



PROGRESS REPORT

May 2011

1 INTRODUCTION

In 2008, the Department of Water Affairs (DWA) published the Water Reconciliation Strategy for the Crocodile West Water Supply System. The Strategy was primarily focused on the quantitative reconciliation of the requirements for and availability of water, with due consideration of water quality where it impacts on the Strategy. The Strategy is used as a decision-support framework for making timeous and informed recommendations on those interventions that should be implemented to meet future water requirements.

In 2010, the Department commissioned a follow-up study: *Support to the Implementation and Maintenance of the Reconciliation Strategy of the Crocodile West Water Supply System*. This study will see as its final deliverable an updated Reconciliation Strategy Report. A draft of the Revised Reconciliation Strategy will be available for discussion and review at the next SSC meeting scheduled for 29 September 2011.

The main aim of the development and upkeep of the Reconciliation Strategy is to ensure sufficient and reliable supply of water of appropriate quality to all existing as well as future users, taking into account provision for the ecological Reserve. As part the Strategy interventions have to be identified that will reconcile water requirements with available water up to 2030. This should be achieved within the framework of the best utilisation of water resources, at the lowest cost and in an environmentally sustainable manner.

2 BACKGROUND CONTEXT AND CHALLENGES

The Crocodile West River catchment is one of the most developed river catchments in the country. It is characterised by the sprawling urban and industrial areas of northern Johannesburg and Pretoria, extensive irrigation downstream of Hartbeespoort Dam and large mining developments north of the Magaliesberg. As a result, the Crocodile West River is one of the rivers in the country that has been most influenced by human activities, and where more specific management strategies are of paramount importance.

Most of the water used in the catchment is supplied from the Vaal River System via Rand Water. Urban return flows are an important resource for the users in the area and increased volumes of return flows are already projected. See **Figure 1** for a depiction of the water transfers between the Crocodile and Vaal catchments.

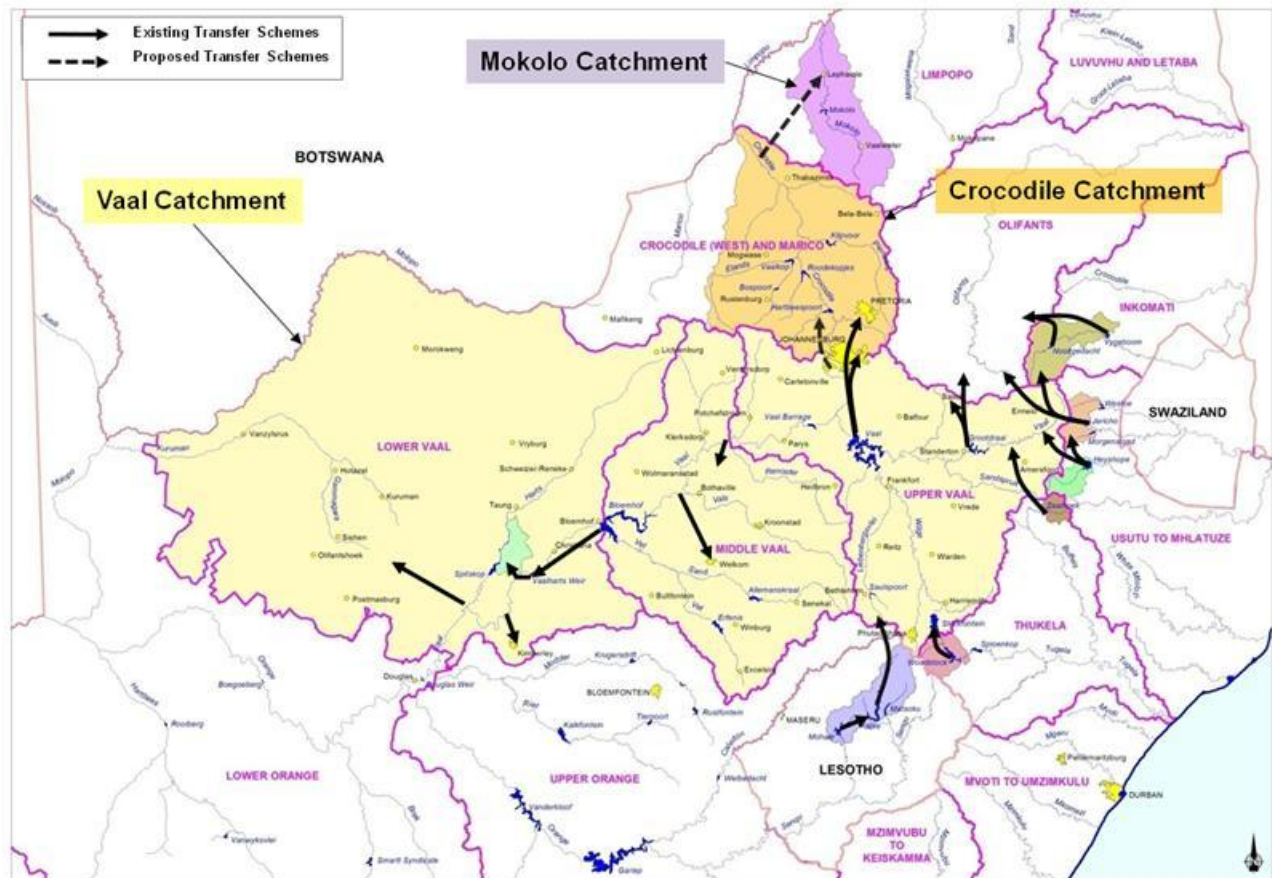


Figure 1: Context of the Crocodile West River

The anticipated increased water requirements due to various planned and anticipated developments associated with the Waterberg coalfields have further necessitated the upkeep of a decision-support framework for the DWA to ensure proper planning for future water requirements, whilst maintaining the supply to current users and the requirements for the ecological Reserve.

Water quality in the study area (with specific reference to the eutrophic state of dams) becomes an increased challenge to users, but also in respect to the requirements for the ecological Reserve. The Crocodile West River catchment is not an isolated system and therefore its linkages to neighbouring catchments have to be considered in all aspects of the study.

Given the above description of the characteristics of the system the existing reconciliation strategy consists of the following three main components:

- The Rand Water service area (including the Crocodile West River catchment area south of the Magaliesberg) will continue to be supplied with water from the Vaal River System. This water is treated to potable standards and distributed through the bulk conveyance infrastructure of Rand Water and the municipalities to the end users.
- Areas north of the Magaliesberg will utilise the increasing treated effluent from the metropolitan area as the future source of water for mining and urban requirements .

- The Waterberg area (north of Crocodile West catchment) has to optimize the utilisation of local resources and if necessary surplus effluent in the Crocodile River System will be transferred to the Lephalale area to support the planned developments on the Waterberg Coal Fields. Furthermore, in the event that the water needs exceed the surplus effluent additional treated effluent water, currently been discharged into the Vaal River, will be transfers to augment the water resources of Crocodile West River catchment.

3 INTERMEDIATE RESERVE DETERMINATION

The DWA has completed a study to determine the intermediate Reserve of selected water resources in the Crocodile West and Marico Water Management Area. The recommendations of the study were:

- Water quality management of the discharges in the catchment is the only way of improving the ecological status (more stringent source control).
- The proposed transfer of water from the Vaal River system to the Crocodile River catchment needs stringent water quality requirements so as not to deteriorate the receiving water quality.
- A detailed water availability assessment in the Maloney's Eye dolomitic compartment should be done.
- Validate and verify water use in the Middle and Lower Crocodile River catchments.
- Implement and monitor the ecological Reserve programme.
- A more detailed study is required for identified wetlands to be affected by license applications.

In the development of the scenarios the ecological water requirements will also be taken into consideration.

4 PROGRESS ON THE PLANNING OF THE MOKOLO-CROCODILE WATER AUGMENTATION PROJECT

The DWA commissioned the *Mokolo-Crocodile Water Augmentation Project Feasibility Study (MCWAP)* to investigate the options for meeting the water requirements for proposed developments associated with the Waterberg coal fields. The objective of the MCWAP is to plan and implement feasible options to transfer water from the Mokolo River and Crocodile West River to Lephalale and Steenbokpan (near Lephalale) without impacting on the water entitlements of existing users. The proposed components of MCWAP include the following (see **Table 1** and **Figure 2** for a depiction of the layout of Phases 1 and 2 of the MCWAP).

Currently it is anticipated that delivery of water supply associated with Phase 1 will commence in July 2013. The water requirements related to the MCWAP is taken into consideration in determining the water availability scenarios.

Phase 1	Phase 2	De-bottlenecking
<p>Parallel pipeline to augment the supply from Mokolo Dam to supply in the growing water use requirement for the interim period until a transfer pipeline from the Crocodile River can be implemented. Phase 1 consists of the following:</p> <ul style="list-style-type: none"> ◆ Rising main from Mokolo Dam to Wolvenfontein balancing dams; ◆ Gravity line from Wolvenfontein to Matimba Power Station; and ◆ New gravity line from Matimba Power Station to Steenbokpan. 	<p>Transfer scheme from the Crocodile West River at Vlieëpoort near Thabazimbi to the Lephale area via a system consisting of:</p> <ul style="list-style-type: none"> ◆ A weir and abstraction infrastructure, including a balancing reservoir, desilting works, and a high lift pumpstation at Vlieëpoort (near Thabazimbi); ◆ Transfer system (approximately 100 km); ◆ A break pressure reservoir; ◆ An operational reservoir; and a ◆ Delivery system, consisting of a gravity pipeline (±30k m) from the operational reservoir to the Steenbokpan area. 	<p>De-bottlenecking of the existing pipeline that stretches from Mokolo Dam to Lephale, which belongs to Exxaro. This entails the construction of the first 9 km of the proposed gravity pipeline (for Phase 1) from Wolvenfontein balancing dams, with interconnections to the existing pipeline. The intention of the de-bottlenecking is to improve the hydraulic gradient at Rietspruitnek, where the existing pipeline passes over a high point.</p>

Table 1: Proposed components of the MCWAP

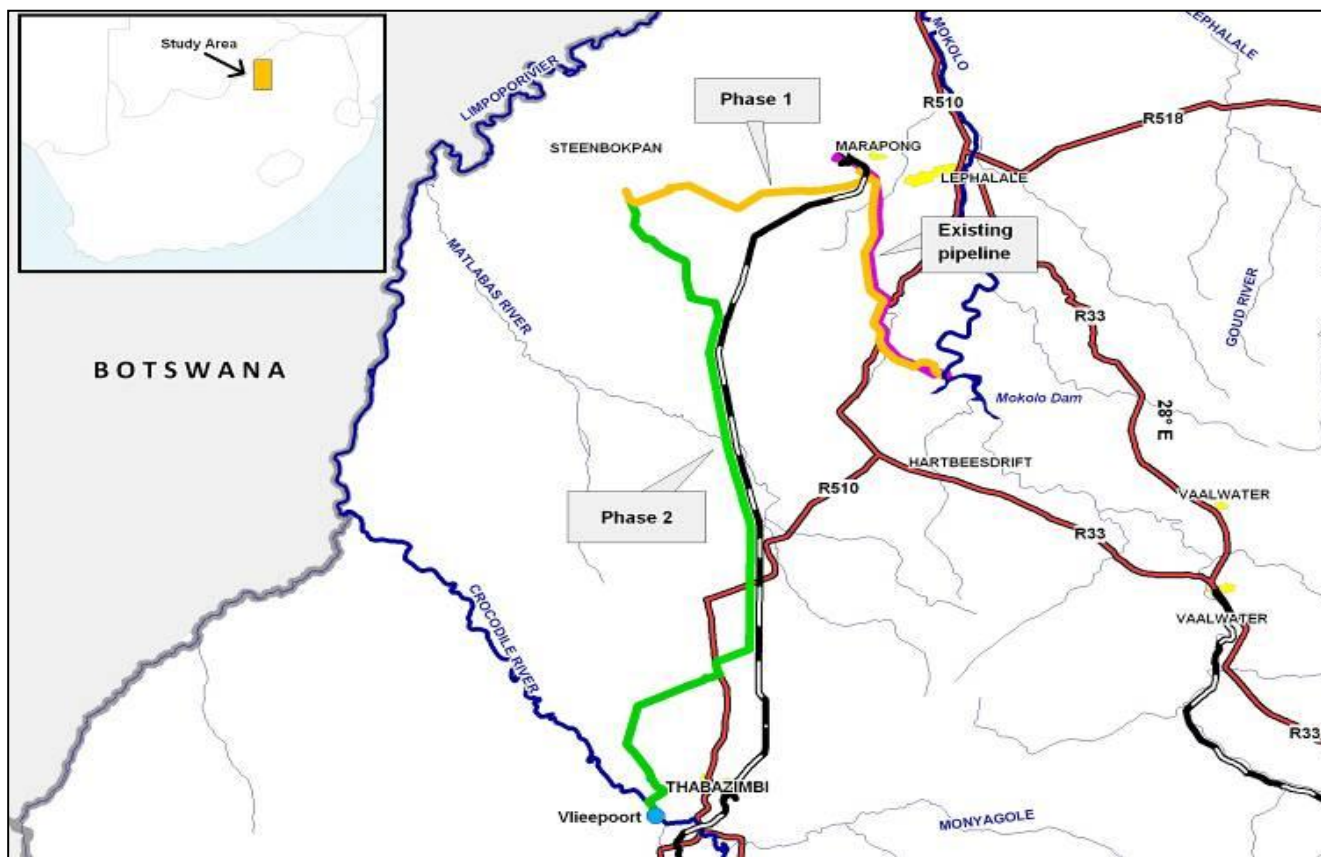


Figure 2: The layout of Phases 1 and 2 of the MCWAP

5 WATER RESOURCE PLANNING MODEL

A Water Resource Planning Model (WRPM) is currently being set up and tested. The WRPM will be used, *inter alia*, to analyse different potential future development scenarios within the Crocodile West River catchment as well as augmentation requirements from the Lephale area in the neighbouring Mokolo River catchment and Modimole in the Mogalakwena River catchment. The same WRPM will also be the tool to be used in another parallel study, the *Crocodile West River Annual Operating Analyses*. Provision has been made to include a link between the Crocodile West River catchment and the Mokolo River catchment to model potential future water transfers from the Crocodile West River to the Mokolo River catchment.

Output from the water quality model, discussed above, will be used as input and starting conditions for the WRPM. The WRPM will be used to analyse scenarios that will impact on water availability and water quality in the Crocodile West River catchment. Provision was made to analyse six scenarios, detail still to be decided on, which will incorporate possible future water transfer to the Lephale area to meet the projected growing water requirements, including transfer of treated effluent from the Vaal River system to the Crocodile West River catchment, if required.

Urbanisation has significantly altered the flow regime of the Crocodile West River. All proposed scenarios will report on compliance with the ecological water requirements (EWR). This is especially relevant below Hartbeespoort Dam and at Vlieëpoort, close to Thabazimbi in the lower reaches of the Crocodile West River, upstream and downstream of the most likely abstraction point for transfers to the Lephale area.

The WRPM will also be used to update water balances at different time intervals at different points in the catchment for the Crocodile West Reconciliation Strategy Report: Version 2, the draft of which should be completed by November 2011.

6 DEVELOP OPERATING RULES FOR THE SYSTEM

The Water Resource Yield Model (WRYM) will be applied to evaluate alternative operating scenarios through simulation analyses. The objective is to develop the optimum operating rules that can be applied in the long-term planning analyses as well as annual operating analysis. The annual operating analysis will be undertaken by DWA in another parallel study which has started in March 2011. The emphasis will be on the five major dams in the catchment, Hartbeespoort, Roodekopjes, Roodeplaat, Klipvoor and Vaalkop dams. These five major dams will be operated as a system, while the other dams in the catchment will be treated as stand-alone dams and will not be used to support downstream water requirements not allocated to these dams specifically.

In addition, and as a separate process, a System Operating Forum (SOF) will be established by DWA between representatives of water users to meet regularly to monitor available water versus water requirements, water quality as well as the operating rules of the system. It is anticipated that the SOF will be established before July 2011.

7 PROGRESS WITH THE IMPLEMENTATION OF THE STRATEGY

7.1 STRATEGY STEERING COMMITTEE

One of the recommendations of the Reconciliation Strategy was that a Strategy Steering Committee (SSC) be established with a clearly defined mandate and scope of work.

The objectives of the SSC are to:

- Ensure and monitor the implementation of the recommendations of the Crocodile West Water Supply System's Reconciliation Strategy;
- Update the Strategy to ensure that it remains relevant; and
- Ensure that the Strategy and its recommendations are appropriately communicated.

The SSC was established in July 2010 and had its second meeting on 24 February 2011. The Terms of Reference (ToR) of the SSC was approved by all members. The SSC ToR is a dynamic document that is available on the DWA Website. Members of the SSC represent relevant National and Provincial Government Departments, all relevant local authorities, agriculture, business, water boards, industry, conservation, power generation and traditional authorities as well as representatives from the Consultants, who currently manage the process.

The SSC is supported by the Study Management Team (SMT) which consists of inter alia representatives of the DWA's National Office (Directorates of National Water Resource Planning, Water Resource Planning Systems and Option Analysis) and the DWA North West, Limpopo and Gauteng Regional Offices as well as representatives from the Consultants. The SMT meets bi-monthly to monitor and review progress of the study and to ensure that the recommendations of the Strategy and SSC are implemented.

7.2 WATER QUALITY - SALINITY

The water quality model (WQT) is currently being calibrated to model total dissolved solids (TDS), also referred to as salinity, and the calibration parameters will be included in the Water Resource Planning Model (WRPM). This will allow the WRPM to be used to investigate both water quantity and water quality aspects of the Strategy. In the development of the Reconciliation Strategy focus was to date mainly placed on the water quantity. For requirements of the ecological Reserve, and in light of the poor water quality in streams and dams downstream of the major urban areas, more attention will be placed on water quality in the update of the Reconciliation Strategy. It should, however, be noted that the DWA has commissioned several other studies that deal with water quality in the study area and that for the update of the Strategy the water quality model will only be calibrated for TDS. See **Figure 3** for an overview of the water quality in the Crocodile West River system.

3.2.1 Harties Metsi A Me Project

The DWA is conducting the Harties Metsi A Me project since 2005 to improve amongst other the water quality in the Hartbeespoort Dam. The project is regarded as a total remediation programme for the dam which is severely impacted by upstream pollution sources, eutrophication and as a result poor water

quality. Several strategies are being implemented to ensure an active approach to the improvement of the dam's water quality and biodiversity. More information on the project can be obtained from www.dwa.gov.za/projects.

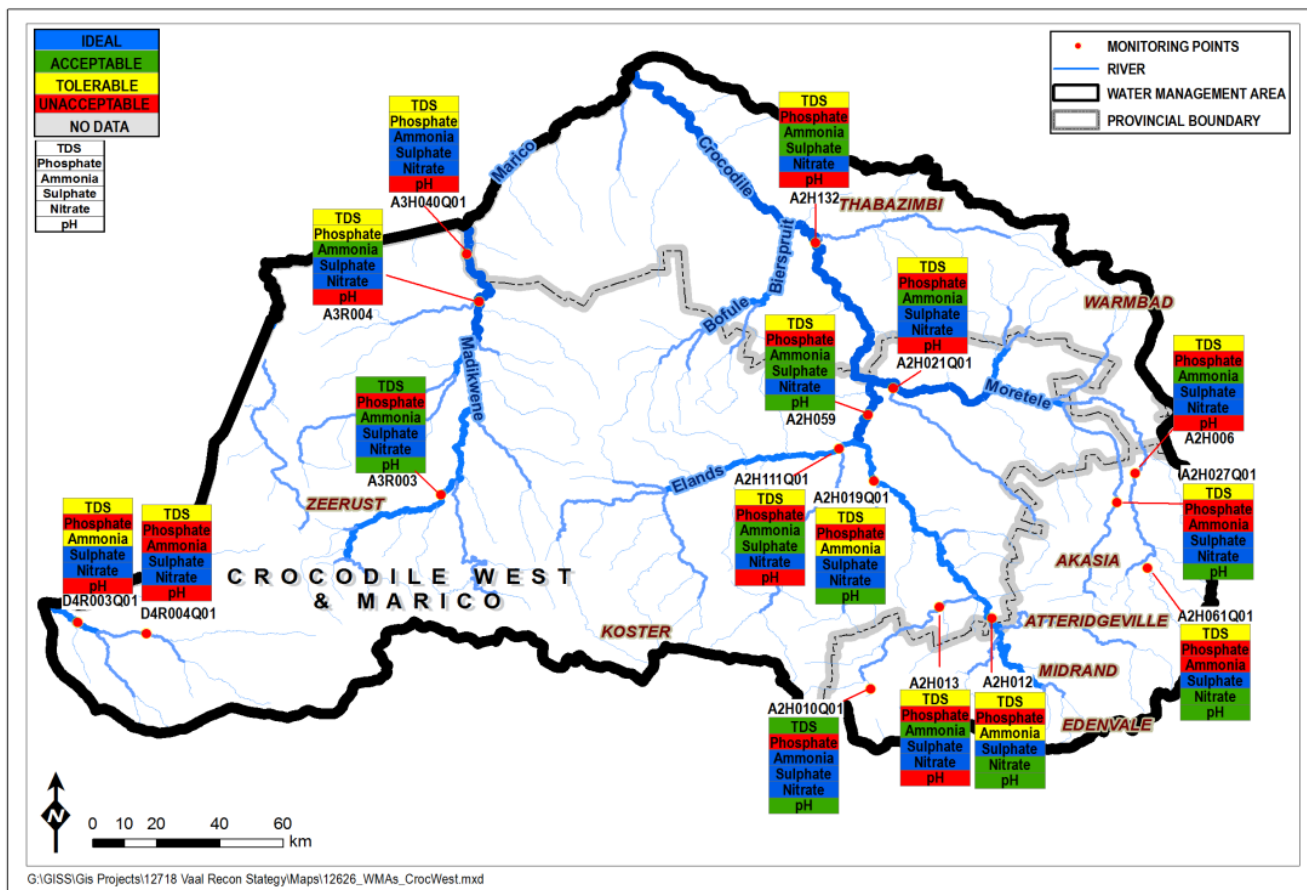


Figure 3: Overview of the water quality in the Crocodile West River System (period of analysis 1 January 2006 to 31 December 2008)

7.3 WATER REQUIREMENTS

The system water balance and reconciliation scenarios were revised taking into consideration water requirements and water sources, including return flows.

7.3.1 Urban water requirements

In terms of the water requirements the main drivers considered were population, economic activity, standard of living and efficiency of water use. The current water requirements were updated based on the actual recent water supply figures for 2008/09 and 2009/10 from Rand Water, Magalies Water, municipalities and recently completed studies (e.g. All Towns Study, Feasibility studies 2007/08 Magalies Water to Waterberg).

In the development of the urban water requirements, the following was assumed:

- High population growth rate;
- Medium WC/WDM efficiency (15% saving achieved within 5 years);
- Updated water requirement projections for the Rand Water supply area for the study area obtained from the Vaal Reconciliation Strategy Study;
- Water requirement projections for other areas outside the Crocodile West River catchment based on existing information, updated with current water requirement figures.

A summary of the projected urban water requirements in the Crocodile West River catchment is given in **Table 2**.

Area	Water requirement (million m ³ /a)								
	2010	2015	2020	2025	2030	2035	2040	2045	2050
Bela Bela LM	2.9	2.9	3.3	3.6	4.0	4.3	4.5	4.8	5.0
City of Johannesburg Ml	206	188	205	216	236	248	260	274	288
City of Tshwane MM	269	288	314	344	376	395	416	438	461
Ekurhuleni MM	84	90	98	103	112	118	124	131	137
Kgetlengrivier LM	1.3	1.4	1.6	1.7	1.9	2.0	2.2	2.3	2.5
Kungwini LM	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
LM of Madibeng	18.5	18.5	18.5	18.5	18.5	18.6	18.6	18.7	18.7
Mogale City LM	13.5	14.0	15.6	16.9	18.7	19.7	20.7	21.8	22.9
Moretele LM	4.4	4.6	4.8	5.1	5.4	5.6	5.8	6.0	6.2
Moses Kotane LM	11.4	10.0	10.9	11.9	12.8	13.6	14.3	14.8	15.3
Nokeng tsa Taemane LM	5.3	5.5	5.6	5.8	6.0	6.1	6.2	6.3	6.4
Randfontein LM	9.2	9.7	10.7	11.3	12.4	13.0	13.7	14.4	15.1
Rustenburg LM	41	40	47	53	54	56	58	60	62
Thabazimbi LM	4.6	4.6	4.6	4.7	4.7	4.8	4.8	4.9	4.9
Modimolle LM	1.3	2.4	3.4	4.5	5.5	5.6	5.7	5.7	5.7
Mookgopong	0.8	1.2	1.7	2.1	2.5	2.9	3.3	3.5	3.8
Total	674	681	746	803	872	915	960	1 006	1 055

Note: Municipalities in Blue are part of the Rand Water supply area
Numbers in red beyond 2030 show values that were extrapolated

Table 2: Urban water requirements per municipal area in the Crocodile West River

7.3.2 Mining water requirements

Current mining water requirements are based on recent (2009) measured water supply from Rand Water and Magalies Water, updated with a 5-year lag in water requirement growth projections from a previous (2007) study.

7.3.3 Irrigation and rural water requirements

Irrigation water requirements were assumed to remain constant as per previous versions of the water balance. In addition, irrigation from aquifers in the Lower Crocodile is now modelled in more detail with the inclusion of the aquifer model in the WRPM. Rural water requirements are assumed to be supplied from groundwater.

7.4 WATER SOURCES

Water in the Crocodile West River System is generated from runoff, return flows, transfers from the Vaal River catchment and from groundwater. These sources are each considered to establish the available supply in the catchment. Some municipalities have their own water resources (dams, boreholes, fountains, groundwater) but in most instances the bulk of the requirements are supplied by Rand Water (see **Figure 4**).

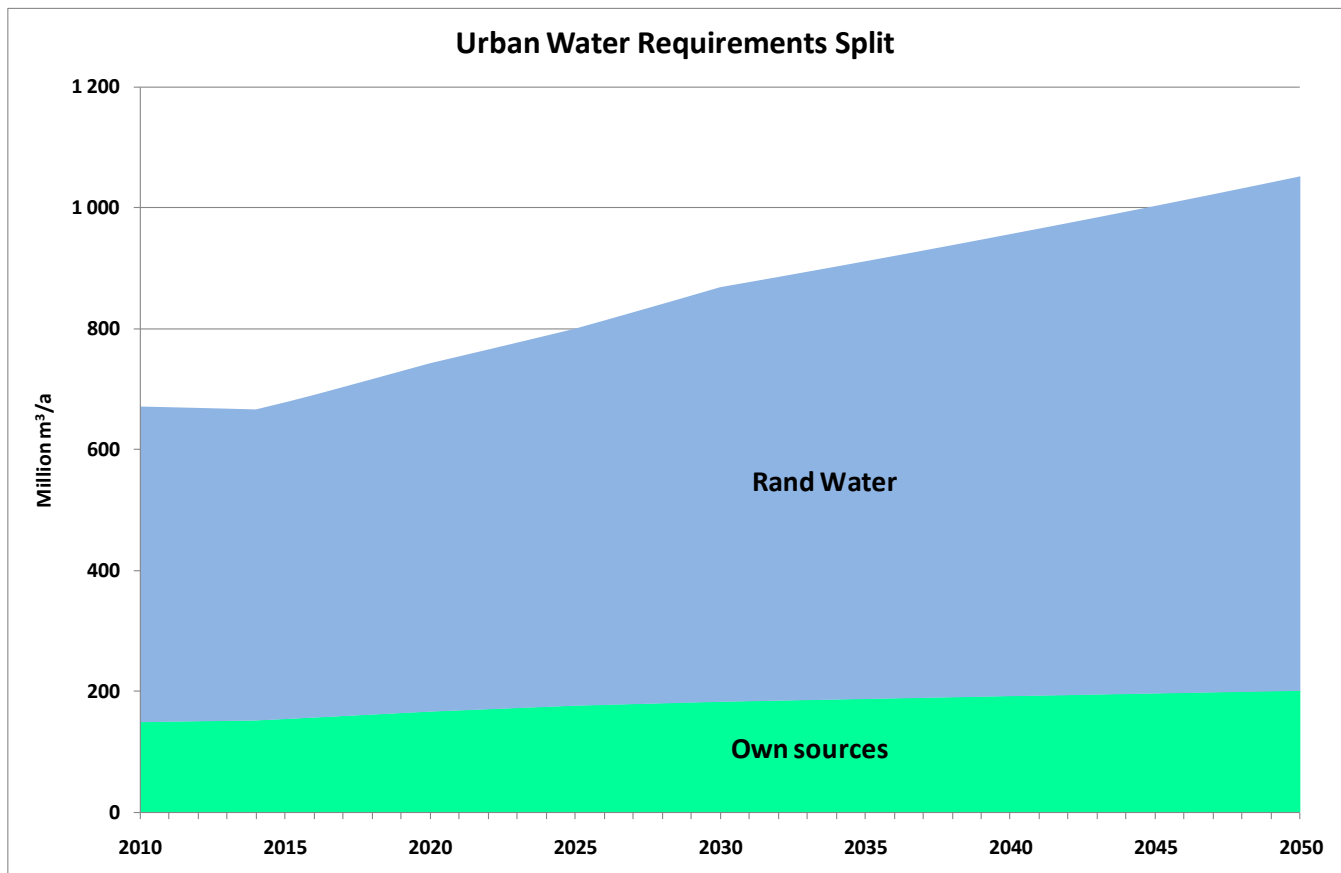


Figure 4: Split of water requirements within the Crocodile West River catchment between Rand Water and own sources

Urban return flows are a large and integral part of water availability in the Crocodile West River catchment and this need to be carefully and accurately considered. Urban water supply and return flows are linked and dependant on the specific water within the drainage area. Thus in the WRPM water supply and the return flow characteristics specific to each urban drainage area are taken into account through demand centres to ensure thorough understanding of the water supply in the Crocodile West River system.

Factors that affect urban return flows:

- Water usage
- Evaporation
- Rainfall
- Routing of water through demand centres

A typical schematic of water supply to and return flows from demand centres are illustrated in **Figure 5**.

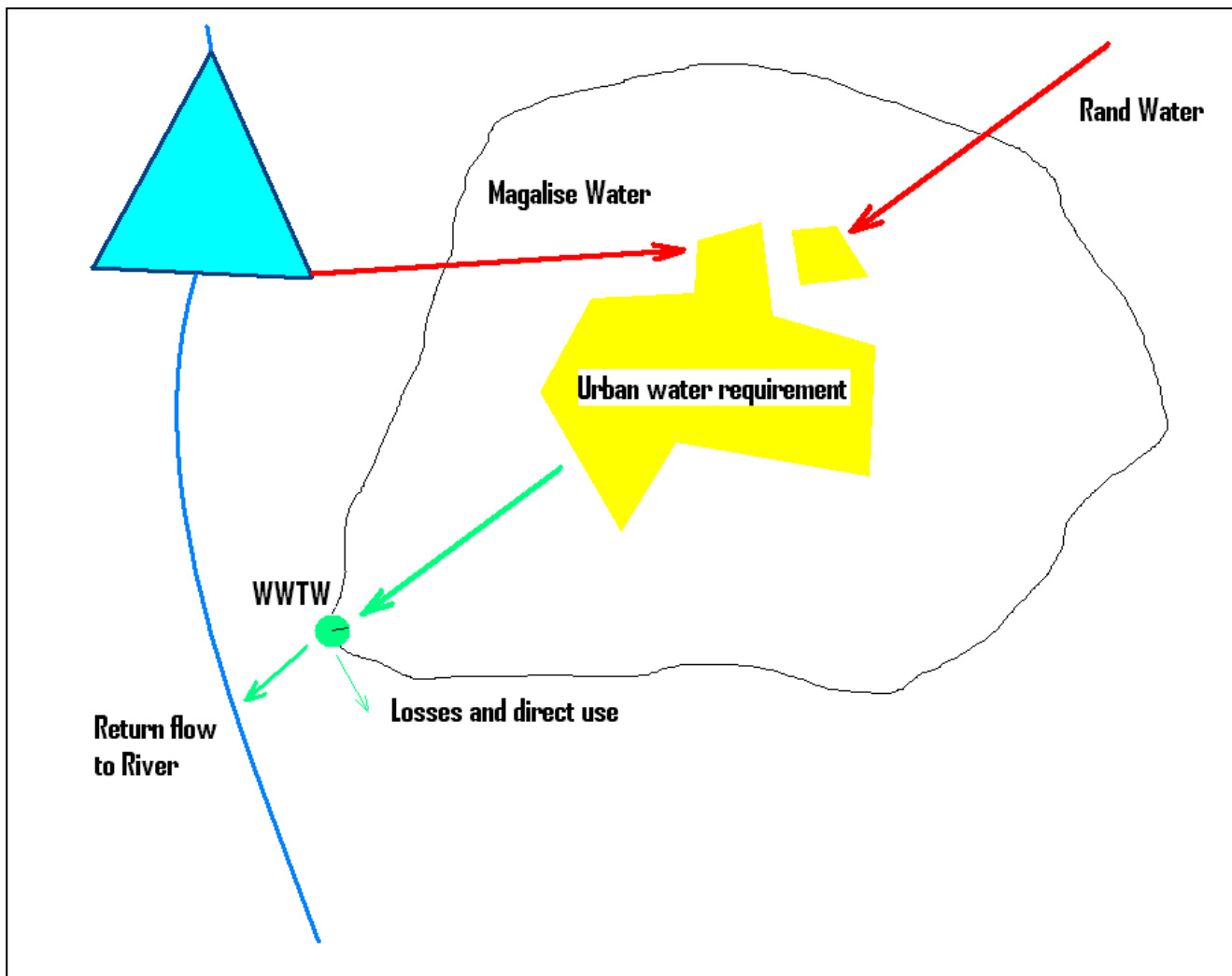


Figure 5: A typical schematic of water supply to and return flows from demand centres

7.5 WATER BALANCE

The water balance for the Crocodile West River catchment was re-calculated with the updated water requirements and water availability and is reflected in **Figure 6**. As can be seen there is currently surpluses available in the Crocodile West River catchment and it is projected that these surpluses will increase in future.

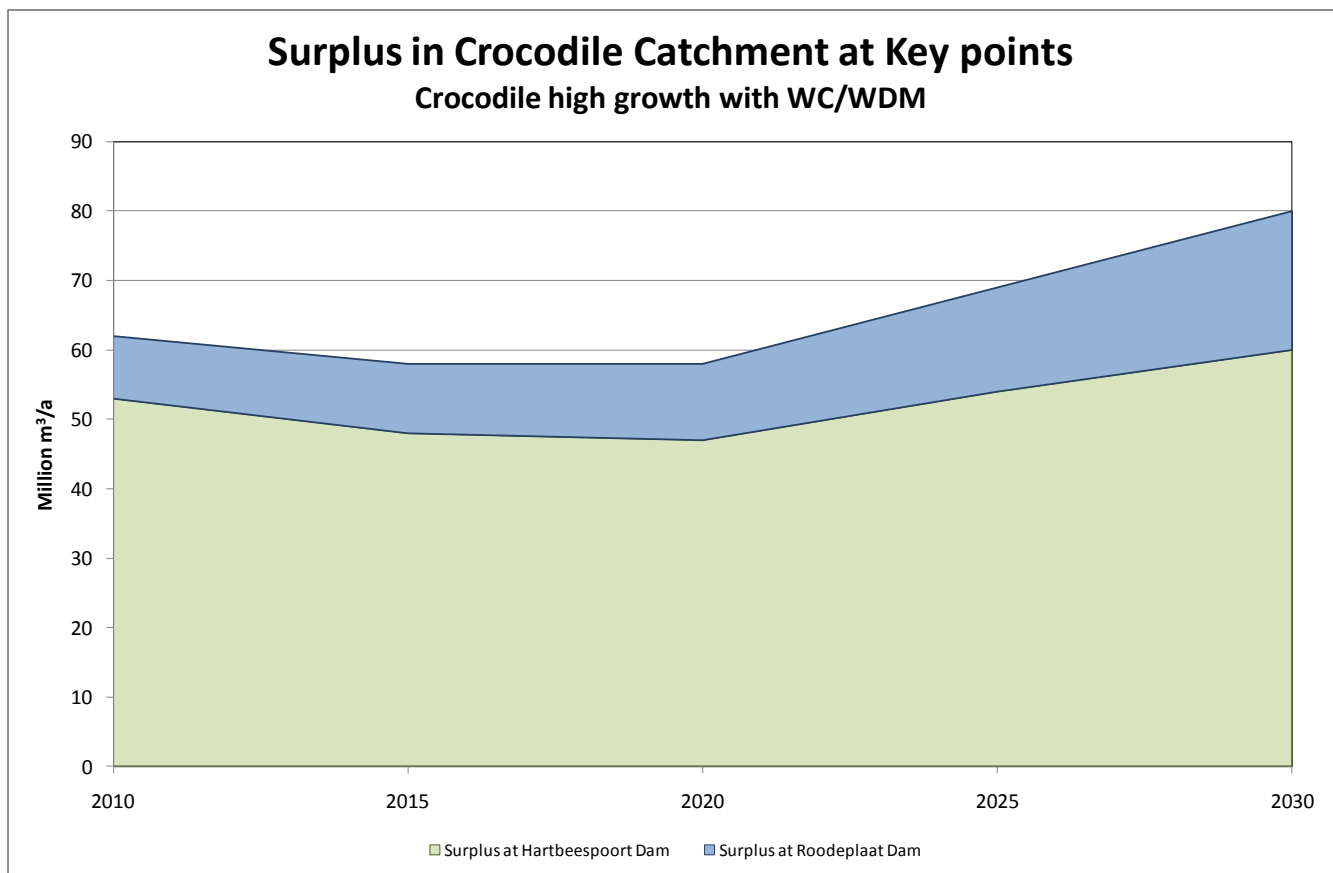


Figure 6: Surplus available at key points in the Crocodile Catchment

7.6 DEVELOPMENT SCENARIOS

In order to obtain a good understanding of the proposed Strategy interventions to be identified that will reconcile water requirements with available water up to 2030 several scenarios were developed. These scenarios take the following into account:

- Updated water requirements from an urban water use perspective, mining water requirements, irrigation and rural water requirements.
- The potential effectiveness of implementing Water Conservation and Water Demand Management (WC/WDM) measures.
- Potential water sources (water generated from runoff within the Crocodile West River catchment, return flows from different urban centres, transfer of water from the Vaal River catchment via the Rand Water supply system for urban and mining water requirements as well as groundwater).

Current and future developments outside the Crocodile West River catchment in the neighboring Mokolo Water Management Area north of the Crocodile West River catchment could have an influence on the future water availability in the Crocodile West River catchment. The developments in the Lephalale area will be focussed around the available coal reserves there and the DWA has to fulfill its mandate as custodian of water resources in South Africa to ensure adequate planning for future water needs. However, the biggest influence on the Strategy flows from South Africa undertaking to decrease its carbon footprint. The result is evident in the Integrated Resource Plan (IRP) for electricity which shows a dramatic reduction in coal-fired power stations and an increase in renewable energy sources as well as nuclear power generation.

Two scenarios were investigated to augment the Lephalale area, namely **Scenario 11.2** (original scenario) and **Scenario 12** (latest scenario). The net result is a dramatic reduction in coal-fired water requirements in the Lephalale area with the long term demand dropping from 147 million m³/a for Scenario 11.2 to 49 million m³/a for Scenario 12 in 2030.

Scenario 11.2: high growth development (see **Figure 7**). This scenario provided for the development of up to four Eskom coal fired power stations, including existing Matimba and Medupi under construction, one Independent Power Plant and the development of a Sasol Plant (Mafutha 1) as well as the anticipated associated urban development of Lephalale and Steenbokpan towns and associated mining of the coal reserve. It also allows for the current irrigation, rural, mining and urban water requirements.

With the implementation of the Mokolo-Crocodile Water Augmentation Project (MCWAP) as well as medium success with WC/WDM together with **Scenario 11.2**, the high growth scenario, a surplus of water was calculated in the catchment as a whole, initially. This surplus was calculated while ensuring that existing users within the Crocodile West system are not negatively impacted). **From about 2018 the projected forecasted water balance for the combined Mokolo-Crocodile system will be in balance with the water requirements and thereafter augmentation would be required from the Vaal River system (highlighted in orange).**

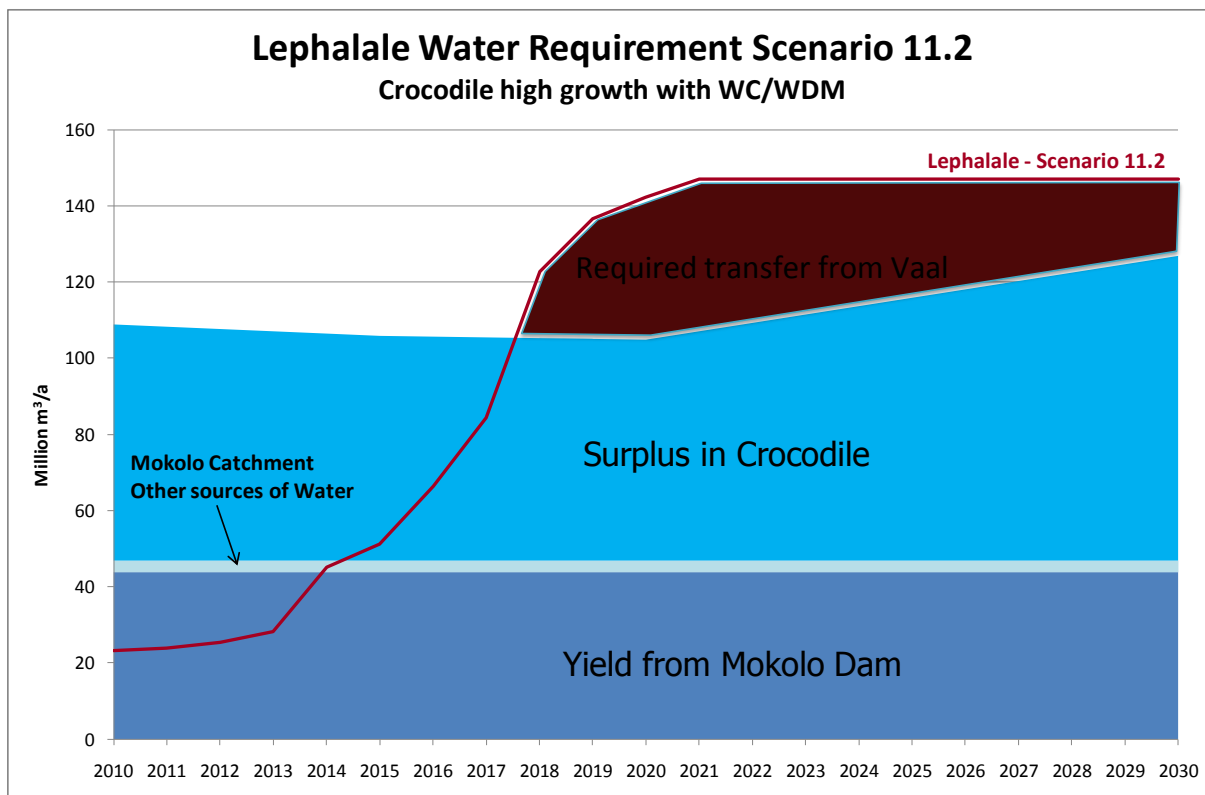


Figure 7: Lephalale water requirements: Scenario 11.2

Scenario 12: low growth development (see **Figure 8**). This scenario provided for the development of two Eskom coal fired power stations, namely existing Matimba and Medupi (under construction) as well as the associated urban development of Lephalale town. It also allows for the current irrigation, rural, mining and urban water requirements.

With the implementation of the Mokolo and Crocodile Water Augmentation Project (MCWAP) (more detail included in **Section 5**) as well as medium success with WC/WDM together with Scenario 12 – the low growth scenario a larger surplus of water was calculated in the catchment as a whole. (The surplus was also calculated while ensuring that existing users are not negatively impacted).

The change in projected water requirements in the Lephalale are from Scenario 11.2 to Scenario 12 resulted in a change in the water situation in the Crocodile West River catchment. With Scenario 11.2 additional transfers from the Vaal River surplus was required to supplement the Crocodile West River catchment, while with Scenario 12 a surplus of water would be available in the Crocodile West River catchment after transferring water to the Lephalale area. The planning focus will now, with the reduced projected future water requirements, shift from determining when augmentation from the Vaal River system to the Crocodile West River catchment will be required to one to determine the best possible use of this growing surplus in the water stressed inland areas of the country.

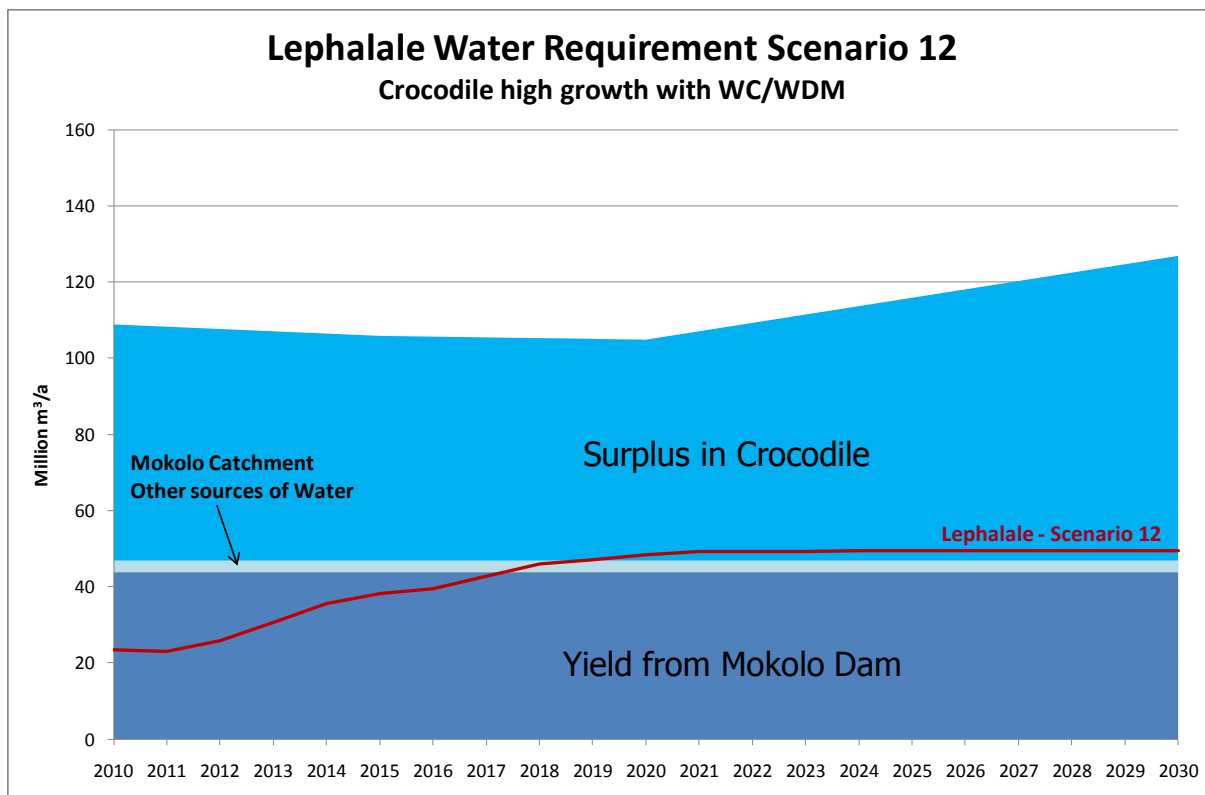


Figure 8: Lephalale water requirements: Scenario 12

Although a surplus of water is calculated in the Crocodile West River system the following important considerations should be kept in mind:

- 1) The Waterberg coal reserve will be developed. Development may be taking longer than originally anticipated, but water planning scenarios should accommodate any potential growth in its planning for sufficient water supply in future. Thus strategically provision should be made for reserving water for possible coal mining in the Lephalale area.
- 2) The surpluses in the Crocodile West River system, which should not be overestimated, pose a strategic resource available which should be managed responsibly to ensure optimal development in the catchment.
- 3) The Olifants River catchment to the east is under severe pressure and some of this water could be transferred to the mines in this area, albeit at a high cost.
- 4) WC/WDM as well as the validation and verification of exiting lawful water use are essential for the sustainability of the resources in the catchment.

7.7 AUGMENTATION FROM THE VAAL RIVER SYSTEM

As part of the DWA study to support the implementation of the Vaal River System's Reconciliation Strategy, the DWA is investigating the re-use of treated effluent to augment water supply in the Vaal River system. The implementation thereof will have a direct impact on the Crocodile West River system as much of its supply comes from the Vaal River system, and depending on the water requirements of the Crocodile West River system further transfers from the Vaal River system could be required. The results from the investigations were used in the water balance scenarios presented in **Section 3.5**.

8 UPDATE OF THE RECONCILIATION STRATEGY

As shown above, the urgent need of augmenting the Lephalele area with water from the Crocodile West River system has been reduced drastically, and therefore the water balance for the Crocodile West River catchment will again be updated and reported on at the Strategy Steering Committee during September 2011. The Reconciliation Strategy will also be updated and Version 2 of the Strategy should be available during November 2011. The main objective of updating the Strategy is to incorporate revised water requirement and return flow scenarios as well as to apply detailed water resource modelling for determining the water balances of sub-catchments and the system as a whole. The modelling results will determine the spatial and temporal distribution of excess or shortages in the system and this will inform the formulation of appropriate reconciliation scenarios of meeting the future water needs.

Various technical investigations are being undertaken by the PSP and **Figure 9** presents for the process that will be followed to update the Reconciliation Strategy.

8.1 FACTORS TO BE CONSIDERED IN THE UPDATED STRATEGY

The following factors are being considered in the updating of the Strategy:

- Growth in water requirements;
- Natural water resources already fully developed;
- Strong dependence on transfers from the Vaal River system;
- Large and projected increasing volumes of return flows;
- Implementation of the Reserve;
- Water quality;
- Linkages to neighboring catchments;
- Dynamic planning assumption of water requirements, particularly in the Lephalele area and mining sector;
- Applications for increased water allocations
 - Magalies Water: Vaalkop Dam (in addition to 90 million m³/a issued in 2010);
 - Tshwane Metro: At Leeukraal Dam (increased allocation from current 16 million m³/a to more than 48 million m³/a);
- Approval and implementation planning of above applications;

- Growing future urban water requirements in Limpopo WMA outside the study area (suggested source Klipvoor Dam vs. Roodeplaat Dam);
- Impact of suggested abstraction options on water availability to relevant existing water users; and
- Utilisation of expected future surplus in the Crocodile West River catchment.

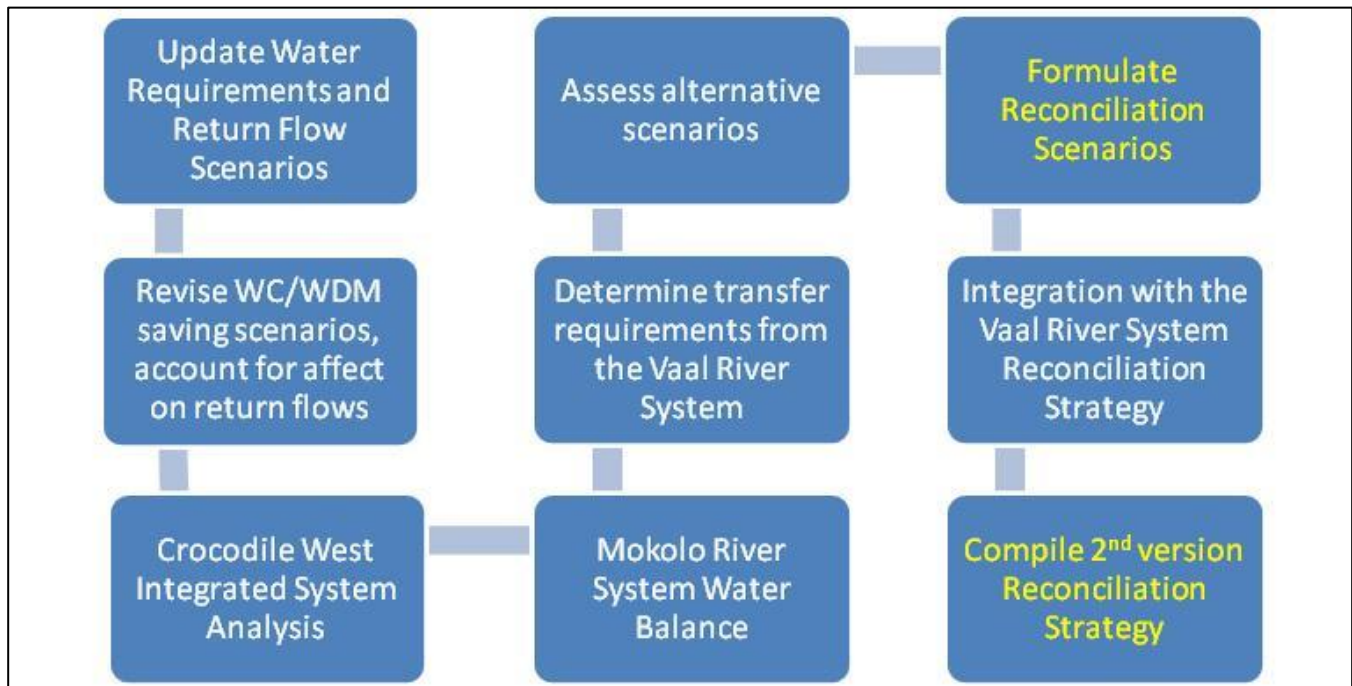


Figure 2: Water Balance and Strategy update

8.2 RECOMMENDATIONS TO BE CONSIDERED IN THE UPDATED STRATEGY

The following recommendations should be considered in the updating of the Strategy:

- Validation and verification of existing lawful use should be carried out to confirm excess and establish assurance criteria for irrigators in the Lower Crocodile;
- Confirm water requirements with all users;
- Evaluation of operating rules and integration with long-term planning scenarios;
- Engage water users through the proposed System Operation Forum;
- Review spatial and temporal distribution in water requirements and return flows;
- Obtain revised water requirement scenarios for the mining sector (to be supported through the Joint Water Forum);
- Apply WRPM to determine projected surplus in sub-systems (location and timing);
- Investigate options for reuse of excess for urban and/or industrial purposes; and
- Commission a new study to develop long term water requirement scenarios up to the year 2050.

When considering the recently completed study on the Ecological Reserve (see Section 3), the study recommendations will be taken into account with the updating of the Strategy.

With regards to the recommendations made by DWA in respect to the Water Quality studies being undertaken, the following recommendations will be taken into account with the updating of the Strategy:

- Salinity impacts needs to be managed;
- Management of eutrophication due to increasing nutrient loads and concentrations;
- Set Resource Water Quality Objectives (RWQOs);
- Investigate management options for achieving RWQOs; and
- DWA considering the development of a water quality action and implementation plan.

The first draft of the revised and updated Strategy will be available in September 2011 and will be presented at the next SSC meeting.

9 GENERAL INFORMATION

More information on this study can be found at the following link:

<http://www.dwa.gov.za/Projects/crocodilemaintanance/default.aspx>.

The DWA Project Manager for the project is Mr Tendani Nditwani.

The next meeting of the Strategy Steering Committee is on 29 September 2011.