OVERVIEW OF THE WESTERN CAPE WATER CRISIS & LONG TERM WATER CHALLENGES & RESPONSE

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Business risks beyond the City

- Many businesses based in Cape Town - operations & / or supply chains in other parts of the Western Cape
- How serious is the situation across the rest of Western Cape?
The average level for dams across the Western Cape for the week starting 16 October is 35.7% (2016: 62%)
## WC dam levels 2016 vs 2017 (16 October 2017)

<table>
<thead>
<tr>
<th>Dam</th>
<th>% Full This Week</th>
<th>% Full Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town System Dams (Combined): Wemmershoek, Voelvlei, Steenbras, Theewaterskloof and Berg River Dams</td>
<td>37.04</td>
<td>61.67</td>
</tr>
<tr>
<td>Berg River Catchment</td>
<td>49.29</td>
<td>72.92</td>
</tr>
<tr>
<td>Breede River Catchment</td>
<td>34.27</td>
<td>59.63</td>
</tr>
<tr>
<td>Gouritz River Catchment</td>
<td>19.01</td>
<td>39.26</td>
</tr>
<tr>
<td>Olifants / Doorn River Catchment</td>
<td>39.33</td>
<td>99.18</td>
</tr>
<tr>
<td><strong>Western Cape State of Dams</strong></td>
<td><strong>35.77</strong></td>
<td><strong>62.38</strong></td>
</tr>
</tbody>
</table>
Drought status across the Western Cape

Western Cape Municipal Drought Status
# October 2017

Legend
Municipal Drought Status
- Medium
- High
- Severe

Drought Status: High - Requires urgent intervention
Drought Status: Severe - Requires IMMEDIATE urgent intervention
Municipalities that have declared disasters
Municipalities that have put water restrictions in place as per provincial gazetted directives

Data Source: Dept of Water and Sanitation
Dept of Local Government
## Interventions underway in municipalities

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaufort West</td>
<td>Emergency water security – equipping 2 boreholes, 3rd underway soon. Further funding: 5 more boreholes. Intensive comms campaign</td>
</tr>
<tr>
<td>Kannaland</td>
<td>New abstraction point &amp; pipe, lining earth channel &amp; pipe repairs underway</td>
</tr>
<tr>
<td>Knysan</td>
<td>Water works plant repairs – by early Dec 2017. Other projects to the value of R3.6m ongoing</td>
</tr>
<tr>
<td>Bitou</td>
<td>Existing groundwater project Greater Plettenberg Bay remains in progress – for drilling, equipping of boreholes and pipelines</td>
</tr>
<tr>
<td>Drakenstein</td>
<td>Exploring 57 boeholes &amp; 19 boreholes underway</td>
</tr>
<tr>
<td>Stellenbosch</td>
<td>Exploring &amp; finding funding for boreholes</td>
</tr>
<tr>
<td>Bergrivier</td>
<td>Exploring &amp; finding funding for boreholes</td>
</tr>
<tr>
<td>Swartland</td>
<td>Exploring boreholes</td>
</tr>
<tr>
<td>Saldanha Bay</td>
<td>Supply line linking Elandfontein mine with the Municipal network. Desalination option</td>
</tr>
<tr>
<td>Theewaterskloof</td>
<td>2 groundwater purification plants in progress – end October 2017. Refurbishment of existing boreholes and link pipeline completed. Project cost R10.6m</td>
</tr>
</tbody>
</table>
Continuity plan for WCG run facilities & operations

Focus on critical service delivery areas of:
• health services
• education
• social development services, and
• office accommodation (command and control structures, and critical service points).

Interventions to reduce water consumption across all facilities & operations.

State of action & restrictions

- All municipalities in the WC (excl 3) are in a severe drought status and require immediate intervention
- The remaining 3 are in a serious state and require urgent intervention
- WCG is working with a number of municipalities to:
  - implement supply augmentation schemes &
  - tighten demand reduction
- Restriction levels across municipalities in WC not consistent – WCG is working with municipalities towards standardising restriction levels & actions aligned with each restriction level. This is a legally complex process.
Economic impacts of water crisis

30% of Provincial GVA highly / moderately water intensive (i.e. high exposure to risk)

• Uncertain and low water supply
• Variable water quality
• Knock on high costs of water

Note most / no municipalities increasing business water tariffs yet

Curtailment in water dependant economic activity and investment

Increase in prices of all goods and services

Decreased competitiveness

Importing products previously sourced locally

Loss of confidence in investing in WC

Reputational loss as a supplier / destination

Decline in GVA

Decline in Jobs

Food security
Breakdown per municipality (GVA %) within Berg River WMA highlights areas of high intensity – but risk not only related to intensity

Source: Quantec 2015: Water Decision Making Tool Project (GreenCape co-funded by WRC & WCG)
Some business impacts so far

- Agriculture:
  - Emergency funding for fodder – will last until March 2018. But veld will not recover before next spring – what are the LT implications?
  - Ceres – massive losses expected in wages to agri workers
  - Deciduous fruit – significant drops in crop production expected, with smaller fruit
  - Some nursery vine planting cancelled
  - Grain – fields used to graze livestock in many places
  - Huge social welfare crisis developing – potential of tens of 1000s permanent workers no income. Seasonal workers no work. Migration into towns, safety issues etc.
  - Huge financial losses – no capex for next year, tax losses

- Swimming pool companies likely to start closing down

- Nurseries – huge impacts

- Car washers – waterless or close down

- Agri-processing:
  - A WC tomato pure factor not opening this season
  - Fish processing factories have huge concerns
Water for the economy: business support workstream

• Engagements: - municipal (24) and sector based
• Support co-ordination:
  • Unblocking challenges
  • Collating info – impacts, actions, savings
• Reduce economic risk of water shortages and increased costs:
  • risks, metering,
  • technology information,
  • water management plans,
  • benchmarks,
  • links to suppliers,
  • case studies etc.
• Supporting the water sector:
  • links to research,
  • skills development,
  • revision of by-laws,
  • alternative water use guidelines etc.
Key messages

• The current drought can only be broken with 3-4 years of good rain
• The effects of the current drought are long term
• Restrictions are here to stay
• Will are likely to see significant tariff increases
• Grave risks to water security, economic security, job security, food security, social security & safety security
• We are too dependent on rainfall and surface water sources – need to diversify
• Businesses need to adapt to a ‘new normal’ - may need to make hard decisions: sustainability of business? Cuts in production? Investments in water?
• Focus on CCT, but other municipalities experiencing sever problems
• Need a whole of society approach – businesses key partner (own operations, supply chains, employees)
Contact Us

Thank You