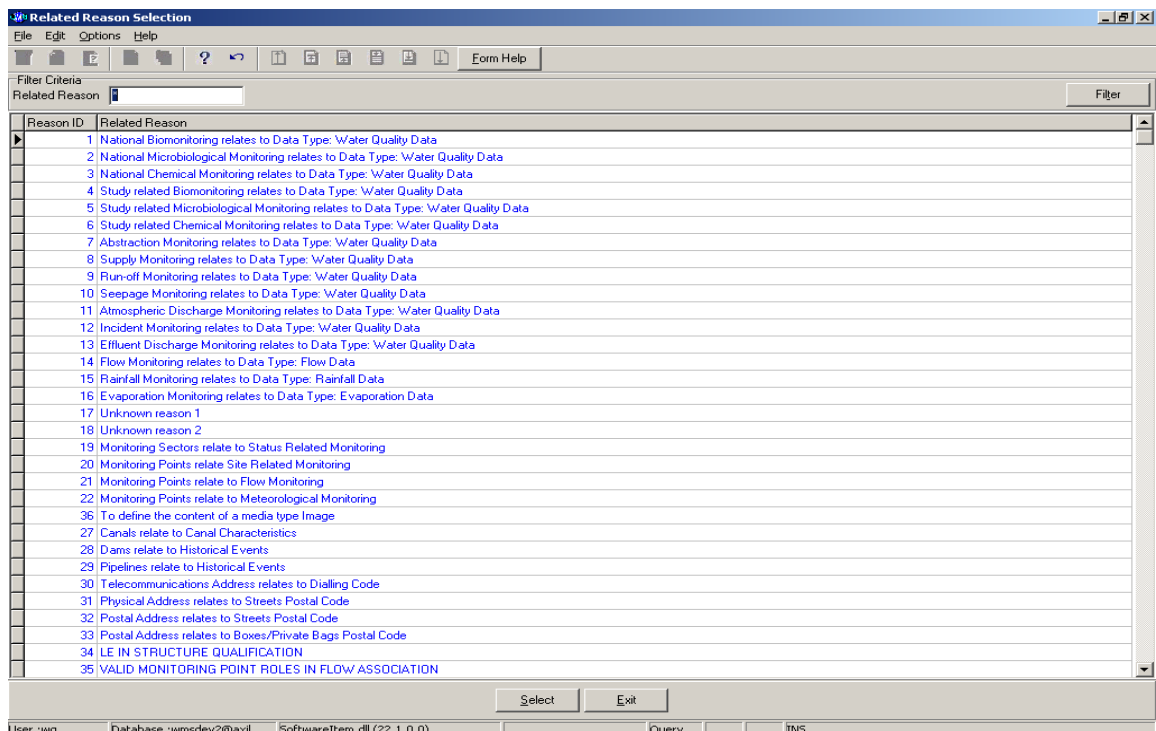
The **Related Type Reason** (the reason for the relationship between the software items) will be automatically displayed as it is linked to the Related Type Reason ID.

If this related software item will be the default software item on the decision criteria from then check the **Default Indicator** checkbox. 🛈 *Note: For each software item and reason combination there can only be one checked default indicator.*

The **Active Indicator** checkbox is checked to indicate that the relationship is in use in the particular database.
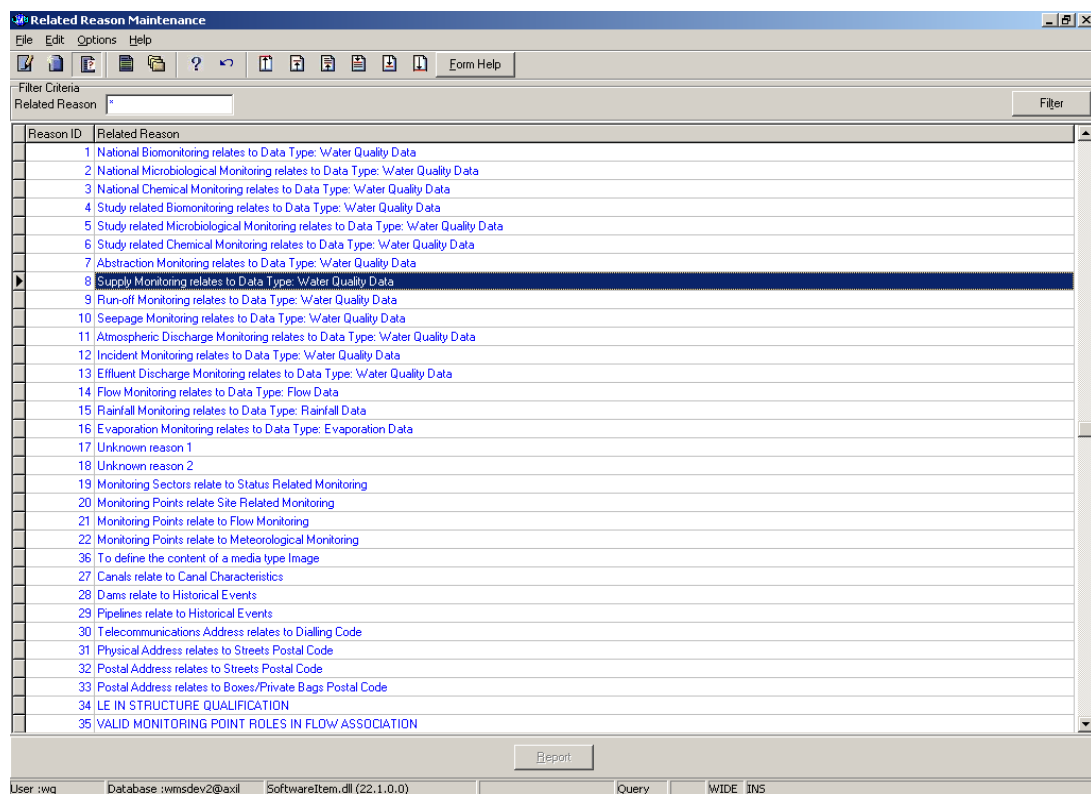
Tab to accept the new relationship between software items.

The user can click on the **Related Reason Maintenance** button to open the **Related Reason Maintenance** form from where related reasons can be maintained.

5. How To Add/Create a Related Reason (Reason for relating items):

🛈 *Note: Only users in the WMSADMIN group may add related reasons.*

Open the **Related Reason Maintenance** form.

🛈 *Note: The user must ensure that the Related reason does not exist by first performing a search on the Related Reason field on the Filter Criteria part then clicking the **Filter** button.*

Click on the 🛈**Create** button to add a new related reason.

*The **Related Type Reason ID** will be automatically created by the system.*

In the **Related Reason** field, enter the reason for relating two items. E.g. two class types, 2 software items, 2 subset tables. *Note: The reason must be unique, regardless of case.*

6.   How to Edit /Modify Records:

How to Edit/Modify a Software Item:

*Note: Only the Central Database Administrator or an analyst can edit the records. Only the check boxes may be updated for the related software item record (bottom-grid) else the user must first delete the incorrect relationship and then add the correct one, or vice versa. Please refer to **7.1 How to Delete a Software Item** & **4. How to Relate Software Items to each other**.*

Click on the record to be edited to highlight it, and click on the **Modify Records** button.

Edit/Modify the record as required.

Tab to accept the newly modified record.

How to Edit/Modify a Related Reason:

Note: The related reason description may only be edited if it is not used elsewhere in the system. Only users in the WMSADMIN group may edit related reasons

Click on the record to be edited to highlight it, and click on the **Modify Records** button. *Note: When records are referenced elsewhere in the system, the **Modify Records** button will be disabled*.

Edit/Modify the record as required.

Tab to accept the newly modified record.

7.   How to Delete Records:

How to Delete a Software Item:

Note: Only the Central Database Administrator may delete a record if it is not used elsewhere in the system.

Click on the **Modify Records** button.

Click on the record to be deleted, to highlight it.

Press **F3** or **Edit-Delete Line**, a confirmation message will be displayed asking if you would like to delete the record. Click on the **OK** option to confirm the deletion.

Note: When records are referenced elsewhere in the system, the delete line option will be disabled.

How to Delete a Related Reason:

Note: Only the Central Database Administrator may delete a record if it is not used elsewhere in the system. Only users in the WMSADMIN group may delete related reasons

Click on the **Modify Records** button.

Click on the record to be deleted, to highlight it.

Press **F3** or **Edit-Delete Line**, a confirmation message will be displayed asking if you would like to delete the record. Click on the **OK** option to confirm the deletion.

Note: When records are referenced elsewhere in the system, the delete line option will be disabled.

Troubleshooting

If you are a "new" WMS user, please discuss your problem with any other regular users because they should know what the system can do.

Please do not despair or get frustrated if the system does not do what *you* would like it to do. It might be that you have used an unusual approach to do that what you want to do. This is great because WMS must work without problems even with the not so common paths to a "destination".

Please do us a favour and tell us what you tried to do, exactly how you did it up to the point where the problem occurred. YOU might have discovered a new bug in the system!

OPERATIONS

Call Logging Procedure

- All calls to be logged to #WMS DWAF Calls

- Include screendumps/prints as attachments where applicable

- To capture a "New User" – Please follow the "**WMS New User Login Procedure"** as per "Attachment 1"

Logging a call

If you find that any module of WMS does not function, as it should, follow the steps below:

1. Make a Screen print and save it somewhere where you can access it again.

2. Write down the steps you took to get to the point where the problem started.

3. Send your problem in an e-mail to #WMS DWAF Calls.

    3.1. The support team will pick up the problem and route it to the necessary teams to be attended to.

    3.2. If it is a local problem, the Network Controller must rectify it. These include:

        ➢ Local network problems

        ➢ Installation of the software required for WMS

        ➢ Updating of software version, e.g. if you get the message: "The version number of the application is not correct. Please contact your system administrator"

4. Log a call:

    4.1. Open a new mail message and address it to: #WMS DWAF Calls

    4.2. Add "DWAF" in the subject line to identify the Department then enter the system, module and the "path" to the form where you encountered the problem: Examples:

> ➢ DWAF: WMS; WATER RESOURCE MANAGEMENT; REGISTER MONITORING POINT; LINK MONITOR TO MONITORING POINT

> ➢ DWAF: WMS; WATER RESOURCE MANAGEMENT; ORGANISATION AND PERSON FUNCTIONAL STRUCTURES; POSTAL ADDRESS; POSTAL CODE

> ➢ DWAF: WMS; MONITORING MANAGEMENT; PERIPHERAL INFO; MONITORING ACTION AND FREQUENCY; FREQUENCY SPECIFICATION

> ➢ DWAF: WMS; MONITORING MANAGEMENT; PERIPHERAL INFO; MONITORING ACTION AND FREQUENCY; MONITORING ACTION.

> ➢ **It is important that your subject starts with WMS because the Arivia Call Centre handles all help calls for all systems in DWAF and must know where to route your call.**

4.3. Supply the following information:
   - ➢ DWAF Asset Number:
   - ➢ Persal Number:
   - ➢ Directorate:
   - ➢ Programme:
   - ➢ Contact Details:
   - ➢ e-mail address:
   - ➢ Telephone:
   - ➢ Region:
   - ➢ Building:
   - ➢ Office Number:
   - ➢ Priority of Call:

4.4. Copy the subject line after this.

4.5. Skip one line, then describe your problem in as much detail as possible to enable the person that will attend to your problem to recreate it.

4.6. Skip a line and describe the possible solution (if known) or the alteration that is required.

4.7. SCREENPRINTS OR FILES CAN BE ATTACHED (supply as far as possible)

4.8. Send your message.

5. You will receive an answer from Arivia Call Centre. The answer will have a reference number for your call in the "Subject line", either an "I" number or a "R" number. An "I" number is an incident while a "R" is a request for service. The difference between the calls is that an "I" is basically a bug while a "RFS" is a change to the system, or even data extraction.

6. You will also be provided with a "URS" number. This is the number for your problem as registered in the Requirement System (of WMS). You can access the Requirement System at http://wmstest:8080/urs/URSHomeFrame and follow the process for solving and the status of your problem else you can simply send a mail to "Therese Peddie" who will advise you or follow up with the Arivia call centre.

7. Priorities (Indicate the priority of your call)

URS Priorities

ID	Priority
1	Job Stopper
2	Critical
3	High
4	Medium
5	Low
6	None

Arivia Priorities (Application Support Calls)

Priority Code	Description
1	Mission Critical
2	Critical
3	Medium
4	Low

> ➢ Priority 1 – Jobstopper / Mission Critical – This is a bug or error in the system that prevents you from doing your work.   Impacts the entire directorate and both the head office and regional operations. These requests get immediate attention.

> ➢ Priority 2 – Critical – Impacts on a section of the directorate and only head office or regional office, but not both)

> ➢ Priority 3 – Medium – Issue impacts less that 20 users.

> ➢ Priority 4 – Low – Issue has a low severity impact on a small number of users / also could require program changes and must go through the change management process.

If a call falls between critical and medium indicate the priority as high for the purposes of the URS.

Enhancements required on the system must be requested in the same way, these will usually be an RFS.

How are calls processed?

1. A call is logged to #WMS DWAF Calls.

2. Arivia Call Centre and registers the call and allocate a call number

   2.1. Arivia Call Centre acknowledges your call in a reply and supplies you with a call number.

2.2. The call is the routed to the various call desks

3. WMS Support registers the call on the Requirement System (URS).

   3.1. If the call is a jobstopper / mission critical, it will receive immediate attention.

   3.2. All calls are routed to the CCB.

   3.3. You are provided with a URS number via e-mail.

4. The **Change Control Board** (CCB) reviews all calls.

   4.1. The CCB will approve, reject or suspend calls.

   4.2. Approved calls are prioritised and grouped according to their respective subjects and problem types (enhancement, bugs, etc.)

   4.3. Should the CCB reject a call you will be notified. Minutes are published on the public folders. (In **MS Outlook**: Public folders\All public folders\Directorates\Information Services\WMS\Minutes

   4.4. Suspended Calls are either referred back to you or the Super User for more information, else could be suspended until to later stage when the specific functionality would be addressed (typically an enhancement).

   4.5. The CCB prioritises and groups calls together for action that deal with "mutual subjects".

   4.6. Priority enhancements are then written into a **Project Charter** depending on the subject matter. The project charter spells out the tasks: what, how and by whom the enhancement will be achieved.

5. The Management Team or Joint Project Management (JPM) will review calls that are referred by the CCB if required urgently and would impact on current projects. The Management Team or JPM can either agree or disagree with the CCB's decision. The call will then go back to the CCB for further action.

6. The identified tasks from the project charter will then be put on a **Project Plan** and the development process will commence.

7. Approved enhancements that are not identified, as a high priority will only be done when resources are allocated.

8. The problem, bug or enhancement is rectified or the programme is adapted.

9. A bug fix or new programme version is sent to all Network Controllers.

10. The Network Controllers update the version on your PC or Local server.

11. You will receive a mail from the WMS Support team once your fix has been released, requesting confirmation.

12. Check that your problem is resolved and send a mail confirming that fixed or not.

13. If your problem is not resolved, the process starts over.

If you have any queries regarding problems or the process of logging a call, please do not hesitate to contact any one of the Super Users at RQS:

	Telephone number	e-mail
Kobus Myburgh	012 808 9604	MyburghK@dwaf.gov.za
Triana Louw	012 808 9616	LouwT@dwaf.gov.za
Magda Smidt	012 808 9590	SmidtM@dwaf.gov.za

Example of a logged call:

```
DWAF: WMS; WRM; Water Network Management; Monitoring Network; Point Query; Edit monitoring point name - Message (Rich ...)

File  Edit  View  Insert  Format  Tools  Actions  Help

Reply   Reply to All   Forward

From:     Myburgh Kobus (RQS)                                    Sent: Wed 2006-03-15 11:23
To:       #WMS DWAF Calls
Cc:
Subject:  DWAF: WMS; WRM; Water Network Management; Monitoring Network; Point Query; Edit monitoring point name

DWAF Asset Number:   012378 & 022345
Persal Number:       12225762
Directorate:         Resource Quality Services
Programme:           Water Management System
Contact Details:     J Myburgh
e-mail address:      myburghk@dwaf.gov.za
Telephone:           012 808 9604
Region:              RQS Roodeplaat Dam
Building:            RQS Roodeplaat Dam
Office Number:       232

WMS; WRM; Water Network Management; Monitoring Network; Point Query; Edit monitoring point name

When I edit the name of an existing monitoring point I get an error message: "Name should have a value"
Please refer to the screen prints.

  Edit point name
 2006-03-15.doc...

Please investigate the cause of the problem and rectify it.

Regards,
J Myburgh (Kobus)
Department of Water Affairs and Forestry
Resource Quality Services - Roodeplaat Dam
Private Bag X313
```

Example of a series of screen-prints to show actions taken for the call above

Edit point name

Accept

OK

Please note: Sometimes the error message is over (covers) the fields that cause the problem, right click on the banner of the error message and drag it away, now make the screen print. Paste it on a word document and save it on your PC.

If you use [Alt+Print Screen] only the error message is copied for pasting.

Some error messages in WRM can be "opened" to give more detail for the persons that must solve the problem.

Attachment 1:

Procedure Name	WMS New User Login Procedure
Function	The process that must be followed to implement WMS for a new user.
Process	WMS New User Login

Forms	
WMS011 – Application for new Users @ a existing WMS Site	

Inputs	
Call Logging Procedure	
User process after receipt of usercode and password	
WMS Installation Guide	

Activities	
Responsibility	**Procedure Activities**
User	1. E-mail WMS011 to WMS Support (Therese Peddie)
WMS Support	2. Evaluate requirement (Winterm / Magic / etc.) 3. Log calls as required (1 to 4 calls) at Arivia (USD) • Connectivity (Unix/Informix password) [always required] • Winterm Connectivity [Winterm users only] / setup according to mail • Informix Setup (Setnet) [always required] {DvZ – Winterm} • Magic User Code / Password [Monitoring Mangement] 4. Capture on URS and advise the user of their reference number.
Arivia Helpdesk	5. Provide call numbers to requester 6. Assign calls as per call details (DWAF Connectivity / DWAF Applications)
WMS Support	7. Acknowledge the USD Call (if calls not correctly assigned, assign it back to DWAF Northern Service Desk advising them to assign to Connectivity / the other is for WMS) • Forward form to the DWAF Connectivity team via e-mail advising them of the call number

Activities	
Responsibility	**Procedure Activities**
	• Follow up and track process.
DWAF Connectivity team	8. Create User Codes/Passwords • Unix/Informix (Conn Mostert) 9. Advise WMS Support. 10. Close call.
WMS Support	11. Once received User Codes/Passwords log a task for the WMS team and advise code details
WMS Team	12. Create User Codes/Passwords • Magic (Informix client setup - DvZ) • DwafTS (Winterm / Mail) 13. Close task on URS and log task for Support to take further (put codes in comments)
WMS Support	14. Advise user of User Codes/Passwords 15. Log another call to have the users PC Setup (for WMS). 16. Inform IB and the User (supply reference number).
IB	17. Setup User PC (for WMS) – Installation Guide available. 18. Inform WMS Support, obtain sign-off from user and Close Call. (User will use user codes/passwords) to test
WMS Support	19. On receipt of confirmation from IB that users PC is setup, confirm whether the user able to work or not, i.e. that they have WMS on their PC and their passwords work, follow up.
User	20. Advise WMS Support team that your PC has been set-up. 21. Test whether your passwords work utilising the attached document. (User process after receipt of usercode and password) 22. Send an e-mail confirming able to work and reference URS and USVD number.
WMS Support	23. Assist user if any hiccups. 24. On confirmation close call on both URS (follow CCB procedure) and USVD (inform the Applications Call Desk).
Applications Call Desk	25. Close the USVD call.

Outputs
3 USVD Calls generated

| |
|---|
| URS Request Registered |
| Task registered on URS for tracking |
| WMS011 Application for new Users @ a existing WMS Site form completed |
| User Login code and passwords created |
| User PC setup sign-off |
| User e-mail confirming completion |

| Abbreviations & Acronyms	
URS	User Requirement System
IB	Infrastructure Business
USVD	Unicentre Service Desk

ERWAT Electronic Import Setup
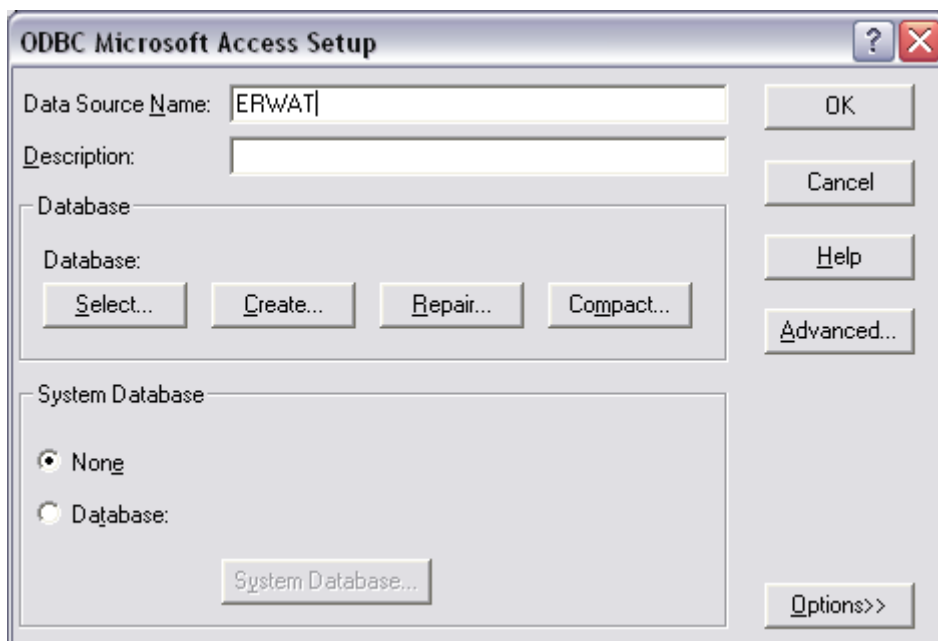
1   SETUP OF PC and ODBC:

1.1   Create directory **C:\ERWAT**.

1.2   Copy an empty **samsched.mbd** to directory c:\erwat.

1.3   Go to **Start** then go to **Settings**, then **Control Panel**.

1.4   Click on **Administrative Tools** then select **Data Sources (ODBC)**.

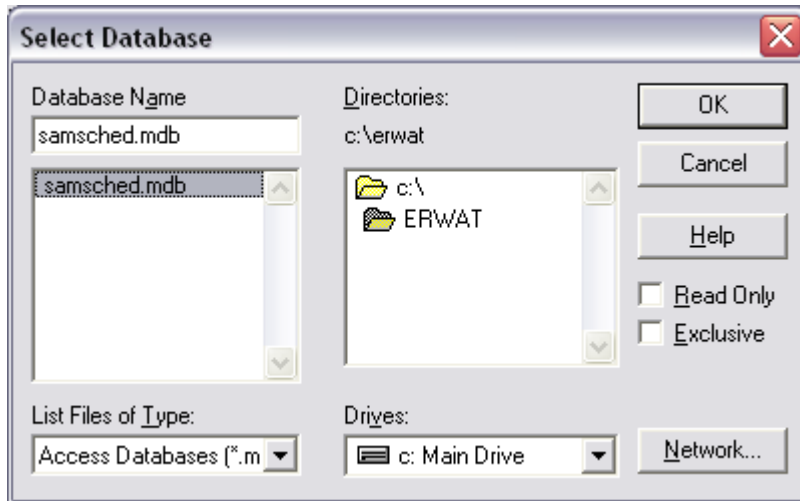1.5   Click on the **USER DSN** tab.
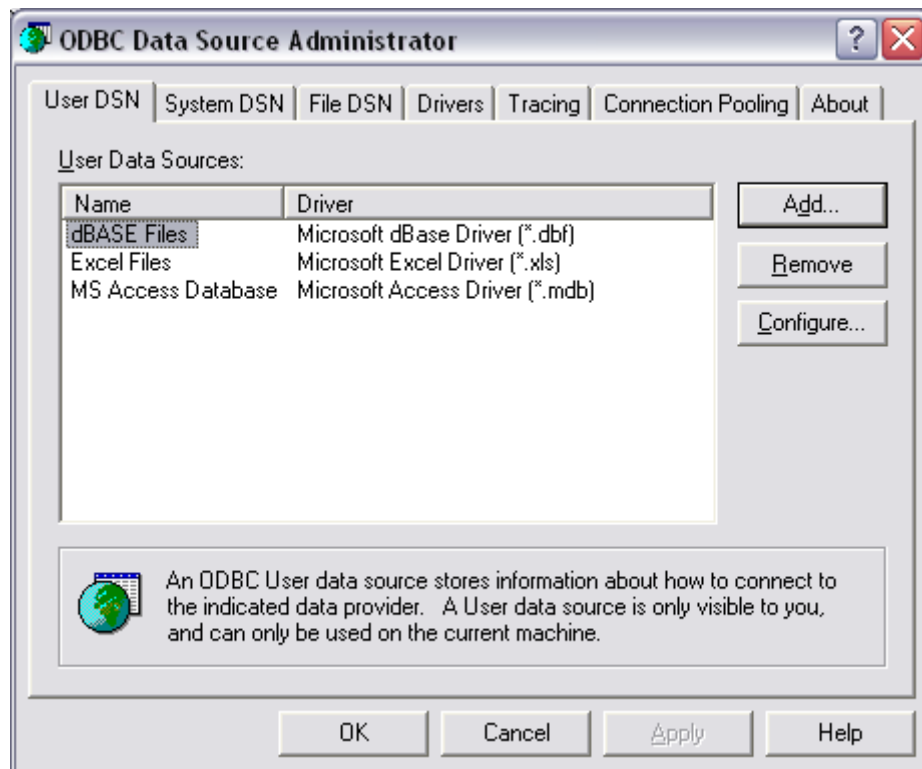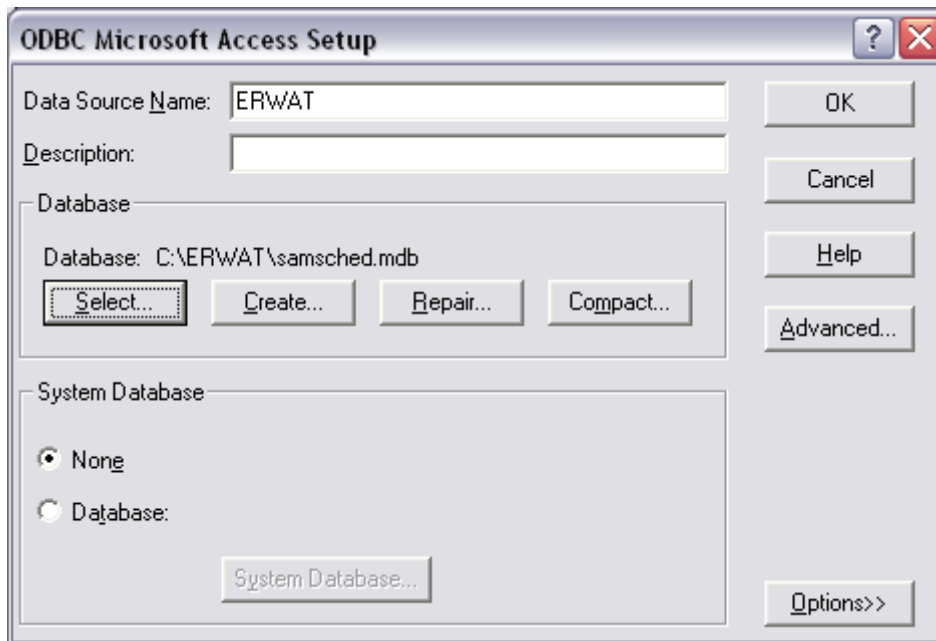

1.6   Click Add button.
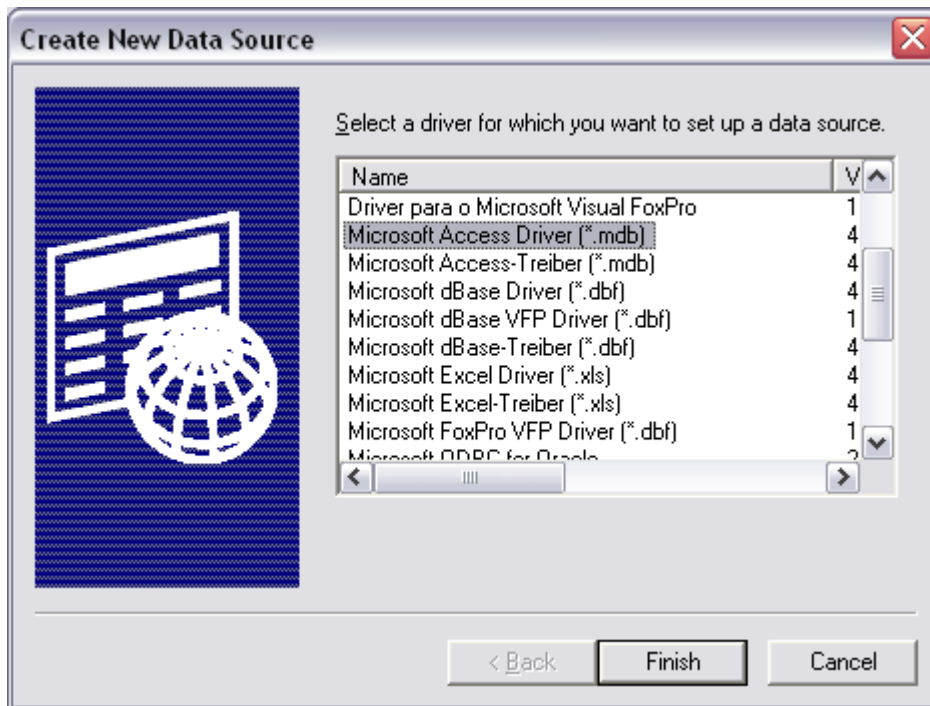
1.7   Select Microsoft Access Driver(*.mdb).

1.8   Click **Finish** button.

1.9   ENTER: **ERWAT** as Data Source Name

1.10   Click **Select** button.

1.11   Select samsched.mdb in the c:\erwat directory.

1.12   Click **OK** button.

1.13   Click **OK** button again.
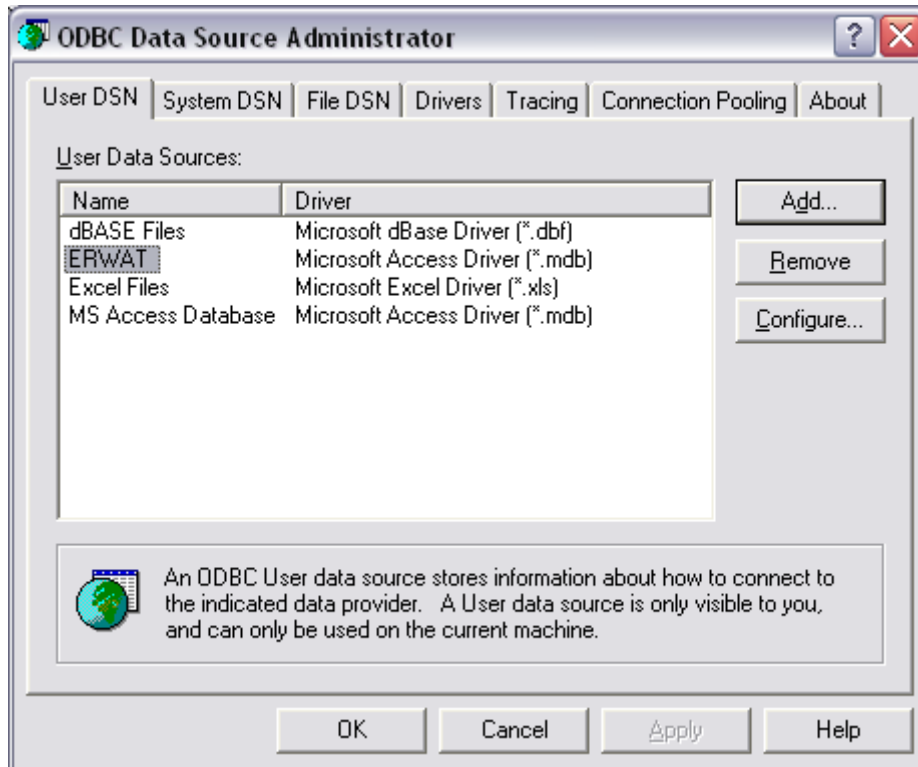
1.14   Click **OK** button again to complete ODBC setup.

2   SETUP in MONITORING MANAGEMENT

2.1   Open Magic.

2.2   Enter User code and Password.

2.3   If application opens, close application.

2.4   From the menu Select Settings then Databases.

2.5   Add new line.

2.6   Type **ERWAT** in the name field.

2.7   Press F5 on the DBMS field and select ODBC.

2.8   Type **ERWAT** in the Database Name.
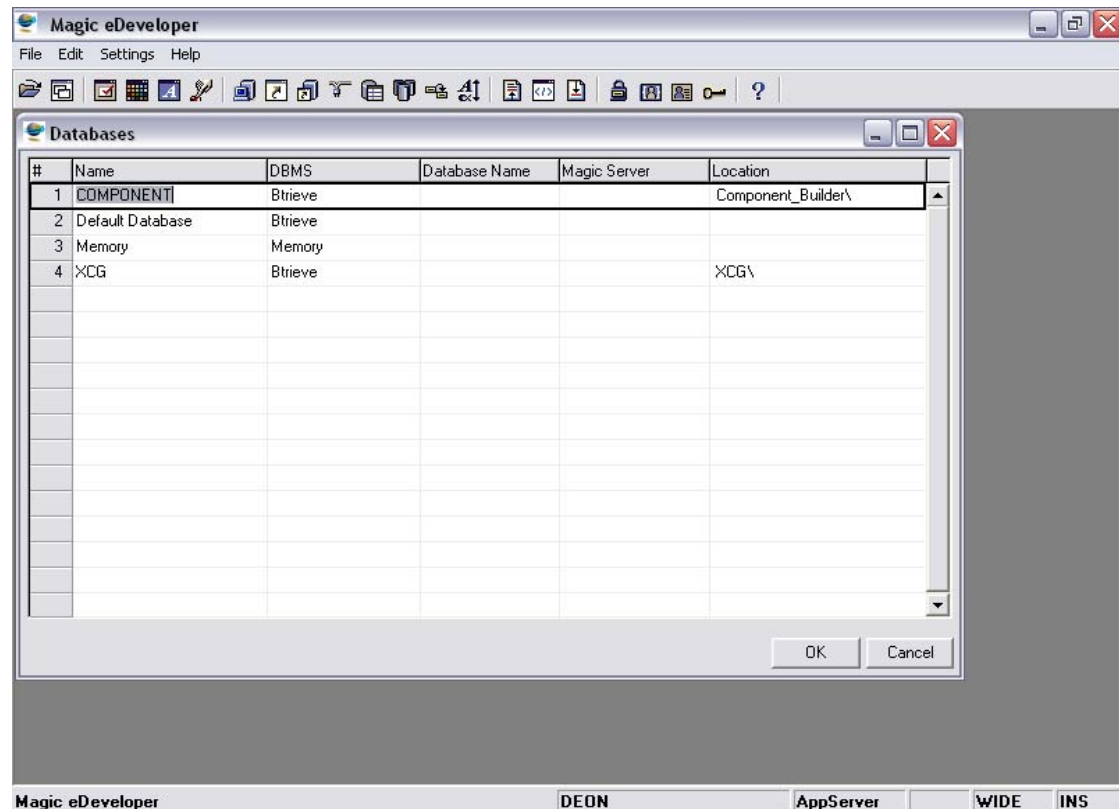
2.9 From the menu select Settings then User ID's (Must be supervisor to use this function).

2.10 Go to user that will do the transfer.

2.11 Press F5 on the rights field.

2.12 Add a right by pressing F4.
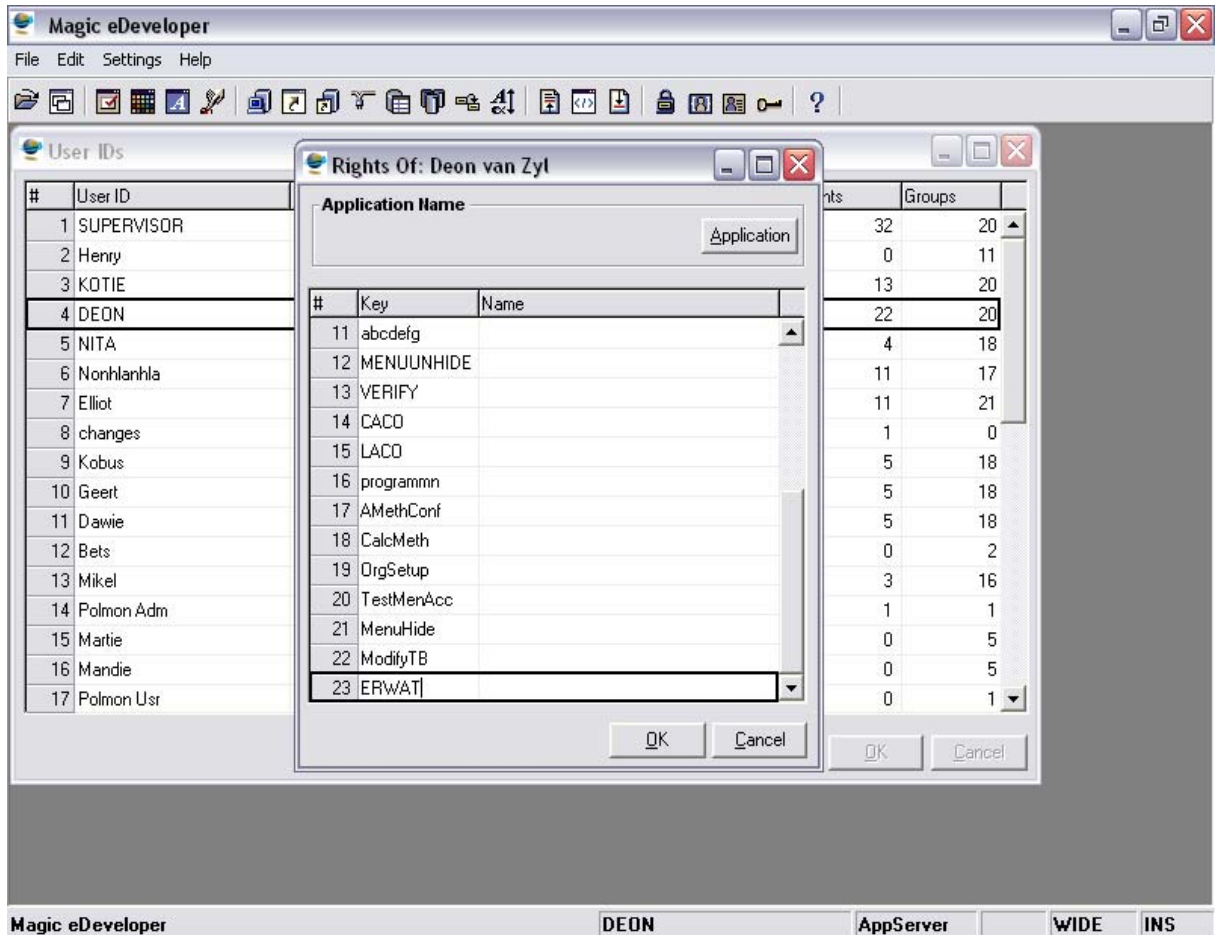
2.13   Type **ERWAT** as the right and click on OK.

2.14   The PC is now ready to do ERWAT Electronic Import.

Password Change Procedure

Contact us should you require support with regards to queries or any problems that you may be experiencing while working with the WMS. There are three lines of support available to you, and we propose that you work through the lines of support, beginning with the first line.

	On your PC's desktop go to Start; Run and type telnet <hostname>, where hostname is the name of your Unix host server, or it's IP-address (See table in Appendix A for hostnames per region)
	A window is displayed where you are prompted for your login code. Enter you code that you use to access WMS and click on Enter (if you do make a mistake and enter an incorrect character, use the delete key to erase it)
	You are then prompted for your current password. Type it and click on Enter
	Upon successful login to the Unix server, a message is displayed to indicate that it is a server belonging to the Department of Water Affairs and Forestry. The date-time of last login and IP-address of the server is also displayed. The command prompt is the last item in this window ($)
	Now type in the command password and click on Enter
	The system will display the message: "Changing password for <usercode> and display prompt "Enter login password:"
	Enter your current password and click on Enter
	The system will now prompt you for a new password. Capture your new preferred password of at least 8 characters long, containing at least 1 special or numeric character and 2 alphabetic characters. The new password must also differ by 3 or more characters from the old password. Click on Enter when you have keyed in the new password
	If the new password that you have entered is acceptable to the system, you will be prompted to re-enter it, else you will be prompted for another/different new password. To confirm the new password type it in, exactly as you did the first time and click on Enter.
	If you have been unsuccessful to change the password for a 3rd time, the system will display message: "Too many failures – try later" and you will be logged off. You will then have to repeat the process from step 1.
	If successful the system will display a message to inform you that your password has been successfully changed.
	To exit type in the command exit at the command-line prompt ($)

Contacting us

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The First line of support

External / Internal Site (i.e. Non-DWAF Sites)

➢ All support issues must pass through the site resource appointed to deal with WMS, Network, System Administration and the WMS Site Owner before being referred to the DWAF Regional Office.

➢ Non DWAF Sites your Internal Resource is therefore your 1st line of support and DWAF Regional Office the 2nd line of support.

➢ DWAF WMS Sites contact your Region's Super User and Network Controller.

The Second line of support

➢ External / Internal Sites (i.e. Non DWAF Sites), the 2nd line support is the DWAF Regional Office

➢ All Hardware / Network and Application problems that are not resolved at the 1st line of support, can be reported to a Help Desk. Trained help desk staff will identify the type of problem and provide support accordingly.

The Third line of support

For Monitoring Management system queries contact Kobus Myburgh at (012) 808 9604 (up to 2006-10-31). For Water Resource Management system queries contact Geert Grobler at (012) 323 8691

Index

A

C

D

E

G

I

L

M