

DEVELOPMENT OF A RECONCILIATION STRATEGY FOR THE OLIFANTS RIVER WATER SUPPLY SYSTEM

Work done up to the end of August 2010

1. Study Planning and Process Initiation

Completed.

2. Phase 2, Task 1: Summary of Current and Previous studies

Completed.

3. Task 2 : Preliminary Screening Workshop and Reconnaissance Study Tour

The Preliminary Screening of Reconciliation Options Report was completed and is now available for comments.

4. Task 3: Current and Future Water Requirements and Return Flows

No further work was done on the water balance.

Compilation of a report on this Task has commenced.

5. Task 4: Water Conservation and Demand Management

- Several IDPs and WSDPs were reviewed to obtain their WCDM strategies. Assessment of IDPs, WSDPs and WCDM reports was done in order to estimate the WCDM savings.
- Maps indicating the irrigated areas and irrigation board districts were prepared.
- Irrigation boards have been contacted in order to ascertain their level of efficiency.
- Several municipalities have been approached for information on their water use efficiency.

6. Task 5: Opportunities for Water Re-Use

Marginal water questionnaires have been issued to municipalities, water boards and certain industries and to date the following municipalities in Mpumalanga have completed their questionnaires:

Mpumalanga:

- Steve Tshwete – questionnaire completed with the municipality.
- Emalahleni – questionnaire completed with the municipality.

Limpopo:

- Sekhukhune - questionnaire completed with the municipality.
- Polokwane - questionnaire completed with the municipality.
- Phalaborwa
- Mopani - questionnaire completed with the municipality.

Marginal water questionnaires have been sent out to the following water boards:

- Mr Norman Nokeri : Lepelle Sekhukhune
- Mr Willie Fratter : Lepelle Capricorn
- Motalepula Mphachoe: Lepelle Mopani

Marginal water questionnaires have been sent out to the following mining houses and business users:

- SA Iron and Steel Institute
- BHP Billiton
- SAB Miller (Polokwane Brewery)
- Emalahleni Reclamation Plant – questionnaire completed.

The report structure for the Opportunities for Water Re-use has been completed and the drafting of this report has commenced.

7. Task 6: Invasive Alien Plants

- The GIS alien vegetation data obtained from the ARC was transposed to an excel spreadsheet containing riparian and upland vegetation per quaternary catchment.
- THE WRSM2000 model has been used to obtain unit streamflow reduction (alien and upland) for IAPs.
- Some research in streamflow reduction due to alien vegetation has been carried out.
- An IAP model is being setup to analyse the sensitivity of various IAP parameters on the reduction on yield of the major dams in the Olifants System. This will help to clarify the issues relating to IAPs and indicate where the effort should be focused.

8. Task 8: Water Quality

Preparation of the Water Quality report has commenced.

9. Task 9: Reserve Requirement Scenarios and Scheme Yields

Natural and present day MAR at possible dam sites have been determined.

Field work commenced in August 2010, and preparations for the specialist workshop have been completed.

10. Task 10: Groundwater

Groundwater Reserve Report was reviewed.

11. Task 11: Review Schemes and Update Cost Estimates

Except for the preparation of the Preliminary Screening of Reconciliation Options Workshop and Report, no further work was done under this task.

12. Task 12 : Review or Assess Social and Environmental Impacts

Not commenced as yet.

13. Task 13 : Assembly of Information and Formulation of Scenarios

No further work done.

14. Task 14: Final Screening Workshop

Not commenced as yet.

15. Task 15 : Public Participation

The draft Newsletter has been prepared. The information for the DWA website was prepared.

16. Task 16 : Project Management

- The SMT meeting and the SSC workshop minutes were finalized.
- Preparations for the SMT meeting of 2 September 2010 were done.
- The Gantt chart for the study was finalized and due dates for reports were given to the authors.
- Communication – telephone and e-mail, has taken place between the Project Leader and Task Leaders.



J. Beumer

Study Leader

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Date