

OLIFANTS-DORING ECOLOGICAL INFRASTRUCTURE PROJECT

PROJECT SUMMARY

Water Users Associations (WUA) are established to manage local water infrastructure, supply water to entitled water users, and implement management decisions agreed upon between members. The Olifants-Doring and Sandveld catchments, in the West Coast Region of the Western Cape, are among the most ecologically and economically important landscapes, supporting globally significant biodiversity, commercial agriculture and rural livelihoods. Yet this natural wealth is under pressure. Climate change, invasive species and water abstraction are driving degradation across wetlands, rivers, estuaries and rangelands. This Ecological Infrastructure Strategic Plan (EISP) responds to these risks with a Source-to-Sea approach, integrating ecological and socio-economic priorities to restore and safeguard critical natural systems. It builds on detailed spatial assessments and aims to catalyse investment in Nature-based Solutions (NbS) that improve resilience, water security and ecosystem service delivery across the region.

A suite of strategic, actionable interventions that form the core implementation component of the Olifants-Doring Ecological Infrastructure Strategic Plan is structured around five key themes—geomorphology, alien invasive vegetation, wetlands, Ecological Reserve implementation, and water quality improvement, derived directly from the findings of the baseline assessments completed for the catchment. Each intervention is designed to address specific ecological risks identified in the baseline studies, including erosion and sediment instability, invasive plant encroachment, wetland degradation, non-compliance with Environmental Flow requirements, and water pollution from municipal and agricultural sources. The strategy proposes a learning-by-doing framework that integrates ecological infrastructure (EI) indicators into adaptive planning and reporting.

PROJECT STATUS



The project is at different stages of completion. Below is a summary of interventions extracted from the Olifants – Doring Ecological Infrastructure Strategic Plan and Executive Summary documents.

CATEGORY	INTERVENTION (Strategic Action)	GEOGRAPHIC FOCUS	DESCRIPTION	APPROXIMATE BUDGETS
Geomorphology	Reconnect floodplains and reduce erosion	Upper Olifants, Knersvlakte	Restore floodplain connectivity and reduce gully erosion through re-vegetation and grazing management.	R40m
Invasive Alien Plants	Targeted clearing and fire-risk reduction	Doring Rangelands, Citrusdal-Olifants corridor, Koue Bokkeveld	Clear wattle, Neltuma and gum invasions in riparian corridors and pines in water source areas.	R5m
Wetlands & Floodplains	Restore high-priority wetlands and protect functional systems	17 wetland hotspots: Bokkeveld, Hantamsberg, Sandveld	Rehabilitation and stewardship in hotspot areas; integrate into SDFs.	R5m
Estuaries	Restore flow, improve buffers, and reduce pollution	Olifants Estuary and Verlorenvlei	Secure Reserve flows, control sediment and nutrient loading, manage reed encroachment, and improve governance coordination.	R20m Subject to further studies and decisions
Water Quantity (Ecological Reserve)	Restore baseflows and improve Reserve compliance	Olifants-Doring and Sandveld rivers	Improve monitoring, operating rules, and enforcement, support adaptive management and build accountability.	R30m Subject to further studies and decisions
Water Quality	Reduce nutrient and salinity impacts through land-use and WWTW upgrades	Downstream of irrigated areas, towns, and Verlorenvlei	Interventions include riparian buffers, wetland rehabilitation, improved irrigation scheduling, and WWTW performance upgrades.	R20m Subject to further studies and decisions

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FINANCIAL NEEDS



Approximate value: R120 million.

This amount is the combined budget for all interventions and it is not yet clear if budgets for Estuaries, Water Quantity and Quality are combined or individual project amounts. Budgets were estimated using benchmarks from comparable South African Ecological Infrastructure projects (e.g. WRC TT 646/15, Working for Water and Wetlands programmes, DEA&DP), and are presented as indicative ranges to inform planning and funding mobilisation. Interventions are prioritised based on ecological urgency, implementation feasibility, and potential for multi-benefit return on investment. Together, they offer a pragmatic roadmap for catchment-wide action, enabling public and donor investment in the restoration and protection of critical ecological infrastructure.

MAP OF THE PROJECT



TIMELINE



Phase 1: Enabling Conditions (2025–2026)

Focuses on institutional groundwork and strategic alignment.

Key actions include:

- Establishing catchment coordination platforms (e.g. via the Source-to-Sea programme in conjunction with the Boland Grootwinterhoek Collective).
- Integrating EI priorities into Spatial Development Frameworks (SDFs) and Integrated Development Plans (IDPs).
- Improving flow monitoring (e.g. Reserve sites on the Olifants River and Verlorenvlei).
- Conducting EI training, stewardship dialogues, and updating alien clearing workplans.

Phase 2: Strategic Pilot Implementation (2026–2028)

Targets high-leverage rehabilitation interventions and demonstration projects in priority zones.

Activities include:

- Wetland and riparian rehabilitation at selected hotspots.
- Invasive alien plant clearing in the Olifants-Citrusdal corridor and Koue Bokkeveld catchment.
- Application of tools like the Water Balance Tool (WBT) to guide Reserve compliance.
- Testing of incentive mechanisms and stewardship models.

Phase 3: Scaling Through Strategic Investment (2028+)

Aims for systemic, landscape-scale restoration.

This includes:

- Aligning with multilateral funding (e.g. Green Climate Fund).
- Integrating EI into infrastructure (e.g. DWS upgrades).
- Positioning EI as a tool in climate risk disclosure and agricultural sustainability

PUBLIC/ PRIVATE SECTOR OPPORTUNITY



Partnerships will be created between landowners and existing contractors regarding the possibility of secondary industries that involve local communities. The upskilling of workers and the use of unemployed individuals will also benefit the local economies.

KEY PARTIES



- National Department of Water and Sanitation (DWS)
- Western Cape Government: Dept of Environmental Affairs and Development Planning (DEA&DP)
- Western Cape Government: Dept of Agriculture
- West Coast District Municipality, its respective local municipalities and Water Users Associations
- Department of Forestry, Fisheries and the Environment (DFFE)
- Working for Water
- Local Farmers and Landowners
- Local Communities & NGO's
- Cape Nature