



DRAKENSTEIN
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NCOP Visit to Paarl WWTW

Paarl WWTW Overview

Louis Pienaar | 13 September 2023



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1. Background of Paarl WWTW

- Paarl WWTW is an activated sludge treatment plant that has a hydraulic design capacity to treat 35 ML/d of both domestic and industrial wastewater;
- Serves the population of Paarl and Mbekweni;
- Classified by DWS as a **Class A** plant;
- Currently operating at 69% of its design hydraulic capacity;
- Discharges its treated final effluent into the Berg River;
- Operational monitoring is done weekly by our internal laboratory;
- Monitoring of effluent quality is done by an external laboratory monthly, with continuous reporting to DWS.



1. Background on Paarl WWTW (continued)

- Layout of Paarl WWTW:





2. BFI Funding and Project Scope

- Paarl is an old plant, with aging infrastructure that experiences frequent breakdowns, which ultimately has a negative effect on the effluent quality;
- The organic loading on the plant is in excess of 80%, which means the plant is due for an upgrade;
- The Budget Facility for Infrastructure (BFI) from National Treasury, facilitated through DWS approved an amount of **R1,3 billion** for the Upgrade of the Drakenstein Sanitation Infrastructure
- The construction projects to be implemented have been broken up into the following packages:

Construction Package	Project Description
Construction Package 1	Paarl WWTW - Upgrade of the Liquid Stream
Construction Package 2	Centralised Sludge Treatment Facility
Construction Package 3	Paarl WWTW & Wellington WWTW Link
Construction Package 4	Bulk Sewer Upgrades in Southern Paarl

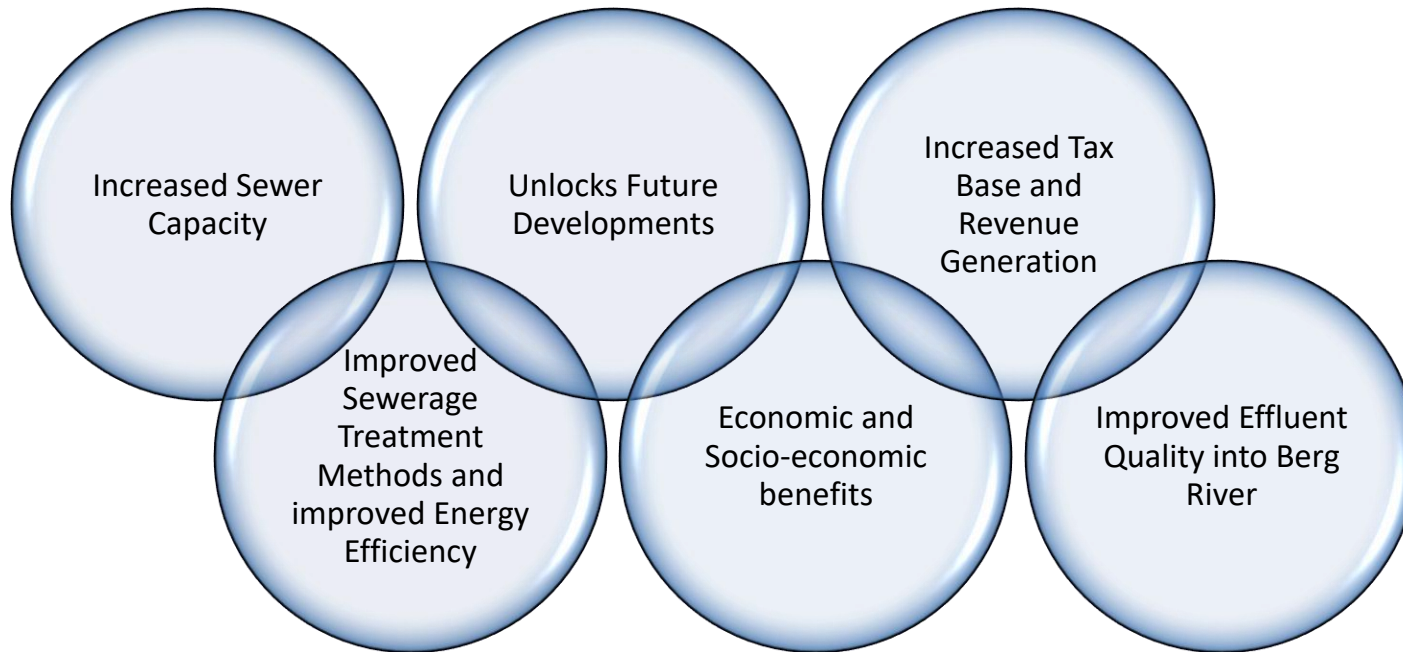


2. BFI Funding and Project Scope (continued)

- Construction Package 1 - Paarl WWTW - Upgrade of the Liquid Stream:**
 - Remove capacity limitations on the existing process, reduce energy demand, optimise operation & maintenance costs and prevent pollution of the Berg River;
- Construction Package 2 - Paarl WWTW - Centralised Sludge Treatment Facility:**
 - Treat sludge from the Paarl WWTW, Wellington WWTW and future Paarl South WWTW, and will also include sustainable opportunities such as transforming sludge into biogas to reduce the high electricity demand at the Paarl WWTW;
- Construction Package 3 - Paarl WWTW & Wellington WWTW Link:**
 - Upgrade of Newton Pump station; upgrade of the current link between the Paarl and Wellington WWTW, to divert flow between the two sewer catchment areas to accommodate flows from new development in Southern Paarl; and
- Construction Package 4 - Bulk Sewer Upgrades in Southern Paarl:**
 - To connect the southern areas of Paarl to the catchment area of the Paarl WWTW to ensure sufficient sewage treatment capacity for future developments.



3. Impact on Drakenstein





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Thank you.