Portfolio Committee Presentation

Portfolio Committee
17 October 2007

Vision . Delivery . Future
TCTA Supports DWAF in Sustainable Water Supply
Agenda

- Mandates
- Highlights
  - Overview
  - Financial
  - Going concern
  - Assurance
  - Sustainability report
  - Progress on projects
- Future
Who is TCTA?
- Established in 1986 to manage the funding and financial risk management of the Lesotho Highlands Water Project
- PFMA ~ Schedule 2 Public Entity
- Report via Minister of Water Affairs and Forestry to Cabinet and Parliament

MISSION STATEMENT
TCTA is a specialised liability management body for bulk water supply development in the most cost-effective manner to the benefit of the water consumer.

Liability management functions within an acceptable risk framework
- Design and supervision
- Construction project management
- Funding and debt management
- Income management
- Natural environment and social impact management
Water Supply Chain

Water Resources

National Planning DWAF
Project Planning DWAF
Project Preparation Mainly TCTA
Operation and Maintenance DWAF
Project Implementation and Funding TCTA

WATER BOARDS

MUNICIPALITY

END USER

Treat raw water to potable level
Deliver water and sanitation through network

Bulk Users

Bulk Users

Water Services

DWAF
TCTA
TCTA Business Model

- Non profit-taking organisation
  - Break-even of revenue to costs over a specified period
  - Actual costs charged i.e. Lower costs = Lower tariff
  - No reserves, profit sharing etc.
  - Transfer risks to parties and sectors best suited to manage it

- TCTA needs to operate in a very sound ring-fenced environment. (NWA& PFMA)
  - PFMA
    - Borrowing Authority per project from DWAF / NT
    - 5-year Corporate plan to DWAF/ NT annually
  - Government guarantees
    - Utilisation of explicit government guarantees audited annually
  - International Treaty
  - Accounting – separate general ledgers
  - Separate bank accounts
  - Separate Income Agreements with DWAF
  - Separate funding programmes
<table>
<thead>
<tr>
<th>Minister and DWAF High Priority Projects</th>
<th>TCTA Impact /Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment of women</td>
<td>Yes</td>
</tr>
<tr>
<td>Improve governance and alignment of DWAF P Entities</td>
<td>Yes</td>
</tr>
<tr>
<td>Forestry BBBEE charter</td>
<td>No</td>
</tr>
<tr>
<td>Meeting water and sanitation targets (support to local gvt.)</td>
<td>As support to DWAF</td>
</tr>
<tr>
<td>Water conservation and WDM</td>
<td>As support to DWAF</td>
</tr>
<tr>
<td>Water allocation reform</td>
<td>No</td>
</tr>
<tr>
<td>Establishment of NWRIA with strategic asset management and development</td>
<td>Yes</td>
</tr>
<tr>
<td>Strategic engagement within the region and continent</td>
<td>DWAF support</td>
</tr>
</tbody>
</table>
TCTA Alignment with Government Agenda

- Delivery on government’s agenda
  - TCTA= infrastructure development
  - Free up tax payers money for social aims
- Alignment with ASGISA
  - With DWAF in infrastructure development
  - Springboard for economic development, water services delivery and job creation
  - Scarce skills deployment and development
- Development methodology alignment with government
  - Involvement of private sector
  - Institutional agreements to achieve appropriate risk allocation, transparency and co-operative governance
  - Tariffs set in a transparent, predictable and sustainable manner
  - Clear socio economic objectives (labour, procurement, training)
  - Link into existing programmes for advance infrastructure and mitigation programmes
Key Highlights

- Governance
  - Board appointment and induction
  - Appointment of Assurance team
  - Progressive review of corporate governance framework

- VRESAP
  - Continued delivery on track with mandate
  - Delay in water delivery agreed with project partners (8 Months)
  - Continued focus to ensure management of delivery within revised time frame and risk profile

- LHWP, BWP
  - Continued delivery on track within mandate and budget

- Advisory
  - Assistance to DWAF re ORWDP II; Spring Grove
  - Water Boards and National Water pricing strategy
Operational Performance

- IFRS reporting
  - IFRS compliant
- LHWP cost allocation
  - R 425 million received from Government of Lesotho in the 2007 financial year in full and final settlement of debt
- Transformation
  - BE and BEE procurement R 1 434 million (98% of spend on narrow based)
  - Diversity profile 63% Black; 60% female
  - Organisational design reviewed to accommodate growth (90-115)
  - Training and development to create empowering culture (8% of payroll @ target of 3%)
Financial Highlights
## Income Statement for the Year Ended 31 March 2007

<table>
<thead>
<tr>
<th></th>
<th>2007 R'Million</th>
<th>2006 R'Million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water volumes</strong></td>
<td>1 385 million m³</td>
<td>1 349 million m³</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>1 952</td>
<td>1 776</td>
</tr>
<tr>
<td><strong>Other Income</strong></td>
<td>334</td>
<td>226</td>
</tr>
<tr>
<td><strong>Royalties paid</strong></td>
<td>(264)</td>
<td>(251)</td>
</tr>
<tr>
<td><strong>Operating expenses</strong></td>
<td>(236)</td>
<td>(175)</td>
</tr>
<tr>
<td><strong>Operating surplus</strong></td>
<td>1 786</td>
<td>1 576</td>
</tr>
<tr>
<td><strong>Finance cost</strong></td>
<td>(1 900)</td>
<td>(2 164)</td>
</tr>
<tr>
<td><strong>Net deficit for the year</strong></td>
<td>(114)</td>
<td>(588)</td>
</tr>
</tbody>
</table>
## Balance Sheet as at 31 March 2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current assets</td>
<td>16 110</td>
<td>900</td>
<td>1 407</td>
<td>18 417</td>
<td>16 036</td>
</tr>
<tr>
<td>Current assets</td>
<td>780</td>
<td>20</td>
<td>124</td>
<td>924</td>
<td>710</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>16 890</strong></td>
<td><strong>920</strong></td>
<td><strong>1 531</strong></td>
<td><strong>19 341</strong></td>
<td><strong>16 746</strong></td>
</tr>
<tr>
<td><strong>EQUITY AND LIABILITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserves and deficit</td>
<td>(3 319)</td>
<td>(32)</td>
<td>(18)</td>
<td>(3 369)</td>
<td>(3 357)</td>
</tr>
<tr>
<td>Non current liabilities</td>
<td>18 039</td>
<td>704</td>
<td>1 236</td>
<td>19 979</td>
<td>17 194</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>2 170</td>
<td>248</td>
<td>313</td>
<td>2 731</td>
<td>2 909</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td><strong>16 890</strong></td>
<td><strong>920</strong></td>
<td><strong>1 531</strong></td>
<td><strong>19 341</strong></td>
<td><strong>16 746</strong></td>
</tr>
</tbody>
</table>
### Funding for 2006/07

<table>
<thead>
<tr>
<th>LHWP Funding</th>
<th>R'million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental</td>
<td>119</td>
</tr>
<tr>
<td>Refinancing</td>
<td>328</td>
</tr>
<tr>
<td>Redemption (WS01 maturing 1 December 2005)</td>
<td>700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 147</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BWP Funding</th>
<th>R'million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental</td>
<td>373</td>
</tr>
<tr>
<td>Refinancing</td>
<td>-</td>
</tr>
<tr>
<td>Redemption</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>373</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VRESAP Funding</th>
<th>R'million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental</td>
<td>1 018</td>
</tr>
<tr>
<td>Refinancing</td>
<td>212</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 230</strong></td>
</tr>
</tbody>
</table>
LHWP: Total Sources of Funding

Total Funding Portfolio Liabilities as at 31 March 2007
R 18 574 million

- Capital Market Bonds: 86%
- Commercial Paper Program: 6%
- Other: 5%
- Foreign Institutions: 3%
- WS04: 35%
- WS05: 18%
- WS06: 4%
- WSP1-WSP5: 11%
- Foreign: 3%
- Local: 97%
- Avg funding rate: 7.95%
- Benchmark rate: 8.17%
- Floating: 29%
- Fixed: 71%
BWP Sources of Funding – R837m

Net BWP Liabilities as at 31 March 2007
R 837 million

- EIB Loan: 40%
- ABSA Loan: 2%
- DBSA Loan: 42%
- Investments: 0%
- Call: 15%
- Term Paper: 1%

ABSA: R20m
CPP: R350m
EIB: R334m
DBSA: R133m
VRESAP Sources of Funding – R1 275m

Net VRESAP Liabilities as at 31 March 2007
R 1 275 million

- ABSA Loan 27%
- EIB Loan 14%
- Investec Loan 2%
- Nedbank Loan 2%
- Standard Bank Loan 48%
- Call 0%
- Investments 1%
- Term Paper 8%

VRESAP Sources of Funding – R1 275m

- ABSA: R 356m
- CPP: R 82m
- EIB: R 184m
- Investec: R 55m
- Standard Bank: R 570m
- Nedbank: R 28m
## 4 Year Funding Requirements per Project

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>LHWP</th>
<th>BWP</th>
<th>VRESAP</th>
<th>TOTAL (R’million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/08</td>
<td>1 855</td>
<td>251</td>
<td>931</td>
<td>3 037</td>
</tr>
<tr>
<td>2008/09</td>
<td>1 684</td>
<td>64</td>
<td>205</td>
<td>1 953</td>
</tr>
<tr>
<td>2009/10</td>
<td>1 523</td>
<td>93</td>
<td>-(139)</td>
<td>1 477</td>
</tr>
<tr>
<td>2010/11</td>
<td>1 310</td>
<td>-</td>
<td>-</td>
<td>1 310</td>
</tr>
<tr>
<td></td>
<td><strong>6 372</strong></td>
<td><strong>408</strong></td>
<td><strong>997</strong></td>
<td><strong>7 777</strong></td>
</tr>
</tbody>
</table>
Going Concern
All projects are ring-fenced with no project having cross-default implications to another project and are ring-fenced by:

- PFMA borrowing authority and corporate plan
- separate bank accounts
- separate income agreements
- separate general ledgers
- separate funding programmes
- treaty and government guarantees in the case of LHWP
Review LHWP’s, BWP’s and VRESAP’s long-term solvency in terms of ability to service and repay debt, after operational expenditure
Approaches to tariffing:

1. No capitalisation of interest approach
2. Constant real tariff approach
3. Smoothed, constant real tariff approach
Tariff Methodology

3 Smoothed, constant real tariff approach

- Pricing future augmentation into the constant real tariff allows the timing of future augmentation to significantly offset the affects of changing demand and yield
- The result is increased certainty to revenue stream and hence increased certainty around solvency
Income Agreements

- **Automatic and negotiated adjustments**
  - CPIX annually
  - **Floor** 4.5%
  - **Cap** 7.5%
  - **Negotiated adjustment**
  - **Automatic adjustment**

- **Other tariff review triggers in the Income Agreement**
  - Changes in water demand
  - Changes in timing and cost of future augmentation schemes (dependant on system yield)
  - Changes to operations and maintenance costs
  - Change in input assumptions that increase/decrease final repayment date
  - Changes in the final implementation costs at construction completion date
Explicit and Implied Guarantee's

- LHWP explicit government guarantee
- BWP implied government guarantee
- VRESAP implied government guarantee

Long-term commitments from government
Support long-term solvency
Summary of findings:

- The useful economic life of the projects far exceeds the debt repayment period
- The free cash generated over the useful economic life far exceeds the peak project debt
- The principal of incorporating future augmentation costs into the tariff calculation reduces cash flow volatility and increases certainty with regards to future solvency
- The income agreements ensure that TCTA “walks the debt curve” based on income agreement triggers
- Long-term government support, supports long-term solvency

Overall conclusion: TCTA is highly solvent over the long-term with no risk of being unable to service and repay debt

TCTA is a going concern
Assurance
Risk Management

**ENTERPRISE-WIDE RISK MANAGEMENT FRAMEWORK**

- **Environmental scanning and forecasting**
  - SWOT analysis:
    - External business environment
  - SWOT analysis:
    - Internal business environment
- **Financial Forecasting:**
  - Interest rates
  - Inflation
  - Real rates
  - Exchange rates
  - Economic conditions
- **Water Sector supply and demand:**
  - Demand forecasts
  - Supply
  - Timing of future augmentation

**Strategy Formulation**

- Within the context of:
  - Funding Philosophy
    - Tariffing
    - Funding
    - Risk Management

**Implementation Philosophy**

- Engineering
- Socio-environmental
- Communication

**Organisational**

- Project Implementation
- Financial

**Risk Governance Framework**

- Risk Management Philosophy

**Governance**

- Internal Audit
- Assurance processes

**Risk Control**

- Risk identification

**Exco/Manco**

- Risk report and monitoring

**Risk Management**

- Financial
- Non-financial
- Sensitivity and scenario analysis

**Board**

**Board Sub-Committees**

**Exco/Manco**
Sustainability Principles

- Fundamental to all aspects of TCTA’s business
- Economic performance is ability to meet and deliver on the requirements of the projects within time & budget
- Full commitment to complying with national environmental legislation, while producing quality standards
- A socio-economic strategy, tailored to the needs of the community – contained in the EMP of each project
- Attraction and retention of high calibre staff, capable of sustaining high performance levels.
### Social Empowerment – Job creation

<table>
<thead>
<tr>
<th>Job Creation to date</th>
<th>BWP</th>
<th>VRESAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total person years (full equivalent)</td>
<td>4 458</td>
<td>1 475</td>
</tr>
<tr>
<td>Local person years</td>
<td>2 503</td>
<td>907</td>
</tr>
<tr>
<td>HDI</td>
<td>93%</td>
<td>86%</td>
</tr>
<tr>
<td><strong>Numbers of local jobs 31 March 2007</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Contractors</td>
<td>969</td>
<td>58</td>
</tr>
<tr>
<td>- Working for water</td>
<td>69</td>
<td>-</td>
</tr>
</tbody>
</table>
### Social Empowerment - Training

<table>
<thead>
<tr>
<th>Training to date:</th>
<th>BWP</th>
<th>VRESAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contractors:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Local person days</td>
<td>7,114</td>
<td>1,178</td>
</tr>
<tr>
<td>▪ Number of local people</td>
<td>1,430</td>
<td>352 + 5 emerging contractors in the women in construction programme</td>
</tr>
<tr>
<td><strong>TCTA:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Advance training in basic construction skills</td>
<td>87 graduates</td>
<td></td>
</tr>
</tbody>
</table>
### Social Empowerment – TCTA Directed Spend in Contracts

<table>
<thead>
<tr>
<th>BE and BEE procurement</th>
<th>BWP</th>
<th>VRESAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contractor cumulative spend:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• BE and BEE</td>
<td>R203 million</td>
<td>R123 million</td>
</tr>
<tr>
<td>• Local enterprises</td>
<td>R23 million</td>
<td>R165 million</td>
</tr>
<tr>
<td>• SMME</td>
<td>R70 million</td>
<td>R116 million</td>
</tr>
<tr>
<td><strong>TCTA direct spend for 2006/07:</strong></td>
<td>R 344 million</td>
<td>R 1071 million</td>
</tr>
<tr>
<td></td>
<td>(98%)</td>
<td>(98%)</td>
</tr>
</tbody>
</table>

All targets set by TCTA exceeded. Contractors on track to meet final targets set by TCTA.
TCTA’s direct procurement spend for the Financial Year to March 2007 was R1 465 million, of which R1 434 million is BEE spend classified on a narrow basis.

- **Black companies**
  1% (R10 million)

- **Black empowered companies**
  96% (R1 417 million)

- **Black influenced companies**
  1% (R7 million)
## TCTA’s Transformation Performance

### Employment Equity

<table>
<thead>
<tr>
<th>Occupational Category</th>
<th>Target for 2006/7</th>
<th>Performance</th>
<th>Target 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislators, senior official and managers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>52%</td>
<td>49%</td>
<td>55%</td>
</tr>
<tr>
<td>Female</td>
<td>38%</td>
<td>38%</td>
<td>40%</td>
</tr>
<tr>
<td>Disabled</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>46%</td>
<td>49%</td>
<td>70%</td>
</tr>
<tr>
<td>Female</td>
<td>33%</td>
<td>35%</td>
<td>60%</td>
</tr>
<tr>
<td>Disabled</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Technicians and Associate Professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>65%</td>
<td>68%</td>
<td>70%</td>
</tr>
<tr>
<td>Female</td>
<td>85%</td>
<td>78%</td>
<td>60%</td>
</tr>
<tr>
<td>Disabled</td>
<td>0%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Clerical and Administrative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>80%</td>
<td>65%</td>
<td>80%</td>
</tr>
<tr>
<td>Female</td>
<td>85%</td>
<td>81%</td>
<td>70%</td>
</tr>
<tr>
<td>Disabled</td>
<td>0%</td>
<td>1%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Berg Water Project Status
Location of Berg Water Project
Western Cape Water System

Voëlvlei Dam
Theewaterskloof Dam
Kogelberg Dam
Berg River Dam 18%

Other Sources (e.g. Misverstand Weir)

Water Delivered 78%

Wemmershoek Dam
Steenbras Dam

Water Delivered 22%

Saleable Water

City of Cape Town

Other Users

TCTA Water Income

Other Sources

(e.g. Misverstand Weir)
<table>
<thead>
<tr>
<th>Project Component</th>
<th>% Complete</th>
<th>Start Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>River monitoring</td>
<td>Ongoing</td>
<td>September 2002</td>
<td>January 2005</td>
</tr>
<tr>
<td>Access Roads</td>
<td>100 %</td>
<td>February 2004</td>
<td></td>
</tr>
<tr>
<td>Construction Village</td>
<td></td>
<td>January 2005</td>
<td>May 2006</td>
</tr>
<tr>
<td>Dam Contract</td>
<td>80 %</td>
<td>June 2004</td>
<td>February 2008</td>
</tr>
<tr>
<td>Dam Impoundment</td>
<td></td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Supplement Scheme</td>
<td>73 %</td>
<td>July 2005</td>
<td>December 2007</td>
</tr>
<tr>
<td>Commencement of water</td>
<td></td>
<td>Summer 2007</td>
<td></td>
</tr>
<tr>
<td>supply</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Principle Features of Scheme

- **Dam Features**
  - Gross Storage Capacity: 130.1 million m³
  - Maximum dam height: 60m (70m incl foundation)
  - Length of dam wall: 990 m
  - Maximum wall width: 220 m

- **Supplement Scheme Features**
  - Pump station capacity: 4 m³/s
  - Pipeline length: 10 km

- **Yield of Scheme**: 81 million m³/yr

- **Cost Estimate**: R1.5 bn
## Project Cost

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Original Budget R Million</th>
<th>Approved Budget R million</th>
<th>Actual Expenditure R million</th>
<th>Forecast to Completion R million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>147</td>
<td>153</td>
<td>124</td>
<td>153</td>
</tr>
<tr>
<td>Construction</td>
<td>1 395</td>
<td>1 117</td>
<td>894</td>
<td>1 117</td>
</tr>
<tr>
<td>Social &amp; Environmental</td>
<td>83</td>
<td>85</td>
<td>56</td>
<td>85</td>
</tr>
<tr>
<td>Administration</td>
<td>100</td>
<td>115</td>
<td>66</td>
<td>115</td>
</tr>
<tr>
<td>Contingency</td>
<td>153</td>
<td>83</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 877</strong></td>
<td><strong>1 553</strong></td>
<td><strong>1 140</strong></td>
<td><strong>1 553</strong></td>
</tr>
</tbody>
</table>
Intake Tower
(Concrete structure 99% complete,
mechanical and electrical installation
40% complete)

Side-channel spillway
(68% complete)

Concrete face-panels
0.5 m thick
(72% complete)

Plunge pool
(100% complete)

Rock-fill Embankment
60m high and 980m wide
(99% complete)
Supplement Scheme

Civil works – DWAF : R 192 mil
Pipeline – Cycad : R 105 mil
Elect. & Mech. – Sulzer : R 59 mil
POWER/DONICO JV: 40 HOUSES : R5.6 mil
BIP 632 cc (FRANSCHHOEK): 20 HOUSES : R2.8 mil
BIP 611cc (DWARS RIVER): 20 HOUSES : R2.9 mil
Key Challenges

- **Engineering**
  - Contractor performance to contractual obligations
    - On schedule to deliver water in accordance to directive.
    - Within budget
    - Within specifications and quality

- **Environmental and Social**
  - Delivery on Franschhoek First Policy
  - Handover of La Motte village
  - Social monitoring and impact mitigation
  - Sustainable Utilisation Plan (SUP)
  - Compliance with EMP

- **Legal**
  - Land acquisition and compensation
  - Berg Water Fire
BWP Impoundment

27 July 2007
30/07/07 07:00 AM
Water Level: RL220.24
FSL: RL2050
Total Storage: 18.4 million cubes – 14%
Live storage: 10.3 million cubes – 8.5%
BWP Impoundment
Vaal Pipeline Project Status
Supply and demand study by DWAF – water deficit in 2007 from existing VRESS system.

Augment water supplies for Eskom and Sasol by 2007 at a 99.5% hydrological reliability of supply.

31 Months to design and construct R2,5 billion project.

Principle Features of Scheme

- Abstraction works and low lift pump station
- Dual purpose balancing dam/desilting works
- High-lift pumpstation (5,4 3/s)
- 10 000 m³ surge tank
- Control room at Grootdraai Dam
- 115 km of 1900mm diameter pipeline
- 6 km of 1000-1200mm diameter pipeline to Bosjesspruit Dam
- Temporary Pump Station
## Project Cost

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Original Budget R’ Million</th>
<th>Approved Budget R’ Million</th>
<th>Actual Expenditure R’ Million</th>
<th>Forecast at Completion R’ Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional consultants</td>
<td>164</td>
<td>176</td>
<td>101</td>
<td>176</td>
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<tr>
<td>Construction</td>
<td>1 811</td>
<td>2 083</td>
<td>1 197</td>
<td>2 083</td>
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<tr>
<td>Bulk Power Supply</td>
<td>83</td>
<td>14</td>
<td>13</td>
<td>14</td>
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<tr>
<td>Land Acquisition</td>
<td>4</td>
<td>19</td>
<td>5</td>
<td>19</td>
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<tr>
<td>Administration</td>
<td>55</td>
<td>104</td>
<td>33</td>
<td>104</td>
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<tr>
<td>Contingency</td>
<td>374</td>
<td>95</td>
<td>95</td>
<td>95</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2 491</strong></td>
<td><strong>2 491</strong></td>
<td><strong>1 349</strong></td>
<td><strong>2 491</strong></td>
</tr>
<tr>
<td>Project Component</td>
<td>% Complete</td>
<td>Start Date</td>
<td>Completion Date</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>------------</td>
<td>----------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Pipeline Contract (V020)</td>
<td>83%</td>
<td>November 2005</td>
<td>June 2007</td>
<td></td>
</tr>
<tr>
<td></td>
<td>58%</td>
<td>April 2006</td>
<td>December 2007</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Civil works &amp; MEIP Contract (V021)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abstraction works</td>
<td>26%</td>
<td>May 2006</td>
<td>September 2008</td>
<td></td>
</tr>
<tr>
<td>Desilting works</td>
<td>54%</td>
<td>April 2006</td>
<td>February 2008</td>
<td></td>
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<tr>
<td>High-lift pump station</td>
<td>56%</td>
<td>April 2006</td>
<td>February 2008</td>
<td></td>
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<tr>
<td>Diversion Works</td>
<td>51%</td>
<td>June 2006</td>
<td>February 2008</td>
<td></td>
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<tr>
<td>Surge Tank</td>
<td>8,0%</td>
<td>February 2007</td>
<td>February 2008</td>
<td></td>
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<tr>
<td>Temporary Pump Station</td>
<td>N/A</td>
<td>August 2007</td>
<td>February 2008</td>
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<tr>
<td>Project Commissioning</td>
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<td>February 2008</td>
<td>May 2008</td>
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<td>Water Delivery</td>
<td></td>
<td>February 2008</td>
<td>May 2008</td>
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</table>
Critical Aspects and Key Challenges

- **Engineering**
  - Contractor’s performance to contractual obligations
    - On schedule – deliver water in accordance with revised contractual dates
    - Within budget
    - Within specifications and quality

- **Environmental and Social**
  - Resolve landowners’ claim for borrow pits
  - Compliance with EMP
Contractor: MPC JV
Contract amount: R1.39 billion
Vaal Pipeline

Pipe coating at the pipe manufacturing plant

Pipe laying
Civil Structures and MEIP Components

Contractor: COVEC-MC JV

Contract amount: R 417,9 million

An overview of the Cofferdam and the start of the shaft excavation.
(3D Model showing the colour scheme for the abstraction works and high lift pump station)
Future
LHWP Summary

- Phases 1A and 1B completed
- Social/environmental mitigation measures continue
- Implementation Completion and Results Report (ICR)
  - Several targets exceeded if compared with information in Project Appraisal Document (PAD)
- Repairs to Mohale Dam
- Further phases – feasibility study in process
Possible Future Mandates

- ORWRDP PHASE: BULK WATER DISTRIBUTION
- SPRING GROVE
- LHWP PHASE II
- MOKOLO PIPELINE PROJECT
Cabinet approved the establishment of the SANWRIA on 5 August 2005

SANWRIA bill approved by Cabinet in August 2007 and to be promulgated

Process to create agency will commence once the Act has been passed
### Analysis Of Functions Required By The Agency

<table>
<thead>
<tr>
<th>Functions required by the Agency</th>
<th>TCTA exp?</th>
<th>Branch exp?</th>
</tr>
</thead>
<tbody>
<tr>
<td>To undertake strategic planning for the development of national water resources infrastructure and to sustain efficient and effective water supply and the collection of revenue arising there from</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>To planning, design and construct new national water resources infrastructure</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>To alter, maintain, rehabilitate and refurbish existing and new infrastructure</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>To operate and manage existing and new national water resources infrastructure</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>To procure funding, arrange the financing and where necessary the refinancing of national water resources infrastructure</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>To acquire national water resources infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To dispose of and to decommission national water resources infrastructure</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>To achieve and sustain efficient and effective water supply and the collection of revenue arising there from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To enter into stakeholder water user agreements for sustainable business</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>To acquire or dispose of any right in moveable or immovable property</td>
<td>No ito scale</td>
<td>Yes</td>
</tr>
<tr>
<td>To provide technical, management and financial advisory services, training and other support services to water management institutions, and water services authorities or providers as defined in the National Water Act and the Water Services Act, and to the Department</td>
<td>Yes but limited</td>
<td></td>
</tr>
</tbody>
</table>
TCTA’s Competencies For State Of Readiness

- **The Treasury function** covers debt and liability management for projects. Because of the uniqueness and size of the current Treasury function, skills and experience in TCTA should be able to manage future projects envisaged for the Agency and well as funding of the Agency overall.

- **The Accounting function** covers financial management and procurement which include skills and knowledge:
  - Accrual accounting and reporting on multiple projects
  - Accounting and reporting on IFRS and GAAP
  - Transparent tender processes
  - Annual budgeting and financial controls

- **The Assurance function** covers corporate governance, and includes internal auditing, legal advice and enterprise risk management.
The Enterprise Wide Risk Management Framework will probably need to be refined in line with the functions of the Agency.

- **The Business Support function** provides corporate services and facilities management, and takes responsibility for communications and IT support.
  With the current skills and experience in branding TCTA, there is much that will be of use to the new Agency.

- **The OD function** includes organisational design and all aspects of human resources management. Its experience lies in oversight of a small organisation.
The Capital Investment function incorporates integrated project management which includes:
- project planning, scoping, and oversight and monitoring of project implementation;
- project procurement and contract management;
- procuring and managing project insurances; and
- quantification and monitoring of risks.

The Business Development function includes:
- formulating institutional arrangements for new projects;
- ensuring appropriate risk allocation;
- developing project financial models to ensure financial viability, and project tariff principles and revenue streams;
- negotiating new project implementation and supply agreements;
- managing initial credit ratings;
- undertaking stakeholder liaison, user coordination and promoting projects at initiation.
Key activities to be performed between TCTA and the Agency:

- Streamline TCTA and Branch internal processes and systems.
- Undertake joint project planning and implementation.
- Engage with organised labour (to understand implications of terms and conditions of employment).
- Design an appropriate revenue collection model.
- Assist with the development of NWRIA Asset Register.
- Conduct joint risk assessment and due diligence on assets and liabilities for TCTA and the Branch.
- Road shows to engage all stakeholders.
TCTA: Key Enablers to Deliver on Mandate

- TCTA role and mandates to be agreed with DWAF in light of transition period to create NWRIA
  - Timing of mandates
  - Clarification of participation before mandates are awarded
  - Role in water resources development and strategic asset management as support to government and DWAF’s agenda
  - Collaboration in skills development initiatives

- What role should TCTA play in the DWAF’s support strategy to ensure delivery on W&S targets

- What role should TCTA play in WDM initiatives relating to funding and strategy (refer to use WfW initiatives within roll out of Berg Water Project)

- Governance aspects that require attention:
  - Complexity of interaction points with DWAF
  - Shareholders compact to be finalised
Questions ....