



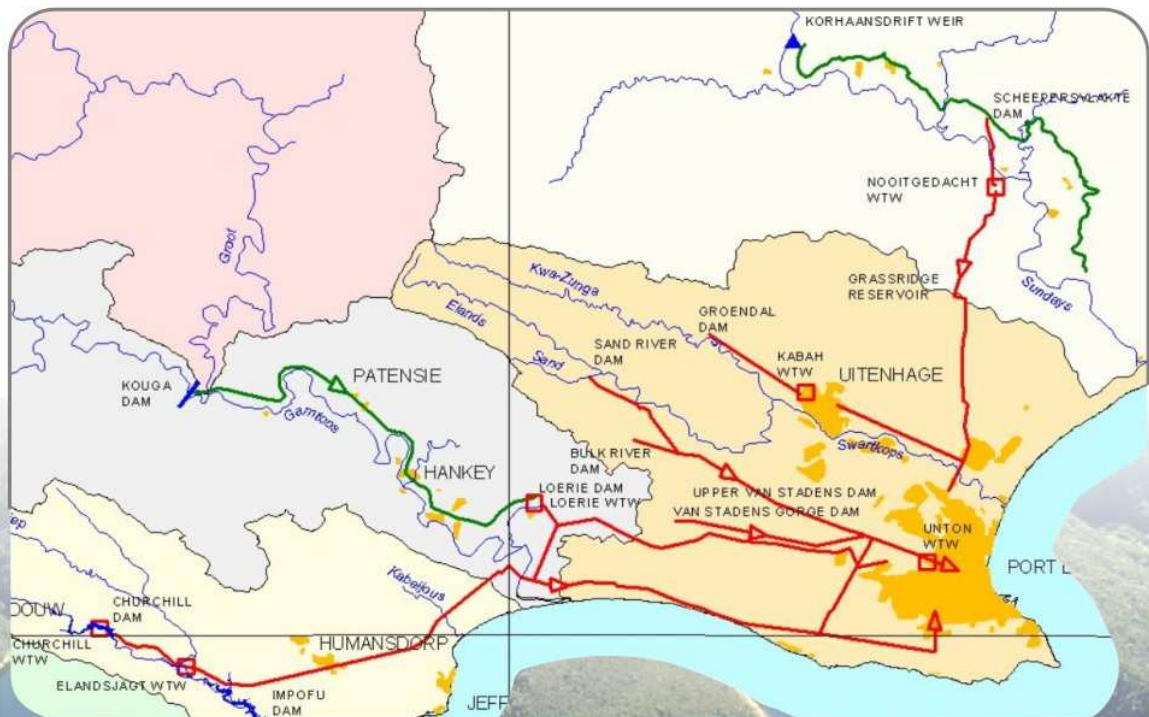
water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Water Reconciliation Strategy Study

for the Algoa Water Supply Area

Annexure B Public Participation



aurecon

April 2011



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Directorate: National Water Resource Planning

Aurecon Project No. 402448

Water Reconciliation Strategy Study for the Algoa Water Supply Area

ANNEXURE B: PUBLIC PARTICIPATION

April 2011

Prepared by: Aurecon South Africa (Pty) Ltd
P O Box 494
Cape Town
South Africa
8000

Tel: 021 – 481 2400
Fax: 021 - 424 5588
e-mail: hydro@aurecongroup.com

Prepared for: Director: National Water Resource Planning
Department of Water Affairs
Private Bag X313
Pretoria
South Africa

Tel: 012 – 336 8647
Fax: 012 – 338 8295
e-mail: thompsoni@dwa.gov.za

Department of Water Affairs
Directorate National Water Resource Planning

Water Reconciliation Strategy Study for the Algoa Water Supply Area

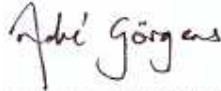
APPROVAL

Title	:	Annexure B: Public Participation
DWA Report no.	:	WMA 15/M00/00/1409/04
Consultants	:	Aurecon South Africa (Pty) Ltd in association with: Africoast Engineers SA (Pty) Ltd Palmer Development Group Groundwater Africa MGP Consulting cc Scherman Colloty & Associates
Report status	:	Final
Date	:	April 2011

STUDY TEAM: Approved for the Association:



E VAN DER BERG, M J SHAND and M A KILLICK
Study Leaders



PROF A H M GÖRGENS
Study Director

DEPARTMENT OF WATER AFFAIRS
Directorate National Water Resource Planning
Approved for Department of Water Affairs:



MS I THOMPSON
CE: NWRP (South)



J A VAN ROOYEN
D: NWRP

Water Reconciliation Strategy for the Algoa Water Supply Area

Study Reports

Report Name	DWA Report Number	Aurecon Report number
Impact of Changed Crops on Water Quality in the Great Fish River	WMA 15/M00/00/1409/01	5004
Preliminary Reconciliation Strategy	WMA 15/M00/00/1409/02	5005
Inception	WMA 15/M00/00/1409/03	5006
Reconciliation Strategy	WMA 15/M00/00/1409/04	5007
Appendix A: Interventions Workshop	WMA 15/M00/00/1409/04	5007A
Appendix B: Public Participation	WMA 15/M00/00/1409/04	5007B

EXECUTIVE SUMMARY: APPENDIX B: PUBLIC PARTICIPATION

The Algoa Public Participation Process (PPP) created awareness of the project at a broad-based level throughout the area supplied by the Algoa Water Supply System. The specific aims achieved by the PPP were as follows –

- Established a database of stakeholders with potential interest in the Strategy, with regular updates thereof
- Established a mechanism for receiving and responding to comments by interested and affected parties
- Established a call centre to enable interested and affected parties to contact the project team
- Provided publicity for the scheduled public meetings
- Prepared programmes for advertisements in print media, radio and television
- Took steps to ensure the inclusion of key stakeholder groups who did not respond to the wider invitations and calls for participation
- Distributed three Newsletters and other documentation to key stakeholders and also to Nelson Mandela Bay Municipality, the Department of Water Affairs and the Department of Agriculture for wider distribution
- Held two public meetings at appropriate times during the project and one at the completion of the project.
- Responded to all comments received.

The PPP contributed towards the success of the project.

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1. INTRODUCTION

The Public Participation Process (PPP) was an integral process necessary for the success of the Algoa Reconciliation Strategy. Key stakeholders within the Algoa system were able to provide valuable comments on the options and scenarios which were developed by the technical team. The involvement of stakeholders, and their active participation, served to create awareness among the user groups within the Algoa Water Supply System of the need for the Reconciliation Strategy and established a sense of ownership of the various interventions which were proposed.

One of the most urgent interventions was the need for water conservation and water demand management (WC/WDM), towards which the Nelson Mandela Bay Municipality (NMBM) had already put initiatives in place. WC/WDM requires participation at the household level, which further underlined the need for comprehensive public awareness.

The successful PPP will contribute towards the successful implementation of the Reconciliation Strategy by preparing the water users and consumers for the interventions, and harnessing their enthusiasm in ensuring that the Action Plan is put in place with their involvement and feedback. The Reconciliation Strategy is intended to be a living and evolving process, which implies that the PPP will also be dynamic and evolve alongside the Strategy development. Of particular value was the review of the Strategy and the feedback from the well-informed stakeholder base.

The PPP continued throughout the project, from initially creating awareness in a wide spectrum of interested and affected parties and stakeholders, to establishing a database of key stakeholders who became part of a more informed and interactive group as the project progressed and developed.

1.1 Aims of the PPP

The primary intention of the PPP was to create awareness of the project at a broad-based level throughout the area of the Algoa Water Supply System. Specific aims of the PPP in the Algoa Reconciliation Strategy were as follows –

- Establish a database of stakeholders with potential interest in the Strategy, and regular update thereof
- Establish a mechanism for receiving and responding to comments by potentially interested and affected parties
- Establish a call centre to enable any interested and affected party to contact the project team
- Provide publicity for the scheduled public meetings
- Prepare a programme for advertisements in print media, radio and television
- Ensure measures to include key stakeholder groups who did not respond to the wider invitations and call for participation
- Ensure a system for distribution of Newsletters and other documentation to key stakeholders
- Ensure regular reporting throughout the PPP
- Identify potential problems, disputes, or other negative elements emerging from the PPP and advise the project team timeously with recommendations on how these might be addressed.

2. PUBLIC DATABASE

In order to increase the public acceptance of the process and its outcomes, opportunities for public comment and engagement were integrated into all stages of the study. The study team compiled a public database for the study from existing databases and input from DWA staff and key stakeholders. Distribution of the Newsletter and the Response Sheets resulted in inputs and amendments to the database. The study team was responsible for the maintenance, verification, and updating of the database for the duration of the study. The stakeholder database is presented in **Appendix A** and will be utilised by the Technical Support Group.

The study team embarked on an exercise of identifying Interested and Affected Parties (I&APs) to ensure the database was as comprehensive as possible. A comprehensive approach of informing stakeholders about the Water Reconciliation Strategy Study process was undertaken by the study team and as such a broader stakeholder base were informed about the process. The following were targeted:

2.1 Nelson Mandela Bay Municipality

The study team conducted separate briefing sessions with the Portfolio Councillor for Water Infrastructure and the Executive Director for Infrastructure and Engineering in preparation for the public meetings.

2.2 Cacadu District and Local Municipalities

The study team conducted an information session with the Deputy Director (Infrastructure) for Cacadu District Municipality. Invitations requesting participation in the process and the public meetings were posted to all local municipalities. Further telephonic consultations were held with the Infrastructure Heads of all local municipalities falling under the Cacadu District Municipality.

2.3 Political Parties including the African National Congress (ANC), the Democratic Alliance (DA) and the South African Communist Party (SACP)

Invitations requesting participation in the process and public meeting were hand-delivered to the parties' regional offices. Personal contacts within the parties were also used to informally raise awareness of the project. Responses were received from some of the Councillors, including opposition parties.

2.4 Labour Movements

Invitations requesting participation by COSATU (Congress of South African Trade Unions) were hand-delivered to the organisation's offices. SALGA (South African Local Government Association) was also invited. Unfortunately there was a poor response from these institutions.

2.5 Civic Society, i.e. South African National Civic Organisation (SANCO) and local business sector

Invitations requesting participation in the process and public meetings were hand-delivered to the offices of SANCO and local businesses including Nelson Mandela Bay Tourism, Coega Development Corporation and also various Engineering, Building and Town Planning Companies.

The study team undertook telephonic briefing sessions with leaders from both the National Federated Chamber of Commerce (NAFCOC) and the Port Elizabeth Regional Chamber of Commerce and Industry (PERCCI). Thereafter, invitations and Newsletters requesting participation were delivered to both offices.

2.6 Media: Radio, Television, and Newspapers

Newsletters and invitations were sent to Siyenza, Media 24, SABC, Algoa FM and KQFM requesting their participation in the process and attendance at the public meetings. SABC TV2 sent a reporter and camera team to cover the first public meeting and the story was broadcast on 28 August 2008 during the 19:00 News.

2.7 Agricultural Groups

Newsletters and invitations requesting participation in the process, and attendance of the public meetings were posted to the Department of Agriculture, Lower Sundays River Irrigation Board, and the Gamtoos Irrigation Board.

The study team also discussed the project with the Director for Agriculture within NMBM to inform their stakeholders about the process. This Directorate is responsible for several community-based irrigation and other agricultural projects within the Algoa Water Supply System.

2.8 Environmental Groups

Newsletters and invitations requesting participation in the process, and attendance of the first public meeting were hand-delivered to the identified organisations' offices. This group showed a poor response.

3. RESPONSE SYSTEM FOR PUBLIC, MEDIA AND STAKEHOLDERS

The study team was responsible for providing technical and administrative input on and responses to stakeholder enquiries as necessary. The study team was also responsible for receiving and compiling enquiries and for distributing the responses to stakeholders.

The public participation specialists in the study team established a response system for dealing with queries and comments on the project. Methods of receiving and responding to the enquiries included email, fax, postal, and telephonic. Queries could be made in the official languages of the Eastern Cape, namely English, isiXhosa, and Afrikaans. Responses were made in the language of the query or comment. All enquiries were logged into the Issues Trail. All enquiries were responded to by the study team, and records were kept of the responses.

4. NEWSLETTERS


The first Newsletter was published in August 2008 (section 4.1), the second Newsletter was published in March 2009 (section 4.2), and the third Newsletter was published in April 2010 (section 4.3). The Newsletters were widely distributed to all the stakeholders on the database. Batches of newsletters were also distributed on request to:

- Department of Water Affairs: East London
- Department of Water Affairs: King William's Town
- Department of Agriculture: Bhishe
- Nelson Mandela Bay Municipality offices, Port Elizabeth.


The three Newsletters are presented in **Sections 4.1, 4.2 and 4.3.**

4.1 Newsletter 1

WATER RECONCILIATION STRATEGY STUDY FOR THE ALGOA WATER SUPPLY AREA




water & forestry
Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA



nelson mandela bay
PORT ELIZABETH | SITTENHAGE | BISHOP

Newsletter 1 of 3
August 2008



Map of the Algoa Water Supply System

INTRODUCTION

In the near future, the existing Algoa Water Supply System (the Algoa System) may not be able to meet the requirements of the Nelson Mandela Bay Municipality (NMBM). The NMBM's demand for water has grown rapidly in recent years, as a result of growth and development actions to meet the challenges of poverty and unemployment as articulated in the Accelerated and Shared Growth Initiative for South Africa (AsgiSA).

The Algoa Reconciliation Strategy Study is being undertaken by the Department of Water Affairs and Forestry in cooperation with the NMBM in order to secure a sustainable future water supply to the NMBM and surrounding towns served by

the Algoa System.

The Reconciliation Strategy Study will entail a technical investigation that is integrated with public awareness and consultation, so that stakeholders and members of the public can be actively involved in the project. Public input on the identification of interventions for saving water or increasing the available water from the water supply system are invited, so that the best possible interventions can be considered.

This is the first of three Newsletters for the Algoa Reconciliation Study

1

OBJECTIVES OF THE STRATEGY

The Water Reconciliation Strategy for the Algoa water supply area has the following objectives:

- **Assessing different water requirement scenarios including:**
 - Short, medium and long-term requirements;
 - Water conservation and demand management;
 - Provincial growth and development initiatives and commitments.
- **Assessing water supply and infrastructure options and possibilities for development including:**
 - Surface water and groundwater development potential;
 - Potential for use of treated effluent;
 - Desalination;
 - Water trading between water use sectors and geographic areas;
- Transfers of water from other drainage regions;
- Integrated water supply and optimisation of current infrastructure.
- **Developing a Strategy to reconcile the water requirements with the available supply, based on the most beneficial options to ensure adequate and sustainable water supply for the next 25 years.**
- **Accommodating future changes in water use, supply and climate with flexible and responsive measures.**
- **Drafting an Action Plan to give effect to the Strategy.**

STUDY AREA

The study area consists of part of the western portion of the Eastern Cape Province, and extends from the Kouga River system in the west to the Sundays River system in the east, as shown on the map. The present day Algoa System evolved from several separate schemes that have become interlinked over the years as development took place in the area and demands increased.

The Algoa System is made up of the following schemes:

- **Main western system** which provides water to the NMBM from the Churchill and Impofu dams on the Kromme River, Kouga Dam on the Kouga River and Loerie Balancing Dam on the Loerie Spruit, a tributary of the Gamtoos River.
- **Main eastern system** which provides water to the NMBM from the Sundays River. The supply from the Sundays River is augmented by the transfer of water from Gariep Dam on the Orange River in the Free State, via the Orange-Fish Tunnel, the Fish River and the Fish-Sundays transfer system.
- **Secondary system** consisting of dams on the Sand, Bulk, Van Stadens and Swartkops rivers and the Uitenhage groundwater aquifer.

DELIVERABLES OF THE STUDY

The main products of the study are:

- **Inception Report**, outlining the objectives, methodology and scope of work.
- **Preliminary Reconciliation Strategy**, giving the water requirement scenarios and water availability for the next 10 years, with a list of possible interventions and options to balance demand and supply.
- **Final Reconciliation Strategy**, the approach to ensure that the bulk water needs of the NMBM are met, including an Action Plan with responsibilities allocated, for implementation of the Strategy.

ALGOA WATER SUPPLY AREA - REQUIREMENTS AND SUPPLY

The Algoa System supplies drinking water to about 1.5 million people, and water for irrigation and to a large number of industries. The Kouga and Impofu dams are owned by the Department of Water Affairs and Forestry, and all the other dams belong to the NMBM. As is evident from the map, all the existing dams are situated relatively far from the NMBM.

The NMBM is the economic hub of the Eastern Cape, in

particular with its focus on the automotive industry, manufacturing industries, sport and tourism, agricultural processing and exports. Development of the Coega Industrial Development Zone has put additional pressure on the water resources serving the area. A long-term bulk water planning and management strategy is needed, based on the current and potential future water requirements.

APPROACH TO THE STUDY

The study combines a technical approach with public participation. Technical investigations will be carried out into water requirement scenarios to establish potential shortfalls in the water supply. A range of interventions to make water available and to reduce requirements will be evaluated. Interventions will be tested against criteria for determining feasibility, and public input will be an integral part of the selection process.

The process of evaluating future water demand and

supply interventions will be interactive and consultative. Over the next two years a multi-disciplinary team of scientists, ecologists, social scientists and engineers and a wide group of stakeholders will review and investigate a wide range of water demand management and supply interventions. The work programme for the study is summarised below, showing the opportunities for public participation and ongoing review of the process.

PROPOSED RECONCILIATION PUBLIC PROCESS

DATE:	MILESTONE:	TOPIC/PURPOSE:
August 2008	Newsletter #1	Background to the Study
26 August 2008	First Public Meeting	Give overview of the study and invite participation and comments on the process
January 2009	Newsletter #2	Preliminary Reconciliation Strategy and summary of water management interventions
February 2009	Second Public Meeting	Present the Preliminary Reconciliation Strategy and proposed interventions and invite input on interventions
February 2010	Newsletter #3	Final Reconciliation Strategy and Draft Action Plan
March 2010	Third Public Meeting	Present the Final Reconciliation Strategy and Action Plan, and outline the way forward for implementation

PURPOSE OF THIS NEWSLETTER

The purpose of this Newsletter is to inform stakeholders about the water reconciliation strategy study for the Algoa water supply area, which includes the NMBM, that is currently being undertaken by the Department of Water Affairs and Forestry.

Stakeholders are invited to participate in the process by contributing issues of mutual benefit, attending meetings, or through corresponding with the public participation office or technical team at the addresses provided below.

The attached Response Sheet provides opportunities for stakeholder input into the initial stages of the Reconciliation Study.

YOUR COMMENT IS IMPORTANT

PLEASE NOTE THAT YOU MUST RETURN THE ENCLOSED RESPONSE SHEET TO CONFIRM THAT YOU WISH TO CONTINUE RECEIVING STUDY INFORMATION.

PUBLIC PARTICIPATION OFFICE AND RETURN ADDRESS FOR COMMENTS

Ayanda Peter
MGP Consulting
PO Box 12012
Central
Port Elizabeth 6006
Tel: (041) 582 3274
Fax: (041) 582 3810
Email: ayanda@mgpconsulting.co.za


Ms Simone Lyons
Ninham Shand Consulting Services
P O Box 1347
Cape Town 8000
Tel: (021) 481 2479
Fax: (021) 424 5588
Email: simone.lyons@shands.co.za

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4.2 Newsletter 2

WATER RECONCILIATION STRATEGY STUDY FOR THE ALGOA WATER SUPPLY AREA




water & forestry
Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA



nelson mandela bay
PORT ELIZABETH | UITENHAGE | DESPATCH

Newsletter 2 of 3
March 2009



Map of the Algoa Water Supply System

INTRODUCTION

The Algoa Reconciliation Strategy Study is being undertaken by the Department of Water Affairs and Forestry (the DWAF) in cooperation with the Nelson Mandela Bay Municipality (the Metro), in order to secure a sustainable future water supply to the Metro and surrounding towns served by the Algoa Water Supply System (AWSS).

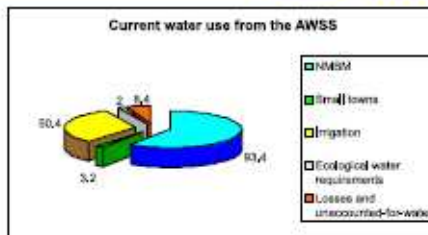
The study area extends from the Kouga River system in the west to the Sundays River system in the east, as shown on the map. The AWSS provides water to the Lower Sundays River Water User Association, the Gamtoos Irrigation Board, the Metro and several smaller towns in the Kouga Municipality and the Sundays River Municipality.

The Algoa Reconciliation Strategy Study entails a technical investigation that is integrated with public awareness and consultation, so that stakeholders and members of the public can be actively involved in the project. Public input on the identification of interventions for saving water or increasing the available water from the water supply system are invited, so that the best possible interventions can be considered.

This is the second of three Newsletters for the Algoa Reconciliation Strategy Study.

1

TOTAL WATER USE FROM THE AWSS



Of the 157.4 million m³ of water used from the AWSS in 2007, total urban/industrial use was 96.6 million m³, total irrigation use was 50.4 million m³, ecological water requirements were 2.0 million m³, and unaccounted-for water/canal losses amounted to 8.4 million m³. Use by the various water sectors is shown in the diagram on the left.

FUTURE WATER REQUIREMENTS

Water requirements in the Coega Industrial Development Zone (IDZ) will have a significant impact on the future water requirements of the region. Unfortunately, there is still a high degree of uncertainty related to water requirement forecasts for the Coega IDZ. If development takes off as anticipated, the first significant water supply to this area could be required by about 2012/13. The future water requirements of all sectors, other than urban/industrial water use, have been assumed to remain constant, as it is unlikely that further allocations will be made for irrigated agriculture from the AWSS. The following scenarios for growth in urban/industrial use from the system were formulated:

- Scenario 1: Low Growth Water Requirement, 0.5% annual growth in water requirements. This scenario is based on low population growth and low economic growth.
- Scenario 2: High Growth Water Requirement, 2.5% annual growth in water requirements.
- Scenario 3: Very High Growth Water Requirement: 3.5% annual growth in water requirements.
- Scenario 4: Alternative Very High Growth Water Requirement, 3.5% annual growth in water requirements for 5 years, and 2.5% growth thereafter.
- Scenario 5: High Coega Growth Requirement, 2.5% growth/a of urban water requirements; Coega IDZ potable water requirements starting in 2008, growing to full use of 18.6 million m³/a (51 Ml/day) over 20 years, and Coega IDZ industrial use starting with a requirement of 20 million m³/a (55 Ml/day), phased in over 3 years from 2012, and growing by 10%/a thereafter up to 2018, and at 2.5%/a thereafter.

Scenarios 3, 4 and 5 were developed to take into account the possible higher growth in water requirements arising from development in the Coega IDZ.

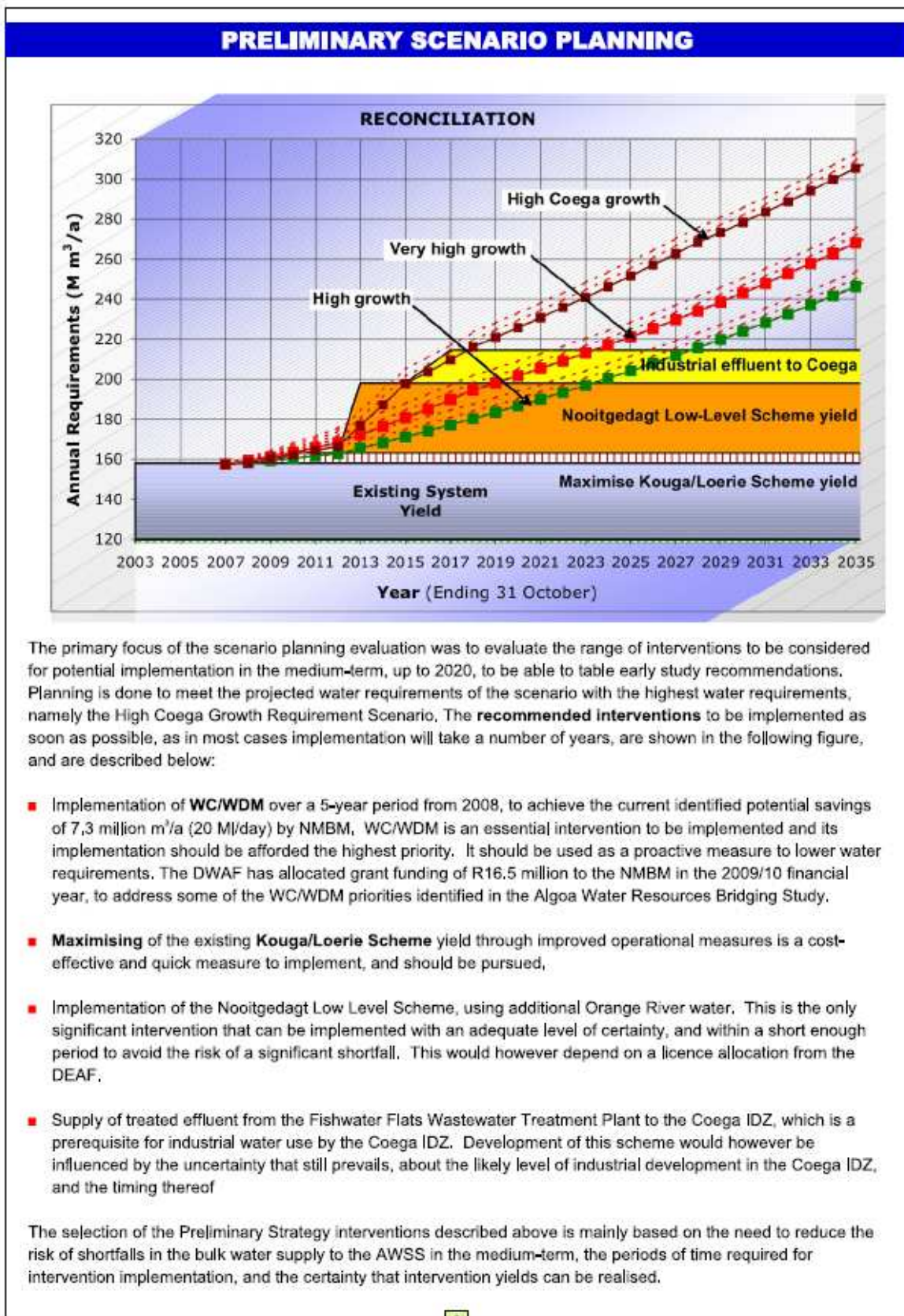
EVALUATION OF THE WATER BALANCE AND INTERVENTIONS

A total quantity of 157.7 million m³/a is available for use from the AWSS, at a risk of not meeting the full water demand once in every 50 years.

A significant number of **potential interventions**, which could contribute to meeting the future water requirements of the AWSS, were initially identified. These interventions were mainly from previous and ongoing studies, and some new interventions were also formulated. From this comprehensive list, the interventions that could be implemented within the medium-term were selected and evaluated. The following range of interventions was considered, to meet future water requirements:

- Water conservation and water demand management (WC/WDM);
- Increased operational efficiency of the current system; Trading of water use authorisations;
- Re-use of water;
- Groundwater schemes;
- Desalination of seawater;
- Desalination of poor quality river water; and
- Surface water schemes.

Each intervention was evaluated and costs and implementation programmes were determined. The conclusion from the water balance scenarios considered is that the AWSS is at risk of soon experiencing water shortages



PUBLIC PROCESS

DATE:	MILESTONE:	TOPIC/PURPOSE:
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February 2010	Newsletter #3	Final Reconciliation Strategy and Draft Action Plan
March 2010	Third Public Meeting	Present the Final Reconciliation Strategy and Action Plan, and outline the way forward for implementation

RECOMMENDATIONS

The periods required for the implementation of new water supplies and the extent of the additional infrastructure that would be required make it impractical to implement only a single solution. Therefore the **Preliminary Strategy Action Plan** recommended that, for the following suite of interventions, covering the geographical area and dealing with both demand-side water management measures and supply-side water resource developments, further studies be undertaken as a priority, in order that these could be implemented as soon as possible:

- Implementation of WC/WDM measures;
- Maximising the yield of the existing Kouga/Loerie scheme;
- Implementation of the Nootgedagt Low Level Scheme, using additional Orange River water; and
- Supply of industrial effluent from the Fishwater Flats Wastewater Treatment Plant to the Coega IDZ,

The Preliminary Strategy Action Plan also recommended that **further studies** of the following interventions, should also be undertaken:

- Groundwater well-field development;
- Seawater desalination by the proposed chlorine producer in the Coega IDZ; and
- Use of desalinated lower Sundays River return flows.

PURPOSE OF THIS NEWSLETTER

The purpose of this Newsletter is to describe the current water balance situation of the AWSS, potential future water balance scenarios, and recommended measures to meet water requirements in the medium-term. The Preliminary Strategy has more of a focus on interventions that can be implemented in the medium-term (i.e. up to 2020), within the long-term framework and the range of interventions that is available to meet any shortfall in water requirements,

Stakeholders are invited to participate in the process by contributing issues of mutual benefit, attending meetings, or through corresponding with the public participation office or technical team at the addresses provided below.

The attached Response Sheet provides opportunities for stakeholder input on interventions and the Preliminary Strategy.

YOUR COMMENT IS IMPORTANT

PLEASE NOTE THAT YOU MUST RETURN THE ENCLOSED RESPONSE SHEET TO CONFIRM THAT YOU WISH TO CONTINUE RECEIVING STUDY INFORMATION.

PUBLIC PARTICIPATION OFFICE AND RETURN ADDRESS FOR COMMENTS

Mr Tsepang Setipa (public process)
Afri-Coast Engineers
PO Box 5104, Walmer
Port Elizabeth 6065
Tel: (041) 505 8000
Fax: (041) 585 3437
E-mail: tsepang@afriacoast.com


Ms Karen Versfeld (technical)
Ninham Shand Consulting Services
P O Box 1347
Cape Town 8000
Tel: (021) 481 2400
Fax: (021) 424 5588
Email: karen.versfeld@shands.co.za




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4.3 Newsletter 3

WATER RECONCILIATION STRATEGY STUDY FOR THE ALGOA WATER SUPPLY AREA



water affairs
Department
Water Affairs
REPUBLIC OF SOUTH AFRICA

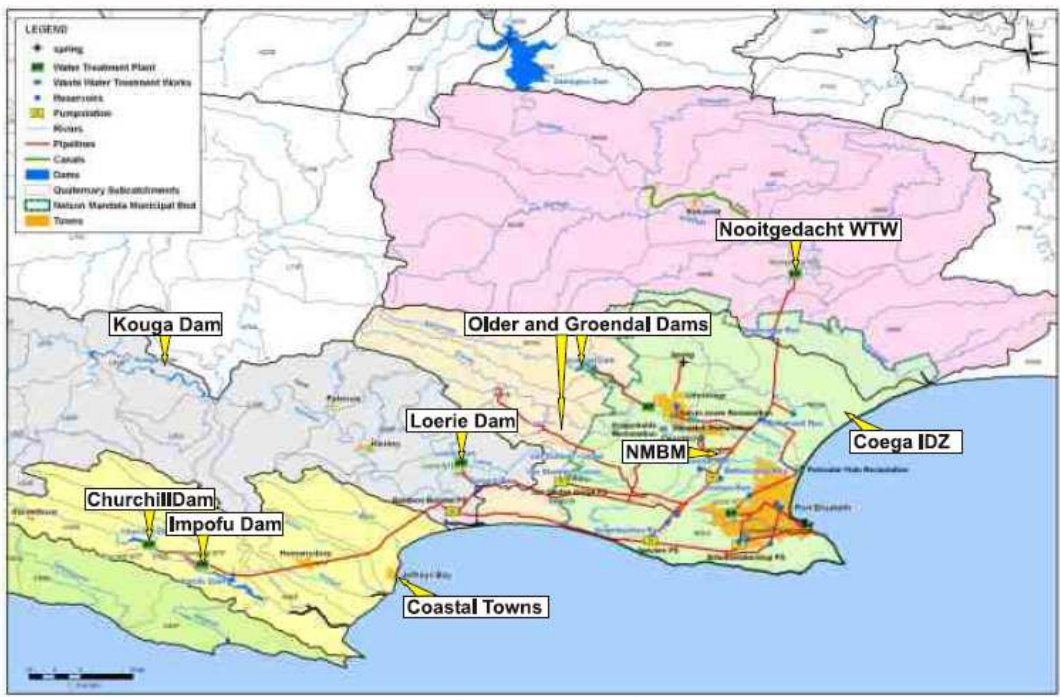


nelson mandela bay
MUNICIPALITY

Newsletter 3 of 3
April 2010

LEGEND

- ★ spring
- Water Treatment Plant
- Waste Water Treatment Works
- Reservoirs
- Pumpstation
- Weir
- Pipelines
- Canals
- Centre
- Quaternary Subcatchments
- Nelson Mandela Municipality
- Towns



Map of the Algoa Water Supply System

INTRODUCTION

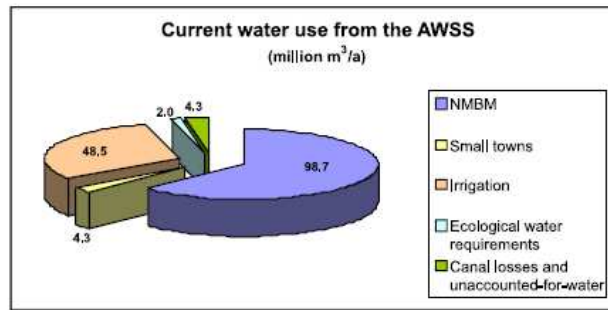
The Algoa Reconciliation Strategy Study is being undertaken by the Department of Water Affairs (DWA) in cooperation with the Nelson Mandela Bay Municipality (NMBM) to secure a sustainable future water supply from the Algoa Water Supply System (AWSS) for the NMBM, the Gamtoos Irrigation Board (GIB), and several towns in Kouga Municipality. The Study area extends from the Kouga River system in the west to the Sundays River system in the east, as shown on the map.

The Algoa Reconciliation Strategy Study entails a technical investigation that is integrated with public awareness and consultation, so that stakeholders and members of the public can be actively involved in the project. Public comment on the Final Reconciliation Strategy is invited, to ensure that the interventions selected address the medium and long-term water requirements (up to 2020 and 2035 respectively).

During the finalisation of the Reconciliation Strategy Report, the AWSS is experiencing a critical drought. Significant decisions are being taken by NMBM to fast-track the implementation of drought-relief measures and interventions, some of which are relevant to this Strategy, and have been considered.

1

TOTAL WATER USE FROM THE AWSS



The AWSS provides water for domestic use and for more than 373 industrial users in the NMBM Metro, irrigation water for the GIB, and water for several smaller towns within the Kouga Municipality. The **current water use** from the AWSS is shown in the figure above is **157.8 million m³ per annum**.

WATER REQUIREMENTS OF THE COEGA INDUSTRIAL DEVELOPMENT ZONE

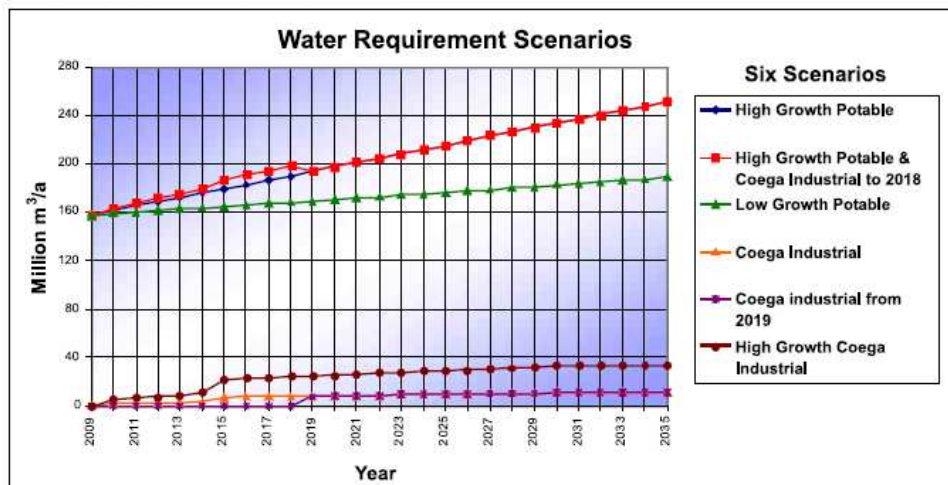


Most **new industrial water requirements** are expected to arise within the Coega Industrial Development Zone (IDZ). Noting the uncertainty **regarding the likely rate of uptake of water within the Coega IDZ**, the Coega IDZ potable and industrial water requirements for water planning purposes were estimated to be as shown in the figure above.

WATER REQUIREMENT SCENARIOS

The future water requirements of all sectors, other than urban/industrial water use, have been assumed to remain constant, as it is unlikely that further allocations will be made for irrigated agriculture from the AWSS.

Six scenarios for growth in urban/industrial water requirements from the system were formulated. The base year for the water requirement scenarios shown in the figure below is 2009.



COMPARISON OF FUTURE WATER REQUIREMENTS AND CURRENT AVAILABILITY

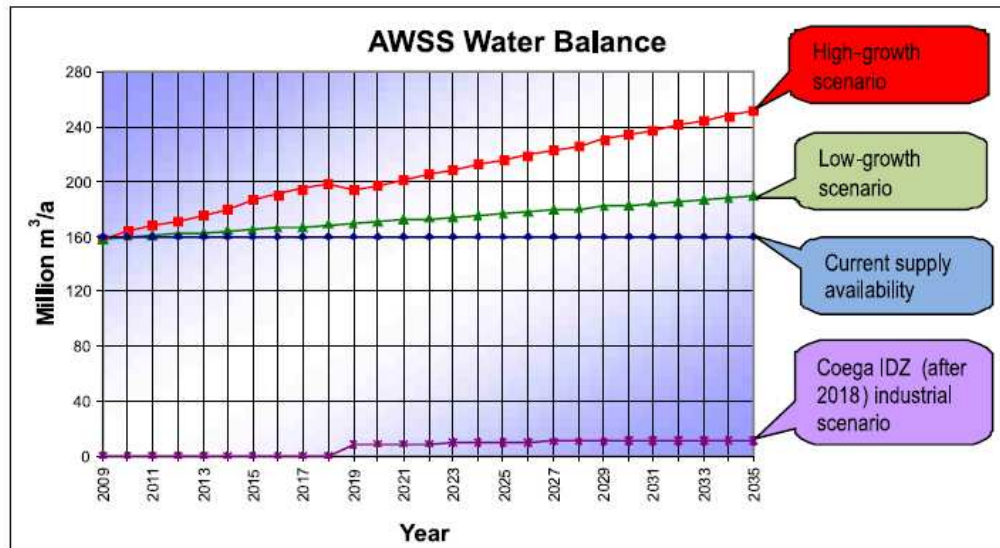
The current water availability from the various sources of supply of the AWSS for urban, industrial, and agricultural use is 159.4 million m³ per annum. Water is supplied from the Kouga and Loerie Dams, the Churchill and Impofu Dams, the Sundays River Government Water Scheme (water transferred from the Orange River) and smaller volumes from the Groendal Dam, Uitenhage Springs, older dams and some re-use of water for industrial processes.

Bulk water planning has been undertaken for a 1 in 50 year assurance of supply (at a risk of potentially not meeting the full water requirements once in every fifty years) for the urban water supply. For the AWSS, urban water use is more than

60% of the total use, and this percentage is expected to increase.

The potential impacts of climate change, the implementation of the ecological Reserve, the eradication of invasive alien plants and operational aspects all affect water availability from the AWSS. Further studies will be necessary to evaluate these aspects so that it is better understood how they will influence water availability in the future.

A comparison of various future water requirement scenarios with the current water availability from the AWSS is shown in the figure below.



It is concluded that the AWSS was just in balance in 2009 and that any increase in use would put the System at risk. The higher the growth in water requirements, the higher the risk would be. It is clear that measures to solve this problem must be proceeded with immediately on account of the lead times necessary for implementation.

MEETING FUTURE WATER REQUIREMENTS - AN EVALUATION OF INTERVENTIONS

The following range of interventions which could contribute to meeting the future water requirements of the AWSS was considered:

- Implementing water conservation and water demand management (WC/WDM) measures
- Increased operational efficiency of the current system
- Additional transfers from the Orange River
- Trading of irrigation water use authorisations

- Re-use of water
- Groundwater schemes
- Surface water schemes
- Desalination of sea water

From this list, the interventions that could be implemented within the medium- to long-term were identified and evaluated.

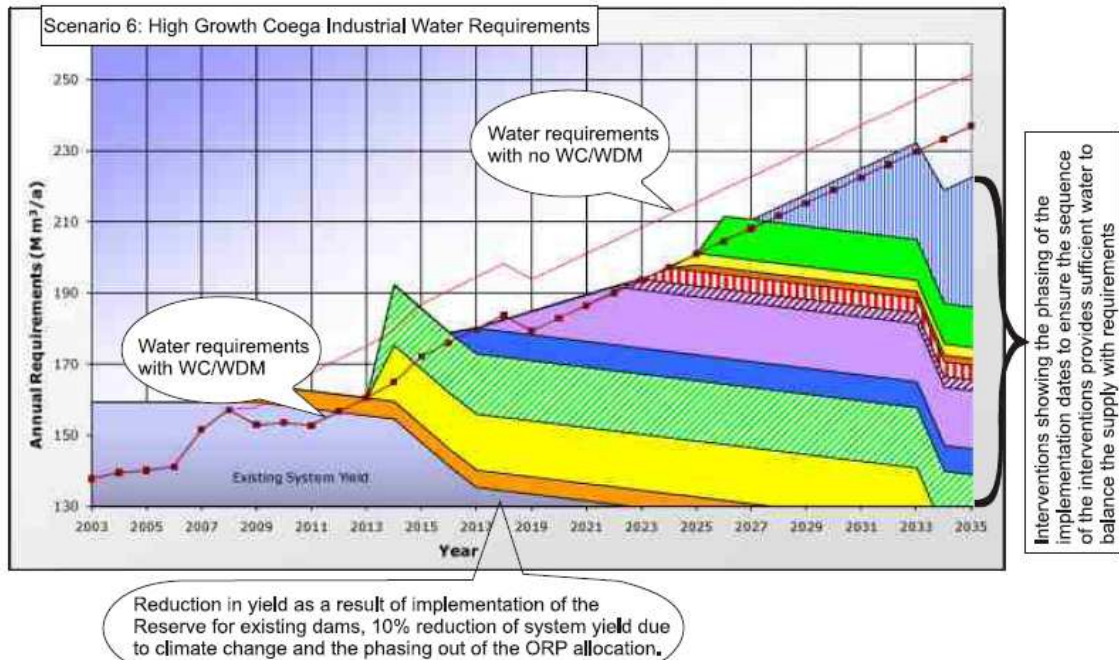
RECONCILIATION SCENARIO PLANNING

The Scenario Planning Process identified alternative groupings and phasing of interventions that could be implemented to reconcile the water supply and requirements of the AWSS, up to 2035 and beyond. The objective was not to select one 'favourable scenario' but rather to identify which interventions should be studied.

The selection of interventions to reconcile water availability with the requirements is a complex task, with many diverse issues and criteria to be considered. The need for a customised planning tool, to provide support for this task, was identified, and the Reconciliation Planning Support Tool was developed for this purpose. The Reconciliation Planning Support Tool allows the user to select and compare potential

interventions, or groups of interventions, so that in the future the supplies will meet the requirements as indicated in the figure below.

The figure depicts a typical water balance graph for one water reconciliation scenario. This illustrates how the water requirements would be reduced by WC/WDM, and how the implementation of interventions could be timed or phased to increase the supplies so as to always exceed the growing requirements.



RECOMMENDATIONS

Based on the findings of the Study, the following recommendations were put forward to ensure ongoing reconciliation of water supply and requirements within the AWSS:

- a. Commitment to WC/WDM by all role-players in the water sector should be obtained to ensure the implementation of WC/WDM measures on a sustainable basis. Water use efficiency must become central to the planning and operations of all water service authorities and water service providers. NMBM should establish a dedicated WC/WDM manager and support team and the implementation of its WC/WDM strategy should be expedited and regularly updated. A significant range of WC/WDM measures, including rainwater harvesting, have been identified and recommended for implementation.
- b. A Strategy Steering Committee, supported by an Administrative and Technical Support Group, should be formed in order to make recommendations, on an annual basis, on long-term planning activities required to ensure reconciliation of the requirements and the available supply in the AWSS area, to update the Strategy as and when necessary and to communicate the relevant findings to the stakeholders.
- c. Actual population and economic growth rates, as well as actual water use by user category, need to be monitored and regularly updated, so that future water requirement projections can be more accurately made.
- d. The only intervention that can be implemented with an adequate level of certainty, and within a short enough period to avoid the risk of a significant shortfall, is the Nootgedagt Low Level Scheme, which will supply additional water transferred from the Orange River.

RECOMMENDATIONS (cont.)

- e. Water user associations and irrigation boards should be encouraged to develop water management plans as required under the National WC/WDM Strategy, for the agricultural sector.
- f. In terms of water re-use, it is recommended that the following aspects are investigated:
- Identify wastewater treatment works which produce higher quality effluent and are therefore better suited to service potable use schemes,
 - Identify the location of industrial centres that could be serviced by re-use schemes,
 - Identify opportunities for exchanging the usage of potable water for "local irrigation" of parks and sports fields with treated effluent schemes and of using rainwater tanks for providing supplies for gardening and/or toilet flushing supplies.
- g. The operation of the AWSS could be further improved by metering all water usage, and by speeding up invasive alien plant removal.
- h. An AWSS information system should be developed that will assist a co-ordinated monitoring effort on various aspects of the AWSS. This could include data sharing, quality control, and addressing gaps in data collection and reporting.
- i. The scenario planning process should be updated on a regular basis to cater for:
- Revised future water requirement projections
 - Updated information on the implementation of the ecological Reserve and the potential impact of climate change
 - Updated information from recently completed studies for WC/WDM and supply interventions
 - Any other change to the input data
 - Revisions to the NMBM Draft WC/WDM strategy
- j. Ongoing awareness-raising, capacity building and information sharing is required for the interested parties representing civil society, ensuring a common vision and enhanced water conservation and holistic resource management.
- k. The process to select which interventions should be implemented after the Nooitgedagt Low-Level Scheme, needs to be based on credible refinement of information and knowledge through additional studies, so that selected interventions can be compared on a common basis.
- l. The DWA and NMBM should evaluate the need to establish further gauges to monitor flow and quality of rivers, estuaries, the sea, and WWTWs flows for later possible reuse (RO desalination) schemes.
- m. Several initiatives and studies of potential interventions will be required, in addition to the studies and initiatives shown below:
- The impact of implementing the ecological Reserve for existing dams
 - The potential impact of climate change
 - Water availability assessment study (WAAS) for the Kouga/Loerie and Churchill/ Impofu systems
 - Potential phasing of use of Orange River water and synergies with a Coega desalination option
 - Assessment of opportunities and prices for trading of Orange River irrigation allocations (in the upper Fish River)
 - Lower Sundays River return flows availability for desalination
 - Integrated policies for the use of treated effluent for non-potable and potable uses
 - Potential for treated effluent re-use from Coega WWTW for industrial use and from Fish Water Flats WWTW for industrial or potable use (possibly via a new dam at Echodale)
 - Groundwater augmentation
 - Lower Gamtoos River water abstraction potential diversion
- o. A detailed Strategy Implementation Plan was developed, to give effect to the Strategy.



Kouga Dam



Impofu Dam

PUBLIC PROCESS

DATE	MILESTONE	TOPIC/PURPOSE
August 2008	Newsletter #1	Background to the Study
26 August 2008	First Public Meeting	Give overview of the study and invite participation and comments on the process
March 2009	Newsletter #2	Provide information on the Preliminary Reconciliation Strategy and recommended interventions
18 March 2009	Second Public Meeting	Present the Preliminary Reconciliation Strategy and proposed interventions and invite input on Interventions
April 2010	Newsletter #3	Final Reconciliation Strategy and Draft Action Plan
29 April 2010	Third Public Meeting	Present the Final Reconciliation Strategy and Action Plan, and outline the way forward for implementation

PURPOSE OF THIS NEWSLETTER

The purpose of this Newsletter is to describe the current water balance situation of the AWSS, potential future water balance scenarios, and recommended measures to meet water requirements in the long-term. The Reconciliation Strategy is more focused on interventions that can be implemented in the long-term (i.e. up to 2035) and the range of interventions that are available to meet any shortfall in water requirements.

Stakeholders are invited to participate in the process by contributing issues of mutual benefit, attending meetings, or through corresponding with the public participation office or technical team at the addresses provided below.

YOUR COMMENT IS IMPORTANT

Your comment will ensure that all relevant issues are taken up in the Strategy for the Algoa Water Supply System. Please complete the attached response sheet, Or contact the public participation office

PUBLIC PARTICIPATION OFFICE AND RETURN ADDRESS FOR COMMENTS

Tsepang Setipa
AfriCoast
PO Box 5104
Walmer, Port Elizabeth 6065
Tel: (041) 582 3274
Fax: (041) 582 3810
Email: tsepang@afriacoast.com



Ms Karen Versfeld
Aurecon
P O Box 494
Cape Town 8000
Tel: (021) 481 2652
Fax: (021) 424 5588
Email: karen.versfeld@af.aurecongroup.com



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5. PUBLIC MEETINGS

5.1 First Public Meeting: 26 August 2008

The first Public Meeting was held on 26 August 2008 in the Port Elizabeth Town Hall. Advertisements were placed in the following local newspapers, and are shown in **Appendix B**.

- PE Express 20 August 2009
- The Herald 21 August 2008
- Daily Dispatch 24 August 2008

Announcements were also made on the radio station Umhlobo w’Nene, and Radio Algoa. The Programme for the Public Meeting is included in **Appendix C**.

5.1.1 Attendance

A total of 55 people attended the Public Meeting.

5.1.2 Issues and questions raised

Table 1 lists the questions raised and responses given by the panel, who consisted of:

- Mr Erik van der Berg: Aurecon
- Ms I Thompson: Department of Water Affairs
- Mr Barry Martin: Infrastructure Manager, NMBM
- Mr Ayanda Peter: MGP Consulting

Table 1 provides a comprehensive list of all questions that were raised at the public meetings.

5.2 Second Public Meeting: 18 March 2009

The second Public Meeting was held on the 18th March 2009 in the Port Elizabeth Town Hall. Advertisements were placed in the following local newspapers, and are shown in **Appendix B**:

- The Herald 9th and 16th March 2009

Announcements were also made on the radio stations Algoa FM and Umhlobo w’Nene on the 16th and 17th March 2009. The Programme for the Public Meeting is attached in **Appendix C**.

5.2.1 Attendance

33 people attended the Public Meeting. The attendance register is attached in **Appendix D**.

5.2.2 Issues and questions raised

The questions raised as well as the responses given by the panel were listed. The panel consisted of:

- Mr Erik van der Berg: Aurecon
- Ms Isa Thompson: Department of Water Affairs
- Mr Barry Martin: Infrastructure Manager, NMBM
- Mr Tsepang Setipa: Afri-Coast Engineers

The issues raised were captured in **Table 1**.

5.3 Third Public Meeting: 29 April 2010

The third Public Meeting was held on the 29th April 2010 in the Port Elizabeth City Hall. Advertisements were placed in the following local newspapers, see **Appendix B**.

- Die Burger 1st April 2010
- The EC Herald 12th April 2010

Announcements were also made on Algoa FM on the 12th and 13th April 2010. The Programme for the Public Meeting is attached in **Appendix C**.

5.3.1 Attendance

39 people attended the Public Meeting. The attendance register is attached in **Appendix D**.

5.3.2 Issues and questions raised

The questions raised as well as the responses given by the panel were listed. The panel consisted of:

- Ms I Thompson: Department of Water Affairs
- Mr Andrew Lucas: Department of Water Affairs
- Dr. Mike Shand: Aurecon
- Mr Barry Martin: Infrastructure Manager, NMBM
- Mr Tsepang Setipa: Afri-Coast Engineers

Table 1 Issues raised at the Public Meetings

<i>Raised By</i>	<i>Organisation</i>	<i>Issue / Comment</i>	<i>Response</i>
COMMENTS FROM THE FIRST PUBLIC MEETING			
Mr Rhodes Zicwele	NAFCOC	What is the rate of water consumption by the Industries? Will this rate negatively affect (threaten) water supply for domestic use?	The Metro has estimated the growth of development in terms of the Spatial Development Framework and estimated water consumption trends from there. There is no threat that Industries will take over domestic water supply.
		Concerned that in the townships, pipe leaks are unattended for hours. Is there anything the Municipality can put in place to address the problem as it leads to water wastage ?	We have a social responsibility as a collective to report leaks. There is apathy in reporting leaks and our communities need to be educated about this. Within the next 12 to 14 months, we are looking into a centralized call centre, which will have a single number for water and sanitation complaints.
Mr Griffiths	Wildlife and Environmental Society of South Africa (WESSA)	When will our country reach the critical point in water shortage, 2010, 2012, etc. given the current climate changes?	We will run out of water if we do nothing. Preferably the study by DWAF in 2003 showed interventions can be taken some of which are already in place. Importing of water from Gariep Dam and the use of recycled water may be explored as potential interventions.
		We know that about 40% of leakages has been reported in the municipal system; what is the metro doing about this?	Water losses in all Metros are sitting between 30 – 40%. NMBM= 30% unaccountable for water. We have a plan for what the NMM believes to be the best way forward in controlling leaks and unaccounted for water.
		Are there any dam proposals in the region that will feed this area?	We are looking at a full range of possible interventions and all dam sites are being evaluated as well as the environmental impacts and challenges.
Mr Themba Mawela	Coca-Cola	As part of this study will you look at socio economic issues?	Water conservation principles need to be brought to the community to raise awareness.
Mr Johan Barnard	NMMU	You mentioned that desalination is expensive. Is it more expensive than getting water from the Gariep Dam? Have you considered low-pressure desalination as an option?	Yes the study will look carefully at desalination, not only sea water. Effluent re-use needs to be seriously looked at in terms of public perceptions. From lower Gariep Dam there is lot of water but of lower quality and this need to be looked at. Socio economic and environmental impacts will be looked at with all these options.
Ms Mandlakazi Mfuleni	Nelson Mandela Bay Tourism (NMBT)	Do we have enough water to supply the world's biggest soccer event in 2010? Are we happy with the quality of water, how does it compare with international water standards, if poor, is anything done?	We have enough water quality; our water is potable and drinkable. We are confident that we will provide drinkable water to meet the requirements for the 2010 World Cup.

<i>Raised By</i>	<i>Organisation</i>	<i>Issue / Comment</i>	<i>Response</i>
Mr Rick Carter	Eastern Cape Green Forum	The Green Forum is against the introduction of water restrictions, and so in support of responsible water use. We have devised a mechanism in a form of a proposal that will help conserve water, and we will be glad to share that with the study team.	Your suggestions are valuable, info pamphlets to educate the public on developing good habits and education is very important in stopping water wastage and it needs to start at school level. Learners will then pass the education to their parents. Any proposals that may assist the study are most welcome.
COMMENTS FROM THE SECOND PUBLIC MEETING			
Nkosana	Avuka	Concern about the quality of water, as it tastes differently in different areas of Port Elizabeth.	In terms of taste, the water is affected by the geology of its source as a result the water will have a different taste.
		What is DWAF doing about the existing skills shortage?	There are programmes in place through the DWAF to address the problem of shortage of skills. These programmes include issuing of bursaries to 167 Water Engineering students and 30 students doing Water Engineering Learnerships.
Vumile Lwana	Cacadu District Municipality Portfolio Councillor Infrastructure Services and Planning	It appears that there is not a reliable water resource to address the water shortage problems. Has desalination been looked at as an option?	The NMBM has conducted a detailed study to consider Desalination as an option, but it was decided that it is not one of the immediate options that will be implemented now. The first option that will be implemented is the Nooitgedatch Low Level Scheme. This will be followed by water re-use and desalination.
		Has the Umzimvubu initiative been considered as an alternative to the Orange River System?	The Umzimvubu was identified by the Premier as an area in need of water resource development, for this reason the AsgiSA Eastern Cape was initiated. The DWAF is waiting for AsgiSA to identify water resource development initiatives. Analysis was done for irrigation potential to be much involved in the development of Umzimvubu but not only that part all the towns of this province.
David Kaymer	Uhambiso Consulting	Would like to query the statement on the increasing of the Loerie Dam operational efficiency to increase the yield.	If you draw down the Loerie Dam to a lower level, the yield will increase. You can get a lot more water from operational arrangements than through the construction of a balancing dam.
		The last survey on the sediment of Loerie Dam was indicated that it was 19.1%. Since then there have been two floods. Reports now show that the Dam is operating at 12% sediment, is it possible to operate the dam at a lower level?	It is not an effective option to operate the Loerie Dam at a lower level.

<i>Raised By</i>	<i>Organisation</i>	<i>Issue / Comment</i>	<i>Response</i>
Rick Carter	Elands Nursery E.C.G.F	Something that was not addressed in the presentation was the option of rainwater harvesting.	Rainwater harvesting is being investigated, especially for new developments.
Bruce Basson	Greenacres Nursery	There are lots of Developments in P.E. It is not a foreseeable option to instruct shopping centres and other new development to install underground water tanks to store rainwater.	This is something that will be further investigated.
Sam van der Merwe	Department of Agriculture	Would DWAF allocate water to resource to poor farmers:	The policy in DWAF is that water will not be made available to any new irrigation project. However, 12 000 ha has been earmarked for resource poor farmers: 4 000 ha in the Upper Orange WMA, and 4 000 ha in the Lower Orange WMA, and 4 000 ha in the Fish-Tsitsikamma WMA. Water has been set aside for these farmers.
Sam van der Merwe	Department of Agriculture	Has the strategy looked at the impact of climate change and the possible need to increase the storage capacity of the reservoirs?	What is needed is a good monitoring system to ensure that the water resource can be clearly understood and to assess the long term flow trends.
Nkosana	Avusa	How will the introduction of the pricing structure affect the water price?	Question noted but is not part of the study.
		One of the ways to reduce water usage is to measure the amount of water used. However, a lot of water meters are broken.	Question noted this is not part of the study.
COMMENTS FROM THE THIRD PUBLIC MEETING			
Bruce Basson	Nursery Industry	The dams and infrastructure supplying the Port Elizabeth area were built 30-40 years ago, over this time the population has tripled. What has been planned to meet the increasing demand for water?	This issue is covered extensively during the presentation
		All plans seem fairly long term, what would happen if we ran out of water in the next 3 months?	If there is no rain, the dams will run dry by January / February 2011. However, the recent rains should increase the storage volume of the days, delaying the date which the dams run dry by about two months.

Raised By	Organisation	Issue / Comment	Response
Angus Clarke	PERCCI	Water requirements within Port Elizabeth peaked at 303 Ml/day in November 2009. However the study has show that the water requirements will decrease until 2011? How is this possible if the economy improves as anticipated?	<p>The decrease in water requirements until 2011 is attributed to the effectiveness of the WC/WDM measures which NMBM plan to implement. These measures include:</p> <ul style="list-style-type: none"> • Bulk supply pipeline infrared imagery leak identification and repair • A public awareness/ user education programme • A schools (educators and learners) awareness programme • A leak repair programme • Retrofitting of inappropriate plumbing and sanitation fittings
		Industry (PERCCI) and IDZ should be included in the strategy committee	Noted – a member from PERCCI will be invited to be a representative on the Strategy Steering Committee.
		Projected growth in economy of 3.5% may be conservative. Eskom were caught off guard by not anticipating the growth in the economy. Is this estimate not too low, when we look at the anticipated growth in the economy and large numbers of RDP houses being built in the future.	Population projections were developed using population data (such as fertility levels, life expectancy, and migration patterns) and economic activity data. Information on future growth potential was also sources from NMBM and the Coega IDZ.
		The most recent blue drop report which came out last week shows that there the smaller municipalities are not performing well, what is being done to ensure compliance?	<p>The focus of the “Blue and Green Drop” Reports has changed from water quality reporting to an evaluation of the process at the Water Treatment Works. It was found that assessing the WTW only on water quality did not yield results timeously to do anything about the poor results. By focusing on the process the Department is able to ensure compliance by the WTW, thus high quality potable water will be produced.</p> <p>This is the first year of that “Blue and Green Drop” Report has reported on process compliance. It has been a learning period and although some scores are poor this does not mean that these WTW have been discharging poor quality drinking water. Part of the reason that some WTW have received low scores is due to the administrative requirements which have not been met. As part of this program the Department are engaging with local government and looking at implementing turnaround strategies to address aging infrastructure.</p>

Raised By	Organisation	Issue / Comment	Response
		Can the borehole abstraction prohibition on industry be relaxed?	Most industries in Port Elizabeth are located in the Swartkops area, which is situated in the Uitenhage Aquifer zone. As a result of the illegal use, this aquifer is overdrawn and the only manner which the Department can manage this, is to stop all abstractions from this aquifer. Domestic users, which fall within a Schedule 1 category, are permitted to abstract water for reasonable gardening purposes. All domestic users are required to inform the Department of their borehole. All industrial water users must apply to the Department for a Water Use Licence for authorization to abstract groundwater. It is unlikely that the Department will relax this restriction on groundwater abstraction by industries.
Andre Goosen	Ward 3 Councillor	The city of London does not have any major dams. In order to provide sufficient water there is a big emphasis on water re-use. Why hasn't the NMBM done more to emphasize water re-use?	The DWA and NMBM are looking into re-use interventions as part of the long term strategy.
Pierre-Louis Lemercier	Renewable Energy Centre Port Elizabeth	Considering the current drought situation is it not opportune to link Climate Change vulnerability aspects to create public awareness to reduce, re-use and recycle. Public need to be made responsible to save water.	As part of the WC/WDM strategy, the NMBM has started an education programme. A door-to-door campaign was undertaken by the NMBM to inform all residents about drought and educate them about using water wisely. The next phase includes a visit to all the schools to educate the kids about using water wisely. In addition, there is a major drive to reduce water leakage from schools.
		Information and education may not be good enough, can't we implement a program to finance water harvesting systems, such as rain tanks, especially considering the Orange River source may not be available in the not too distant future.	A "worst case" scenario was developed to look at how interventions can be implemented to provide sufficient water if the Orange River allocation is phased out and the available yield is reduced as a result of the implementation of the Reserve and climate change.
		The current water pressure is high (9 bar). Is it not economical to reduce the pressure in the pipelines to \pm 3 bar?	The NMBM is looking at implementing measures to reduce the pressure within the system at night when there are low flows. In some areas homeowners install PRV. Most hot water cylinders come equipped with a PRV.
		Has the NMBM looked at increasing the capacity of the WWTWs?	The upgrade of the WWTW is being investigated by the NMBM.

Raised By	Organisation	Issue / Comment	Response
Isaac Adams	Ward 11	There was an education program conducted by consultants to inform the public of water saving and drought issues. This needs to be continued and taken to institutions and other areas so that all public are informed.	Education is a very important and significant part of the campaign in the NMBM
Gavin Snow	NMMU	Whilst conducting research in the Humansdorp and Hankey areas Mr Snow noticed the widespread use of centre pivot irrigation systems and substantial wastage of water especially during windy conditions.	Most farmers use drip irrigation for permanent crops. This is the most efficient irrigation method. Centre pivots are mainly used for cash crops, which are only grown during a "wet" year. Farmers have a Water Use Authorisation which stipulates the amount of water that can be abstracted. Farmers have also been made aware of the water restrictions and how these will be enforced. If the restrictions are put in place, then the farmers will reach their full allocation in June and thereafter they will be limited to 10% of their allocation.
Peter Gouws	Private	What about underground tanks which can be built under new houses and industrial buildings, could this not be made a compulsory requirement for new developments?	The NMBM has approved a by-law to encourage all home owners to install rainwater tanks. As part of this Reconciliation Study, a desktop study was undertaken to determine the cost effectiveness of rainwater tanks and the volume of rainwater which potentially could be captured from an average roof area. The study concluded that rainwater tanks could not be regarded as an economic source of water supply. However, the use of rainwater tanks does have social benefits in terms of making people more aware of using water conservatively, taking ownership of water, and it will to a certain extent reduce the demand on our present water supplies. Nurseries have an important role to play in advising people to plant indigenous gardens which require less watering. Nurseries have a major role to play in educating people about using water sparingly.
		Concerned about the increase in water use from the new RDP developments. At most RDP houses, its not just a single family living in the house, but a couple of families in the one house, resulting a higher than anticipated water demand.	Research indicates that highest residential water use occurs not in the poorer communities, but rather in the affluent suburban areas.
Richard McClarthy	EC Green Forum and PERCCI member.	A water harvesting study conducted showed significant savings can be achieved.	Please provide this study to the NMBM Recon study team.
Stanford Slabbert	Ward 1 Councillor	Is there an intention to increase supply to the Nooitgedacht scheme from the Gariep Dam?	There is sufficient capacity in the Nooitgedacht system to access the full allocation from the Orange River. It will not be necessary to increase the capacity of the transfer tunnel.

<i>Raised By</i>	<i>Organisation</i>	<i>Issue / Comment</i>	<i>Response</i>
		While dam levels are low are the authorities making efforts to increase capacity through dredging and removing silt?	The removal of silt is prohibitively expensive. Fortunately rivers in this area have relatively low levels of silt.
		In peri-urban areas of Chelsea and Theescombe there are concerns over reduced groundwater yield and water quality problems. These areas do not have municipal water supply.	The Department has monitoring boreholes throughout the area. However, the Department also relies on people to inform them if there is a problem to ensure that samples are collected in the area. Please contact the Department and inform them of your concerns.
		Would it not be a good idea to conserve water while it is still available? Our industry has learnt some valuable lessons in reducing water consumption and using water wisely. Shouldn't the NMBM put incentives in place to reward consumers who reduce their water consumption?	The NMBM is investigating a new tariff structure that will create an incentive for consumers to reduce their water requirements.
Brian Haywood	Private	What is the combined level of all the dams supplying the NMBM	35%

6. CONCLUSIONS OF THE PUBLIC MEETINGS

The public participation specialists on the study team were of the opinion that the public participation at the public meetings had been a success as all participants were generally satisfied with the level of information given by the study team. The public participants demonstrated a high level of understanding at the public meetings as reflected in the nature of the questions posed. This is generally regarded as a good indication of the degree of comprehension by participants in any public participation process.

A further indication of successful communication and awareness creation was the open and transparent responses provided to all questions posed to the panel. This created a sense of trust between the participants in the meeting and the study team, as there was no attempt made to mislead or misdirect questions. In conclusion, the public participation and awareness contributed towards the successful completion of the project.

APPENDIX A
PROJECT STAKEHOLDER DATABASE

ALGOA RECONCILIATION STRATEGY STUDY: STAKEHOLDER DATABASE

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
DWA NATIONAL OFFICE							
Ms Thandeka Mbassa	DDG: Regions	Deputy Director General	012 336 7500				P/Bag X313, Pretoria, 0001
Peter van Niekerk	CD: Planning	Senior DWAF Manager	012-336 8762	012-336	082 807 4981	niekerk@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Johan van Rooyen	D: NWRP	Senior DWAF Manager	012-336 8814	012-336 8295	082 808 5652	javr@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Isa Thompson	D: NWRP CE: South	Study Manager	012 336 8647	012-336 8295	082 805 2158	thompsoni@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Archie Thobejane	D: NWRP South	Study management	012-336 7869	012-336 8295	082 903 4218	ThobejaneA@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Frans Stoffberg	D: NWRP	Managed previous studies	012 336 8319	012-336 8295	082 808 5650	StoffbergF@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Solly Mabuda	D: Options Analyses	Senior DWAF Manager	012-336 8244	012-336 7399	082 703 5742	iza@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Alan Brown	D: OA CE: South	West Coast Study	012 336 8321	012-336 8295	082 884 1842	BrownA@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Qingbo Cai	D: OA DCE: South	West Coast Study	012 336 8096	012-336 7399	082 600 5520	dbe@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Thabo Masike	D: WUE	WC/WDM	012- 336 6793	012- 336 8086	082 804 3325	MasikeT@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Samke Mabaso	DWAF: WUE	WC/WDM	012- 336 7878	012- 336 8086	082 881 9806	MabasoS@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Zanele Maphumulo	DWAF: WUE	WC/WDM	012- 336 8293	012- 336 8086	083 641 3646	MaphumuloZ@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Fanus Fourie	D: WRPS	Groundwater	012-336 8835	012- 336 6731	082 801 5598	FourieS@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Pieter Viljoen	D: WRPS	Water quality	012-336 7500	012- 336 6731	082 808 0497	Viljoen@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Beason Mwaka	D: WRPS	System Operation	021-336 8188	021-336 6730	082 807 6621	MwakaB@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Rob Schwab	D:WRPS		012 336 7512	012 336 6731	0828095372	ice@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Jenny Pashkin	D:WRPS (SO)		012 336 8695	012 336 6731	082 804 3143	ige@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Mr Helgard Muller	CD: Water Services	Water Services	012 336 6567	021 323 3877	082 807 4332	vaa@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Mr Mbuso Zama	D: Water Sector Development	Water Services	012 336 6717	012 336 6673		vii@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Ms Thoko Sigwaba	D: Water Sector Regulation	Water Services	012 336 6600	012 323 3877	082 908 4375	sigwazat@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Mr Stephen Marais	DD: Planning Frameworks	Water Services Planning	012 336 8276	012 321 1193	082 808 0408	nah@dwaf.gov.za	P/Bag X313, Pretoria, 0001

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
Mr Allestair Wensely	DD: Water Services Information	Information Systems	012 336 8767	012 321 1193	082 808 5950	vcc@dwaf.gov.za	P/Bag X313, Pretoria, 0001
Mr Norman Nokeri	DD: Regional Institutions		012 336 8194	012 336 6673	082 807 4347	vqd@dwaf.gov.za	P/Bag X313, Pretoria, 0001
DWA REGIONAL OFFICE EASTERN CAPE							
Ms Nomondi Mnkwa	CD: ECR	Senior DWAF Manager	043 604 5402	043 604 5592		MnkwaN@dwaf.gov.za	P/Bag X7485, KWT, 5600
Mr Zolile Keke	ECR	RD: Institutional Establishment	043-604 5403	043-604 5592	082 8074971	kekez@dwaf.gov.za	P/Bag X7485, KWT, 5600
Mr Mzuvukile Tonjeni	ECR	Act CMA Manager	043 7010376		082 908 3185	tonjenim@dwaf.gov.za	
Mr Theo Geldenhuys	ECR	CE: Regulation & Use	048-881 3005	048-881 3545	082 808 0499	geldent@dwaf.gov.za	P/Bag X68, Cradock, 5880 or: Sprigg Str 50, Cradock, 5880
Mr Steven Mullineux	DCE: Water regulation and use (WR&U)	DCE: Regulation & Use	048-881 3005	048 881 3545	082 809 5687	Mullins@dwaf.gov.za	P/Bag X68, Cradock, 5880 or: Sprigg Str 50, Cradock, 5880
Mr Dewald Coetzee	RD: Southern Operations (NWRI)	RD: National Water Resources Infrastructure	041 586 0376 041-586 4884	041 586 0376	083 627 5920	CoetzeD@dwaf.gov.za	P/Bag X6041, Port Elizabeth, 6000
Mr Glenn Daniel	ECR	DD:NWRI	041-586 4884	041 586 0376	082 809 5904	DanielG@dwaf.gov.za	P/Bag X6041, Port Elizabeth, 6000
Mr Martin Labuschagne	ECR	DD:WCDM	048 881 3005	048 881 3545	083 627 5925	LabuscM@dwaf.gov.za	P/Bag X68, Cradock, 5880 or: Sprigg Str 50, Cradock, 5880
Mr Rogers Jack	ECR	DD: Water services	043 604 5467	043-604 5470	082 809 5099	JackR@dwaf.gov.za	P/Bag X7485, KWT, 5600
Mr Galelo Mbambisa	ECR	RD: Water Sector Support	043 604 5402	043 604 5592	083 627 5929	MbambiG@dwaf.gov.za	P/Bag X7485, KWT, 5600
Mr Andrew Lucas	ECR	DD: Regulation & Use	043-722 3805	043-743 3910	082 802 8564	lucasa@dwaf.gov.za	P O Box 7019 East London 5200
Mr Michael Kawa	ECR	Working for Water	043 7010376			kawam@dwaf.gov.za	
NMBM							
Mr Barry Martin	NMBM		041-506 5435	041-506 5476		bmartin@mandelametro.gov.za	P O Box 7 Port Elizabeth 6000
Mr Stuart Fergusson	NMBM		041-506 2414	041-506 5476	079 490 0734	sferguson@mandelametro.gov.za	P O Box 7 Port Elizabeth 6000
Mr Stan Groenewald	NMBM		041-506 2258	041-506 5476	079 490 0716	stan@mandelametro.gov.za	P O Box 7 Port Elizabeth 6000
Mr Paul du Plessis	NMBM		041-506 2514	041-506 5476	079 490 0693	pdupless@mandelametro.gov.za	P O Box 7 Port Elizabeth 6000
Mr G Snow	NMBM		041 379 1433		084 603 5548	Gavin.snow@nmmu.ac.za	P O Box 7 Port Elizabeth 6000
MUNICIPALITIES							
Mr Piet Snyman	Cacadu DM	Infrastructure Manager	041 508 7335	041 508 7276	083 453 8119	psnyman@cacadu.co.za	P O Box 318 Port Elizabeth 6000
Dayalan Pillay	Cacadu DM	Municipal Manager	041 508 7114	041 508 7066	083 458 9641	tpillay@cacadu.co.za	P O Box 318 Port Elizabeth 6000

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
Moppo Mene	Blue Crane LM		042 243 1333	042 243 1548	082 323 4259	Moppo.mene@lgnet.org.za	P O Box 21 Somerset East 5850
Jama Vumazonke	Baviaans LM	Municipal Manager	044 923 1004	044 923 1122	084 510 3210	jamav@lgnet.org.za	P O Box 15 Willowmore 6445
Moegamat Abdullah	Sundays River Valley LM	Acting Municipal Manager	042 230 0310	042 230 1799	083 457 7684	svr@telkomsa.net	
Mr D Smith	Kouga Municipality	Councillor			082 307 2286	devillesmith@absamail.co.za	45 Geelhout Avenue, Humansdorp, 6300
PROVINCIAL GOVERNMENT							
Mr Mbulelo Sogoni	Eastern Cape Premier		040 609 6301	040 635 1166		premier@otp.ecprov.gov.za	Private Bag X0047, Bhisho, 5605
DG: Premiers Office							
Dr. E. Nkem Abonta	HOD: DEDEA		040 609 3235	040 609 3219		thulani.rorwana@deaet.ecape.gov.za	Private Bag X0054, Bhisho, 5605
Ms P Mzazi-Geja	DEDEA		040 609 3235	040 609 3219		junita.delange@deaet.ecape.gov.za	Private Bag X0054, Bhisho, 5605
Thokozile Xasa	Prov Dept of Housing		040 639 4331	040 639 2135			Private Bag X0026, Bhisho,5605
Mr Gugile Nkwinti	MEC: Agriculture	MEC	040 609 3472 / 3603	040 636 3462		gugile.nkwinti@agr.ecprov.gov.za	Private Bag X0040, Bhisho,5605
Sam van der Merwe	Provincial Dept of Agriculture and Land Affairs		042-273 1342	042-273 2657	082 650 9435	sam.m@agr.ecprov.gov.za	PO Box 26, Joubertina, 6410
Kowie Joubert	Provincial Dept of Agriculture and Land Affairs		043-683 5404	043-683 1829	083 286 0363	kowie.joubert@agr.ecprov.gov.za	Private Bag X15 Stutterheim 4930
Mr J Govender	Department of Economic Development and Environmental Affairs		041-508 5800	041-585 1958	082 854 5395	dayalan.govender@deaet.ecape.gov.za	Private Bag X5001 Greenacres 6051
Adv Amon Nyondo	Head of Department: Provincial Dept of Agriculture and Land Affairs		040 609 3471	040 635 0604		amon.nyondo@agr.ecprov.gov.za	Private Bag X0040, Bhisho,5605
Mr Dali Matta	CD: Land Affairs		043 700 7000	043 743 4786	082 574 9132		PO Box 1958, EL, 5200
Mr Henk Prinsloo	DD:Land Reform	Cacadu Land Reform Office	041 363 7888	041 363 8588	082 331 5663		
Ms Linda Faleni	Eastern Cape Land Claims Commissioner	Land Claims Office	043 700 6000	043 743 3687			
Mr Zukile Pityi	CD: Agriculture		040 609 3596	040 639 1977	082 559 8219	zukile.pityi@agr.ecprov.gov.za	P/Bag X 0040, Bhisho, 5605
Ms Mary Jean Gabriel	D: Water Use and Irrigation Development		012 846 8567	012 846 8576	082 555 8064	dwuid@nda.agric.za	Private Bag X515 Silverton Pretoria,0001

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
Mr Thembani Nyokana	AD: Agriculture	Cacadu District			086 659 1715	Thembani.nyokana@agr.ecprov.gov.za	
Ms Thokozile Xasa	MEC: HLGTA	Housing, Local Govt. and Traditional Affairs	040 609 5789	040 639 2135 / 040 609 5218		lungisa.sangela@dhlqta.ecape.gov.za	Private Bag X0026, Bisho, 5605
Mr Sindisile Maclean	HOD: HLGTA	Housing, Local Govt. and Traditional Affairs	040 609 5658	040 639 2163/ 609 5218	082 555 5573	Sindisile.maclean@dhlqta.ecape.gov.za	Private Bag X0035, Bisho, 5605
Mr K Nkantsu	D: Housing	Housing, Local Govt. and Traditional Affairs	040 609 2831	040 609 2832	082 856 3557	Mzi.mkantsu@dhlqta.ecape.gov.za	P/Bag X 0035, Bisho, 5605
Mr J Makgato	MEC Dept. of Education	MEC	040 608 4202/3/47	040 608 4249		nomandla.gobeni@edu.ecprov.gov.za	Private Bag X0032, Bisho, 5605
Mrs N Mahanjana	HOD Dept. of Education		040 608 4205	040 608 4249		nyamie@edu.ecprov.gov.za	Private Bag X0032, Bisho, 5605
Ms Nomsa Jajula	MEC Dept. of Health	MEC	040 609 3998	040 609 3892		anele.homani@impilo.ecprov.gov.za	Private Bag X0038, BISHO, 5605
Mr L Boya	HOD Dept. of Health		040 609 3650	040 635 0115		lawrence.boya@impilo.ecprov.gov.za	Private Bag X0038, BISHO, 5605
Pierre Leppan	ECDC	Eastern Cape Development Corporation	043 704 5600	043 743 6036		pleppan@ecdc.co.za	PO Box 11197, Southernwood, East London, 5213
TRADITIONAL LEADERS							
Lebenya, Chief K G	House of Traditional Leaders	Economic Desk	039 737 4959		082 385 3889		P O Box 752, Matatiele, 4730
Sigcau, Princess Fiziwe	House of Traditional Leaders	Economic Desk	039 253 1348		078 357 9872	mbozi77@yahoo.com	P O Box 2, Lusikisiki, 4820
WUAs and IRRIGATION BOARDS							
Pierre Joubert	Gamtoos IB		042 283 0329	042 283 0382	082 553 0947/41	pioubert@lantic.net	P O Box 237, Patensie, 6335
Harms du Plessis	Lower-Sundays IB		042-234 0022	042 234 0038	082 824 1548	info@sundaysriverwater.co.za	PO Box 10, Sowland 6115
Merwe du Preez	Gamtoos IB		042 283 0704	042 283 0704	082 719 8821	merwe@igen.co.za	PO Box 237 Patensie 6335
ELECTED REPRESENTATIVES							
Vumile Lwana	CLLR Cacadu: Water Portfolio		041 508 7103	041508 7133		viwana@cacadu.co.za	P.O. Box 318, Port Elizabeth, 6000
Phindile Faxi	CLLR Cacadu: Economic Portfolio		041 508 7153	041508 7133		pfaxi@cacadu.co.za	P.O. Box 318, Port Elizabeth, 6000
C de Vuyo Macozoma	Cosatu	Administrator	043 743 1951	043 743 6334		vuyo@cosatu.org.za	
Mandla Makhupulo	SACP	Provincial Secretary	040 635 0463	040 635 0463	082 418 9421	ecape@sacp.org.za	178 Buffalo Road King William's Town, 5601
T J Nadada	NAFCOC	President	047 573 1892				

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
Leon de Villiers	DA: Nelson Mandela Metro (Port Elizabeth)		041 379 5219	041 379 4464	083 577 9694	leonjohan@telkomsa.net	P O Box 7558, Newton Park, PE. 6055
Stone Sizani	ANC: Eastern Cape	Chairman	043 642 4434/5	043 642 4436			PO Box 2165 King Williams Town , 5601
Sephatho Handi	ANC: Eastern Cape	Secretary	043 642 4434/5	043 642 4436			PO Box 2165 King Williams Town , 5601
NON-GOVERNMENT ORGANISATIONS							
Ms F F Mkile	National African Farmers Union	NAFU	047 531 4064	047 531 4064	082 309 2784	ortafa@telkomsa.net	83 Madeira Street, Mthatha
Mr LNP Moahloli	National African Farmers Union	NAFU Secretary Eastern Cape	047 532 2446	047 532 2447	083 794 3947	moahloli@webmail.co.za	83 Madeira Street, Mthatha
Mr M Poto	National African Farmers Union	NAFU President: Eastern Cape		047 532 2447	083 667 5213	potomxo@yahoo.com	P O Box 1037, Mthatha, 5700
Mr C J Pieterse	AGRI SA	AGRI-EC Chairperson	041 363 1890	041 363 1896	082 636 2079		P O Box 34889 Newton Park 6055
Mr M Mangold	AGRI SA	AGRI-EC Water portfolio	043 745 2264	043 745 2348	083 650 4838	mmangold@mweb.co.za	PO Box 3179, Cambridge, 5206
Mr W Kritzinger	AGRI SA	AGRI-EC Water portfolio	041 363 1890	041 363 1896			
Mr Pieter Kruger	Baviaanskloof Western Farmers Association		049 839 1002	049 839 1181	076 890 2201	info@baviaanskloof.com	P O Lulet District Willowmore 6452
Mr Rodney February	WWF	Baviaans rehabilitation	021 888 2800	021 888 2888		rfebruary@wwf.org.za	
S Hoffmann	Deer Park Residents Association						
MEDIA							
	EP Herald						
	Die Burger						
	Daily Dispatch						
	Umhlobo w'nene	Community radio					
	SABC1						
	Algoa FM						
INDUSTRIES							
Odwa Mtati	PERCCI	CEO	041 373 1122	041 373 1142		info@percci.co.za	P O Box 63866 GREENACRES 6057
Bev Mattheus	PERCCI		041 373 1122			bev@pechamber.org.za	
Viwe Biyana	Coega IDZ		041 403 0661	041 403 0401		View.biyana@coega.co.za	Private Bag X3130, Humewood, port

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
							Elizabeth, 6013
	East Cape Tourism Board		043 701 9600	043 701 9649			P O Box 18373, Quigney, East London, Eastern Cape, 5211
Mr K Vermaak	Astore Africa		041 486 1370	041 486 1373		jvermaak@astore.co.za	PO Box 2455, North End, Port Elizabeth
Mr K E Holejane	MTTL Logistics cc				073 944 5550		8 Marla Crescent
Mr H Cook	Metsi Water Solutions		041 406 9729	041 486 2621	083 388 8220	hiltoncook@kingsley.co.za	
Mr D Fourie	Cadbury SA (Pty)		041 392 2414	041 392 2474	071 861 9049	Dawid.fourie@cadbury.com	171 Harrower Road, Kenginton, Port Elizabeth
Mr M Viljoen	Cadbury SA (Pty)		041 392 2345		084 548 0208	Martin.viljoen@cadbury.com	
M G Nel	SRK		043 748 2692	043 748 1811	083 281 0056	gnel@srk.co.za	Palm Square, Oakwood, House Bonanza Bay Road
Mr PJ Muller	Floradale Nurseries		041 368 5169		084 603 5548	pi@floradale.co.za	
PROFESSIONALS AND INDIVIDUALS							
Dr Janine Adams	Nelson Mandela Metropolitan University	Environmental Research	041 5042429	041 5832317		Janine.Adams@nmmu.ac.za	P.O. Box 77000, Nelson Mandela University, Port Elizabeth, 6031
Mr J Roberts	LLM Leyden University				076 406 0357	Joost.roberts@gmail.com	13 Marcia Way, Providentia, Port Elizabeth
STUDY TEAM							
Dr André Görgens	Aurecon	Study Director	021-481 2452	021-424 5588	082 492 8855	andre.gorgens@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Erik van der Berg	Aurecon	Study Leader	021-481 2462	021-424 5588	082 553 5795	erik.vanderberg@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Dr Mike Shand	Aurecon	Reviewer	021-481 2444	021-424 5588		Mike.shand@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Dale Cobban	Aurecon	Task Leader	021-481 2447	021-424 5588	079 510 6790	Dale.Cobban@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Mike Killick	Aurecon	RPST/Scenario analy's	021-481 2462	021-424 5588	082 436 3695	mike.killick@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Kevin Hundley	Aurecon	Agricultural water requirements	021 481 2476	021-424 5588		Kevin.hundly@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Simone Lyons	Aurecon	PM Support	021 481 2400	021-424 5588		Simone.lyons@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Ashwin West	Aurecon	Environmental	021-481 2509	021-424 5588	083 661 9821	ashwin.west@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Nico Rossouw	Aurecon	WQ specialist	021-481 2451	021-424 5588	082 493 1570	nico.rossouw@af.aurecongroup.com	P O Box 494, Cape Town, 8000

Contact Person	Company	Role	Telephone	Fax	Cell	Email	Address
Anton Sparks	Aurecon	Hydrology/system an's	021-481 2456	021-424 5588		anton.sparks@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Louise Hayes	Aurecon	Hydrology/system an's	021 481 2400	021-424 5588		Louise.hayes@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Karen Versfeld	Aurecon	PM Support	021 481 2400	086 609 6359		Karen.versfeld@af.aurecongroup.com	P O Box 494, Cape Town, 8000
Dup van Reenen	Afri-Coast Engineers SA	WDM, reuse, system operation, reporting	041-505 8000	041-585 3437	082 785 3838	dupva@afriacoast.com	14 Rose street Central Port Elizabeth PO Box 5104, Walmer 6065
Tsepang Setipa	Afri-Coast Engineers SA	Public participation	041-505 8000	041-585 3437	073 1900130	tsepang@afriacoast.com	14 Rose street Central Port Elizabeth PO Box 5104, Walmer 6065
Dr Ricky Murray	Groundwater Africa	Groundwater	021 881 3082	021-881 3082	082 323 8303	ricky@groundwaterafrica.co.za	PO Box 162, Lynedoch, 7603
R Goedhard	Groundwater Africa	Groundwater	021 881 3082				PO Box 162, Lynedoch, 7603
Zahn Munch	Groundwater Africa	Groundwater - GIS	021 881 3082				PO Box 162, Lynedoch, 7603
Dr Rolfe Eberhard	PDG	Water requirements	021-797 3660	021-797 3671	083 277 3152	rolfe@pdg.co.za	PO Box 53123, Kenilworth, 7745
Shehnaaz Moosa	PDG	Water requirements	021-797 3660	021-797 3671		shehnaaz@pdg.co.za	PO Box 53123, Kenilworth, 7745
Jillian Sykes	PDG	Economic analyses	021-797 3660				PO Box 53123, Kenilworth, 7745
Dr Patsy Scherman	Scherman Consulting	Reserve	046-622 8241	046-622 7950	082-503 6070	patsy@itsnet.co.za	22 Somerset Street, Grahamstown 6139
S Hoffmann	Deer Park Residents Association						1st Floor, Allandor House, 117 Parliament Street, Central, Port Elizabeth
Koot Vermaak	Astore Africa	Sales Manager	041 486 1370	041 1373		jvermaak@astore.co.za	1st Floor, Allandor House, 117 Parliament Street, Central, Port Elizabeth
Khotso Eric Holejane	MTTL Logistics cc				073 944 5550		1st Floor, Allandor House, 117 Parliament Street, Central, Port Elizabeth

APPENDIX B
NEWSPAPER ADVERTISEMENTS

**ANNOUNCEMENT OF PUBLIC MEETING:
PLANNING OF BULK WATER SUPPLY TO
NELSON MANDELA BAY MUNICIPALITY
AND SURROUNDING TOWNS**

To aid future water resource planning, the Department of Water Affairs and Forestry has appointed an association of consultants, which include Ninham Shand Consulting Services and Afri-Coast Engineers, to undertake a study that will develop a strategy for the reconciliation of future water requirements with supply for the Algoa Water Supply System. The System serves the residents of Nelson Mandela Bay Municipality and surrounding towns, irrigators and industrial users.

THE FIRST PUBLIC MEETING WILL BE HELD AS FOLLOWS:

* 18h00 on Tuesday, 26 August in the Port Elizabeth City Hall.

You are also invited to register as an interested party by sending your contact details to:

Tiitsetso Leshoedi / Tsepang Setipa
PO Box 12012, Centrahill, 6006
Email: Tiitsetso@mgpconsulting.co.za
Fax: 041 582 3810
Phone: 041 582 3274 or 041 505 8000



water & forestry
Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

2208151838/LN

Advertisement for the first Public Meeting

**ANNOUNCEMENT OF PUBLIC MEETING:
PLANNING OF BULK WATER SUPPLY TO
NELSON MANDELA BAY MUNICIPALITY
AND SURROUNDING TOWNS**


To aid future water resource planning, the Department of Water Affairs and Forestry has appointed an association of consultants, which include Ninham Shand Consulting Services and Afri-Coast Engineers, to undertake a study that will develop a strategy for the reconciliation of future water requirements with supply for the Algoa Water Supply System. The System serves the residents of Nelson Mandela Bay Municipality and surrounding towns, irrigators, and industrial users.

THE SECOND PUBLIC MEETING WILL BE HELD AS FOLLOWS:

* 17:30 on Wednesday 18 March 2009
in the Port Elizabeth City Hall

You are also invited to register as an interested party by sending your contact details to:

Thanda Biu
PO Box 5104, Walmer, 6065, Port Elizabeth
Email: thandob@afriacoast.com
Fax: (041) 585 3437
Phone: (041) 505 8000



water & forestry
Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

Kulola

NO	ORIGIN
MN909	B734
MN901	B734

SA Express

No	Ort
SA8621	CPT
SA1501	JNB
SA8625	CPT
SA8627	CPT
SA1505	JNB
SA8617	DUR
SA8635	CPT
SA509	JNB

FLIGHT NO

SA8700	ETD
SA8622	0650
SA1502	0815
SA8516	0930
SA8628	1110
SA1506	1210
SA8630	1455
SA8636	1505
SA1510	1745
	1805

Tide table

SUN	
Rise	Set
9	6:11
10	6:12
11	6:12
12	6:13
13	6:14
14	6:15
15	6:15
16	6:16
17	6:17
18	6:18
19	6:19
20	6:20
21	6:20

Advertisement for the second Public Meeting

ALGOA-STELSEL: HUISHOUELIKE EN INDUSTRIËLE WATERBESKIKBAARHEID

Periode	Water gebruik (miljoen kubieke meter)
Water gebruik in 2009	~80
Water beskikbaar soos op 1 Januarie 2010	~70
Water gebruik tot op hede (1 Jan tot 31 Maart 2010)	~15
285 dae van water oor vir waterverbruikers uit die Algoa-stelsel	~15

NELSON MANDELABAAI METRO STAAR 'N WATERRAMP IN DIE GESIG

Teen die huidige tempo van waterverbruik sal die water in die Algoa-Stelsel net tot die einde van hierdie jaar hou!

Die Algoa-watervoorvoersieningstelsel sluit nie water verkry uit die Gariëpdam, wat oor voldoende water beskik, in nie.

Van die Metro se water word net 32% uit die Gariëpdam voorsien.

Dit is in die belang van almal in die Metro en omliggende gebiede om dringend water te bespaar en so 'n RAMP te voorkom.

DAMME IN ALGOA-STELSEL

(1) KOLUGA (2) LOERIE (3) IMPOFU (4) CHURCHILL (5) GROENDAL

water affairs
Department: Water Affairs
REPUBLIC OF SOUTH AFRICA

18PWEAD-0104 10-05-08 - water2

AANKONDIGING VAN OPENBARE VERGADERING: BEPLANNING VAN GROOTMAATWATEROORSIENING AAN NELSON MANDELABAAI MUNISIPALITEIT EN OMLIGGENDE GEBIEDE

Om te help met toekomstige waterhulpbronbeplanning, het die Departement van Waterwese 'n vereniging van konsultante, wat Aurecon en Afri-Coast Ingenieurs insluit, aangestel om 'n studie te doen vir die ontwikkeling van 'n strategie met die doel om toekomstige waterbehoefes te balanseer met voorsiening vir die Algoa-watervoorvoersieningstelsel. Die stelsel bedien die inwoners van Nelson Mandelabaai Munisipaliteit en omliggende gebiede, besproeiërs en industriële verbruikers. Hierdie is die derde openbare vergadering om die langtermynstrategie aan te bied vir die versekering van die rekonsiliasie van toekomstige voorsiening en behoeftes. Hierdie studie en heersende droogte beklemtoon die belangrikheid van 'n volhoubare toekomstige watervoorvoersiening aan die Nelson Mandelabaai Munisipaliteit.

DIE DERDE OPENBARE VERGADERING SAL SOOS VOLG GEHOU WORD:
17:30 op Donderdag 29 April 2010 in die Port Elizabeth Stadsaal

U word ook genooi om as 'n belanghebbende party te registreer deur u kontakbesonderhede te stuur aan:
Tsepang Setipa Posbus 5104, Walmer, 6065
Epos: tsepang@afriacoast.com Faks: (041) 585 3437 Tel. (041) 505 8000

As deel van die toekomstige waterhulpbronbeplanning vir die Nelson Mandelabaai Munisipaliteit (NMBM) gebied, is die Departement van Waterwese besig met die ontwikkeling van 'n langtermyn rekonsiliasie-strategie wat ten doel het om te verseker dat daar altyd watervoorraad is om te voldoen aan die redelike waterbehoefes van verbruikers in die gebied. Dit sal bereik word deur die voortgesette rekonsiliasie van die beskikbare waterbronne van die Algoa-watervoorvoersieningstelsel aan die een kant en die toekomstige behoeftes van waterverbruikers wat deur die stelsel voorsien word, aan die ander kant. Die stelsel bedien die inwoners en nywerhede van NMBM asook die omliggende dorpe en besproeiingsgebiede. Die strategie-ontwikkeling word gedoen in noue samewerking met hierdie verbruikersgroepe. Neem asseblief kennis dat die projek nie die huidige droogteverwante kwessies direk sal aanspreek nie.

water affairs
Department: Water Affairs
REPUBLIC OF SOUTH AFRICA

18LUVVA-010410-08-03 - water

THE HERALD MONDAY
APRIL 12, 2010 **15**

**ANNOUNCEMENT OF PUBLIC MEETING:
PLANNING OF BULK WATER SUPPLY
TO NELSON MANDELA BAY MUNICIPALITY
AND SURROUNDING TOWNS**

To aid future water resource planning, the Department of Water Affairs has appointed an association of consultants, which include Aurecon and Afri-Coast Engineers, to **undertake a study** that will develop a strategy which aims to **balance the future water requirements with supply for the Algoa Water Supply System**. The System serves the residents of Nelson Mandela Bay Municipality and surrounding towns, irrigators, and industrial users. This is the third public meeting to present the long term strategy to ensure the reconciliation of future supply and requirements. This study, and current drought, emphasizes the importance of a sustainable future supply to the Nelson Mandela Bay Municipality.

THE THIRD PUBLIC MEETING WILL BE HELD AS FOLLOWS:

▪ **17h30 on Thursday, 29 April 2010 in the Port Elizabeth City Hall**

You are also invited to register as an interested party by sending your contact details to:

Tsepang Setipa PO Box 5104, Walmer, 6065
e-mail: tsepang@afriacoast.com Fax: 041 585 3437, Phone: 041 505 8000

As part of the future water resources planning for the Nelson Mandela Bay Municipality (NMBM) area, the Department of Water Affairs is developing a long-term reconciliation strategy which aims to ensure that there will always be adequate water supplies to meet the reasonable water requirements of users in the area. This will be achieved through the ongoing reconciliation of the available water resources of the Algoa Water Supply System on the one hand and the future water needs of the water users supplied by the System on the other hand. The System serves the residents and industries of NMBM, as well as surrounding towns and irrigation areas. The strategy development is being done in close collaboration with those user groups. Note that the project will not directly address the current drought-related issues.



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

1204H51700/JM

APPENDIX C
PUBLIC MEETING PROGRAMMES



Water Reconciliation Strategy Study for the Algoa Water Supply Area



First Public Meeting

Tuesday, 26 August 2008, Port Elizabeth City Hall

PUBLIC MEETING OBJECTIVES

The objectives of the meeting are to:

- Present to stakeholders the technical and public engagement process that is being followed to develop a Water Reconciliation Strategy for the Algoa Water Supply Area.
- Provide an opportunity for stakeholders to comment on the technical and public engagement process followed to develop a Water Reconciliation Strategy.
- Strengthen the partnership between the DWAF and key stakeholders.

PROGRAMME

Master of Ceremony: Mr Ayanda Peter

- | | |
|--------------|---|
| 17:30 | Registration and Reception |
| 18:00 | Meeting objectives and rules
<i>Master of Ceremony, Mr Ayanda Peter</i> |
| 18:10 | Welcome and introduction
<i>Councillor Tokota (NMBM PORTFOLIO Cllr)</i> |
| 18:20 | Foreword
<i>Mr Galelo Mbambisa (Director WSS, Eastern Cape, DWAF)</i> |
| 18:30 | Background, need for the study and objectives
<i>Ms Isa Thompson (National Water Resources Planning, DWA)</i> |
| 18:45 | Overview of the Algoa Water Supply System
<i>Mr Ali Said (Executive Director: Infrastructure & Engineering, NMBM)</i> |
| 19:00 | Overview of the study
<i>Mr Erik van der Berg (Aurecon)</i> |
| 19:20 | Comments and questions
<i>Mr Ayanda Peter</i> |
| 19:50 | Overview of public process, way forward and contact details
<i>Mr Ayanda Peter</i> |
| 20:00 | Word of thanks and closure
<i>Councillor Tokota (NMBM PORTFOLIO Cllr)</i> |

THANK YOU FOR YOUR VALUED PARTICIPATION



Water Reconciliation Strategy Study for the Algoa Water Supply Area



Second Public Meeting

Wednesday, 18 March 2009, Port Elizabeth City Hall

PUBLIC MEETING OBJECTIVES

The objectives of the meeting are to:

- Present the Preliminary Strategy that has been developed for the Algoa Water Supply Area to stakeholders.
- Provide an opportunity for stakeholders to comment on the Preliminary Strategy.
- Strengthen the partnership between the DWAF and key stakeholders.

PROGRAMME

Master of Ceremony: Mr Tsepang Setipa

- | | |
|--------------|--|
| 17:30 | Registration and Reception |
| 18:00 | Meeting objectives and rules
<i>Master of Ceremony, Mr Tsepang Setipa</i> |
| 18:10 | Introduction of the Team
<i>Mr Tsepang Setipa</i> |
| 18:15 | Welcome and introduction
<i>Councillor Tokota (NMBM PORTFOLIO Cllr)</i> |
| 18:20 | Foreword
<i>Mr Andrew Lucas (Water Regulations and Use, Eastern Cape, DWA)</i> |
| 18:25 | Background to the Strategy
<i>Ms Isa Thompson (National Water Resources Planning, DWA)</i> |
| 18:40 | Water requirements and availability
<i>Mr Barry Martin (NMBM)</i> |
| 18:55 | Preliminary Strategy
<i>Mr Erik van der Berg (Aurecon)</i> |
| 19:15 | Overview of public process, way forward and contact details
<i>Mr Tsepang Setipa</i> |
| 19:25 | Comments and questions
<i>Mr Tsepang Setipa</i> |
| 19:55 | Word of thanks and closure
<i>Councillor Tokota (NMBM PORTFOLIO Cllr)</i> |

THANK YOU FOR YOUR VALUED PARTICIPATION



Water Reconciliation Strategy Study for the Algoa Water Supply Area



Third Public Meeting

PUBLIC MEETING OBJECTIVES

The objectives of the meeting are to:

- Present the Final Reconciliation Strategy that has been developed for the Algoa Water Supply Area to stakeholders.
- Provide an opportunity for stakeholders to comment on the Final Reconciliation Strategy.
- Strengthen the partnership between the DWA and key stakeholders.

PROGRAMME

Master of Ceremony: Mr Tsepang Setipa

- | | |
|--------------|--|
| 17:30 | Registration and Reception |
| 18:00 | Meeting objectives and rules
<i>Master of Ceremony, Mr Tsepang Setipa</i> |
| 18:10 | Introduction of the Team
<i>Master of Ceremony, Mr Tsepang Setipa</i> |
| 18:15 | Welcome and introduction
<i>Councillor Tokota (NMBM PORTFOLIO Cllr)</i> |
| 18:20 | Foreword
<i>Mr Andrew Lucas (Water Regulation and Use, Eastern Cape, DWA)</i> |
| 18:25 | Background to the Strategy
<i>Ms Isa Thompson (National Water Resources Planning, DWA)</i> |
| 18:40 | Water requirements and availability
<i>Mr Barry Martin (NMBM)</i> |
| 18:55 | Final Reconciliation Strategy
<i>Mr Mike Shand (Aurecon)</i> |
| 19:15 | Overview of public process, way forward and contact details
<i>Mr Tsepang Setipa</i> |
| 19:25 | Comments and questions
<i>Master of Ceremony, Mr Tsepang Setipa</i> |
| 19:55 | Word of thanks and closure
<i>Councillor Tokota (NMBM PORTFOLIO Cllr)</i> |

THANK YOU FOR YOUR VALUED PARTICIPATION

APPENDIX D
ATTENDANCE REGISTER PUBLIC MEETINGS

Second Public Meeting: 18 March 2009

ALGOA RECONCILIATION STRATEGY STUDY					
REGISTRATION FORM					
NAME & SURNAME	COMPANY	TEL NO.	FAX NO.	E-MAIL ADDRESS	SIGNATURE
DENNIS BEHEMANN	DWAF WS: P&I	012 336 6610	012 336 6609	icf@dwaf.gov.za	
Hugh Lloyd	DWR	082 086 2433		hugh@ucon.co.za	
G. Daniell	DWAF	041 586 4884	041 586 0379	daniellg@dwaf.gov.za	
LEON DE VILLIERS	NHBM	083 577 9694	041-3794464	leonjohan@telkom.net	
REINHARD STRYDOM	DMW.	0825751801	0866307811	reinhard.strydom@guestroad.com	
Herman Goossens	DWAF	043-7010255	0866105738	gossesh@dwaf.gov.za	
COLLEEN RADENSA	AGRI EC.	041 956 0070	041 956 0077	colleen.ec@ec.co.za	
Michael Manson-Kullin	J&G	021 532 0940	021 532 0950	manson.kullin@jgi.co.za	
GERHARD BESTER	MSBA	041 365 6467	041 365 6476	gerhard@msba.co.za	
R Gardiner	SRK	041 509 4800	041 509 4850	rgardiner@srk.co.za	
Robyn Thomson	SRK	041 509 4800	041 509 4850	rthomson@srk.co.za	
MICHAEL ANDERSON	CDC.	041 403 0451		michael.anderson@cdc.co.za	
F.L. Carter	Elands Nursery - E.C.G.F.	041-9555671	041-9555994	rick@elands.co.za	
S. Mungai	SEFFRO ROSEBUSH	076 376 0211	041-3651374	SEFFRO@seffro.co.za	
V. LWANA	CACADA DM	041 508 7103	041 508 7272	vlwana@cacada.co.za	
Coetjee D	DWAF	041 586 4884	041 586 0379	coetjee@dwaf	
Iscia Thompson	DWAF NWKP(S)	012 336 8647	012 336 8295	thompson@dwaf.gov.za	
David Kaymer	URambiso Consult.	041 373 0180	041 373 0102	urambiso@intekom.co.za	
M Koranna Kelemp	Aruta	084512 6349		Myxaji@gmail.com	

ALGOA RECONCILIATION STRATEGY STUDY					
REGISTRATION FORM					
NAME & SURNAME	COMPANY	TEL NO.	FAX NO.	E-MAIL ADDRESS	SIGNATURE
Don Buchanan	Chemchlor	082-5514076	086-6840979	dbn@chemchlor.co.za	
B.J. MARTIN	NMBM	0415065435	041 506 2160	bmartin@mondlanthe.gov.za	
A.B. LUCAS	DWAF	0828028564		lucasab@dwaf.gov.za	A Lucas
P. Retief	DWAF-PE	041-5864884	041 586 4210	retiefp@dwaaf.gov.za	
B BASSON	GREEN ACRES NURSERY	041-3652817	3652819	ombasson@vkebo.co.za	
G.P. Mhambisa	DWAF - PI KWIT.	043-6045407	043-6045592	Mhambisa@dwaaf.gov.za	
MP LABUSCHAGNE	DWAF	046 8813005	046 8813945	labuschm@dwaaf.gov.za	
M.D. Toit	NMBM	0415054417	0415054418	Mtoit@dwaaf.gov.za	
THEO GELDENHUIS	DWAF EC	048 881 3005	048 881 3545	geldent@dwaaf.gov.za	
Sam vd Merwe	Dept of Agri	042 2731342		sam.vr@agr.ecprov.gov.za	

ALGOA RECONCILIATION STRATEGY STUDY
3RD PUBLIC MEETING-29 APRIL 2010
ATTENDANCE FORM

DATE	NAME & SURNAME	COMPANY	TEL NO.	FAX NO.	E-MAIL ADDRESS
29/4/10	BRUCE + LESLE ZASSON	GREEN ACRES NURSERY	0413652817	0413652819	ontrack@yebo.co.za
29/4/10	THOR.ESANE T. A	DWA	012 336 7869	012 336 8295	thor.esane@dwa.gov.za
29/4/10	Isa Thompson	DWA NWRP(S)	012 336 8647	012 336 8295	thompsoni@dwa.gov.za
	FRANS STOFFBERG	DWA NWRP	012 336 8319	012 336 8295	stoffbergf@dwa.gov.za
	Marie Convery	SOK	079 531 0244	041 509485	MConvey@SOK.CO.ZA
	Mike Skand.	Aurcon	021 481 2464	021 4245588	mike.skand@af.aurcongroup.com
	PIET LE ROUX	M&P/S/KW + C&M.	041 451 3249	041 460608	PIET@L&M.CO.ZA.
	PIETER JHANN MILLER	FLORADAGE NURSERY	041-3685169	041-3676623	P.J@FLORADAGE.CO.ZA.
	DANIE FOURIE	CADBURY	041 392 7444	041 392 2727	danie.fourie@cadbury.com
	GAVIN SNOW	NMMU	041379 1433	084-603-5548	GAVIN.SNOW@NMMU.AC.ZA
	MARTIN VILJOEN.	CADBURY	041-392 2345	0845480208	Martin.viljoen@cadbury.com.
	Marganita Cox	DWA	082 886 3507	041-581 1964	Coxm@dwa.gov.za
	Angus Clark	PERCCI	082 4108445	041 403 3091	angus.clark@gm.com
	Lushen Govender	GMSA	0824493380	-	Lushen.Govender@gm.com
	Hilfon Cook	Metsi Water Solutions	083 388 8220	041 486 2621	hilfcoock@kingskey.co.za
	PETER GOUMS	CHAPKINS	041-3681482	-	-
	Isaac Adams	WARD 11 CLLR (I.E&E)	082 303 7198	041 453 5056	IsaacAdams@ward11.gov.za
	Andrew Lucas	DWA.	0436045403		lucas_a@dwa.gov.za
	Pierre Louis Lemercier	Renewable ENERGY CENTER	076 1906884		pierre.louis.lemercier@renewable-energy.co.za
	Karen Versfeld.	AURECON.	08445 49944		Karen.Versfeld@af.aurecongroup.co.za
	David Raymer	URambiso Consult	041 373 0180	041 373 0102	draymer@urambiso.co.za
	Rick Carter	Elands Nursery	041-9515671	041-9515994	rick@elands.co.za

ALGOA RECONCILIATION STRATEGY STUDY
3RD PUBLIC MEETING-29 APRIL 2010
ATTENDANCE FORM

DATE	NAME & SURNAME	COMPANY	TEL NO.	FAX NO.	E-MAIL ADDRESS
	Joost Roberts		0264060552		joost.Roberts@gnwd.co.za
	Mr + Mrs Ferguson	M&M	0794900734		3Ferguson@MANDELAMETRO.GOV.ZA
	ILUVELIZEN	DWA	013 20 0762		iluzen@dwa.gov.za
	MELVIN MAXTASE	DWA	041-5824884	0865424188	maxtase@dwa.gov.za
	SIZWE BLIE	DWA	043 7010353	0866527723	blies@dwa.gov.za
	Mzukisi Tshiki	BAVIAANS Municipality	044 9231004	044 9231122	mtsili@baviaans.gov.za
	Brian Hayward	Weekend Post	0842502932		haywardb@ausa.co.za
	Mika Killick	Auricon	0833931224		
	Robin Williams	NMB	0794900066	041-9661738	rob.will@kantic.net
	STANFORD SWABBERT	CIR WIND I - DA	0829900907	083-0415817390	STANFORDSWABBERT@TELEKOMSA.NET
	THEO GELDENHUIS	DWA, EC	082 8080499	048 8813545	geldenhuis@dwa.gov.za
	MARTIN LABUSCHAGNE	DWA EC	0836275925	088813545	labuschagne@dwa.gov.za
	Bolekwé Kamq	DWA EC	0828876425	0866590188	kamab@dwa.gov.za
	B.J. MARTIN	NMB	5065435	5062180	
	TSEPANG SETIM	AFRI-COAST ENGINEERS	041 5068000	041 5853437	tsepang@afri-coast.com
	DYLAN ANDERSON	AFRI-COAST ENGINEERS	041 5068000	041 5853437	dylana@afri-coast.com