

Part 2 provides details on the following:

- Vision Statement for Verlorenvlei;
- Strategic Objectives for Verlorenvlei;
- Overview of Management Strategies & Actions;
- Estuary Zoning Plan;
- Operational Specification (Targets) for Verlorenvlei; and
- Overview of existing Monitoring Programmes.

2.1 Vision Statement

The Vision statement for Verlorenvlei was discussed at the Stakeholder Workshop held in September 2009 in Elands Bay. Participants were asked to propose vision statements for the area. Based on the feed-back received from the participants following Vision Statement is proposed for Verlorenvlei:

From catchment-to-coast we are an integrated and empowered community, providing a fair standard of living to all, while protecting and proudly sharing the cultural, historical, archeological and natural values of Verlorenvlei.

2.2 Strategic Objectives for Verlorenvlei

While the vision is an inspirational, higher-level statement of strategic intent, strategic objectives answer the question: *“How will you know when you have achieved the Vision and by when?”* Strategic objectives can typically be grouped into three broad categories, namely those addressing (a) Ecological, (b) Heritage and (c) Socio-economic values. Distilling from the Verlorenvlei EMP Vision, Strategic Objectives are required for the following:

- *Ecological: “protecting natural value”;*
- *Heritage: “protecting cultural, historical, archeological values”;* and
- *Socio-economic: “Integrated and empowered community”;*
“Fair standard of living for all”; and
“sharing values”.

The Strategic Objectives for Verlorenvlei were a discussion point at the Stakeholder Workshop held in September 2009 in Elands Bay. Based on the feed-back received from the participants the following Strategic Objectives are proposed for Verlorenvlei:

STRATEGIC OBJECTIVE		BY WHEN
Ecological	The Verlorenvlei ecosystem receives formal protection status under the Protected Areas Act 2004	2012
	Further degradation (negative trajectory) of Verlorenvlei ecosystem is halted	2015
	Ecological health of ecosystem is improved to Category C/B (moderately modified)	2017
	Ecological health of ecosystem is improved to Category A/B (near natural)	2025

STRATEGIC OBJECTIVE		BY WHEN
Heritage	The cultural, historical and archeological sites in and around Verlorenvlei receives official protection status (e.g. Protected Areas Act, National Heritage Act)	2015
Socio-economic	The Estuary Forum is constituted, including functional Technical Working Groups /Sub-committees ("integrated & empowered community")	2011
	The community (farmers, fishers, residents, commercial concerns, NGOs, authorities, etc) functions in an integrated, cooperative manner through a trusting and fully representative Estuary Forum ("integrated & empowered community")	2013
	A sustainable tourism market is established for the area, utilizing the diverse range of values offered by Verlorenvlei ("sharing values" and "valued visitors")	2012
	Unemployment (and associated poverty) in the Verlorenvlei area is reduced through innovative job creation initiatives, e.g. tourism, fisheries, food security, etc ("fair standard of living")	2015

Provisional completion dates for the strategic objectives, as indicated above, need to be firmed up at follow-up stakeholder workshops.

2.3 Overview of Management Strategies & Actions

When setting Management Strategies the following question should be answered *"What do we need to do to achieve or maintain the strategic objectives?"* or *"What is preventing us from achieving the vision and strategic objectives?"*

Based on the feed-back received from participants at the Stakeholder Workshop held in Eland Bay (September 2009), the following "Issue Packages" (or key sectors) for which management strategies had to be defined were apparent:

- Conservation;
- Living Resource management;
- Water quantity and quality (including waste and wastewater management);
- Agriculture;
- Town and tourism development;
- Improved integration and collaboration among role players (institutional arrangements & empowerment);
- Law enforcement and compliance;
- Funding sources and opportunities; and

- Innovative opportunities for job creation (e.g. including tourism opportunities).

The preparation of Management Strategies is the responsibility of the EF, in particular TWGs or liaison teams. In the following sections Management Strategies for the listed issues are proposed, partly based on the feed-back received from participants at the Stakeholder Workshop held in September 2009 in Elands Bay. However, these strategies need to be re-visited and refined by the designated TWGs once established (see Part 4).

A range of actions has been proposed categorized into 9 issues packages or sectors. A summary of these actions are provided below.

ISSUE PACKAGE/SECTOR		ACTION	PRIORITY
1	Conservation	ACTION 1.1: Reinforce Ramsar status of Verlorenvlei through promulgation as a Formally Protected Area	High
		ACTION 1.2: Adopt a formal conservation zoning plan for Verlorenvlei (as part of the estuary zoning plan) and ensure that local IDP/SDF is aligned with this plan and that plan is incorporated in IDP/SDF, linked to other formal initiatives	High
		ACTION 1.3: Obtain formal protection of the heritage areas in and around Verlorenvlei	Medium
		ACTION 1.4: Prepare and implement a rehabilitation and restoration programme for Verlorenvlei	High
		ACTION 1.5: Develop and implement a climate change adaptation plan for Verlorenvlei (in response to changes in freshwater flow, sea level rise, etc)	Medium
2	Living resources management	ACTION 2.1: Eradicate alien fish in Verlorenvlei	High
		ACTION 2.2: Eradicate alien vegetation in Verlorenvlei through Working for Wetlands programme	High
		ACTION 2.3: Investigate deterioration of fish health in Verlorenvlei	High
		ACTION 2.4: Investigate the occurrence of avian botulism in wading bird population of Verlorenvlei	High
		ACTION 2.5: Investigate the viability of fishing competitions (for alien fish) and aquaculture in Verlorenvlei	Medium
3	Water quantity and quality (including waste and wastewater management)	ACTION 3.1: Determine the Ecological water requirements of Verlorenvlei at a comprehensive level	High
		ACTION 3.2: Develop and implement a water resource utilization plan (including registration & licensing)	High
		ACTION 3.3: Prepare and implement a mouth management protocol (to improve connection with the sea)	High
		ACTION 3.4: Address sanitation and sewage treatment facilities in Redelinghuys & Elandsbaai	High
		ACTION 3.5: Appropriately manage solid waste dump sites along Verlorenvlei	High
		ACTION 3.6: Investigate impact of water abstraction on groundwater in Verlorenvlei	High
		ACTION 3.7: Investigate the link between nutrient dynamics and algal blooms in Verlorenvlei	High
		ACTION 3.8: Design and implement a water quality monitoring programme for Verlorenvlei	Medium
4	Agriculture	ACTION 4.1: Develop and implement agricultural best practice specifically to reduce nutrient enriched return flow and sediment erosion (e.g. through Biodiversity and Potatoes/Rooibos Initiatives)	High
		ACTION 4.2: Develop and implement protocol for reed management in Verlorenvlei (addressing excessive growth, harvesting e.g. for thatching and burning)	High
		ACTION 4.3: Manage and control salt marsh grazing in Verlorenvlei	High
5	Town and tourism development	ACTION 5.1: Remove or upgrade of road crossings through Working for Wetlands programme	High
		ACTION 5.2: Ensure appropriate development in and around Verlorenvlei	High

ISSUE PACKAGE/SECTOR		ACTION	PRIORITY
		through IDP/SDF	
		ACTION 5.3: Increase and improve access (e.g. for birding) in Verlorenvlei	High
6	Law enforcement and compliance	ACTION 6.1: Sign a MoU (CapeNature and DAFF) to increase compliance capacity and formalize agreement on the removal of gillnetting	High
		ACTION 6.2: Increase environmental law enforcement and compliance capacity with respect to pollution (e.g. from waste and wastewater and agricultural return flows)	High
		ACTION 6.3: Increase environmental law enforcement and compliance capacity with respect to water quantity (abstractions)	High
		ACTION 6.4: Increase environmental law enforcement and compliance with respect to infra-structure development and land-use	High
		ACTION 6.5: Develop a safety and security plan for the Verlorenvlei area (e.g. "Buurtwag")	Medium
7	Institutional arrangements & empowerment	ACTION 7.1: Establish the Verlorenvlei Estuary Forum, comprising broader representation from relevant government authorities and the community, TWGs (or liaison teams) and a chair person. To give formal status to the forum a constitution must be drafted and approved.	High
		ACTION 7.2: Develop and deploy a human resource plan for implementation of Verlorenvlei EMP	High
		ACTION 7.3: Develop and deploy an education and awareness programme for Verlorenvlei	High
8	Funding sources and opportunities	ACTION 8.1: Prepare a financial plan for the implementation of the Verlorenvlei EMP	High
9	Innovative opportunities for job creation	ACTION 9.1: Investigate and deploy job opportunities for communities in the Verlorenvlei area linked to tourism (e.g. guides for hiking trails/boat trip)	High
		ACTION 9.2: Investigate and deploy hydroponics programme in the area to increase food security	High

The prioritisation of actions needs to be undertaken by the Estuary Forum, in consultation with stakeholders and will be pursued at the next stakeholder workshop. Factors to consider in the selection of priority actions are, for example:

- Severity of ecological or socio-economic impact in relation to the vision and strategic objectives
- Availability of resources, both financial and human resources.

Detailed implementation plans for each for the issue packages or key sectors, including the Management Action Plans for priority actions are contained in Part 2: Detailed Implementation Plans.

2.4 Estuary Zoning Plan

The Estuary Zoning Plan (EZP) provides a means of geographically transposing the aims of the Strategic Objectives and Management Strategies for a particular estuary, where applicable.

The following needs to be demarcated on an EZP:

- **Geographical boundaries (core and secondary boundaries)** of the estuary also indicating important habitat (e.g. open water, main channel and flood plains);
- **Areas of ecological** (Ramsar boundaries; sensitive ecosystems), **heritage** (archeological, historical and cultural sites) and **socio-economic** (fisheries; recreation areas; bird watching sites) **value**;
- **Zones depicting the areas where certain types of activities/developments** will be allowed or where certain activities/developments will not be allowed (i.e. the traditional estuary zonation map)
- Approved existing and future **developments/activities** within the secondary boundary of the estuary.

Figure 2.1 demarcates the geographical boundaries (including the proposed secondary boundaries) of the Verlorenvlei Estuary for the purposes of this EMP. Areas of ecological value are indicated by the red estuary flood plain boundary. These represent areas of high sensitivity. Areas indicated in orange and yellow demarcate the secondary boundary of the plan. Orange zones are more sensitive to development and activities than areas indicated in yellow. All activities with

In Figures 1.1 to 1.3 (Part 1) the location of existing activities within the Verlorenvlei Estuary have been mapped. However, several of the existing activities are incompatible with the zoning proposed above. It is therefore important the Estuary Forum re-assess this situation in order to produce a map that will depict the approved existing and future developments/activities within the secondary boundary.

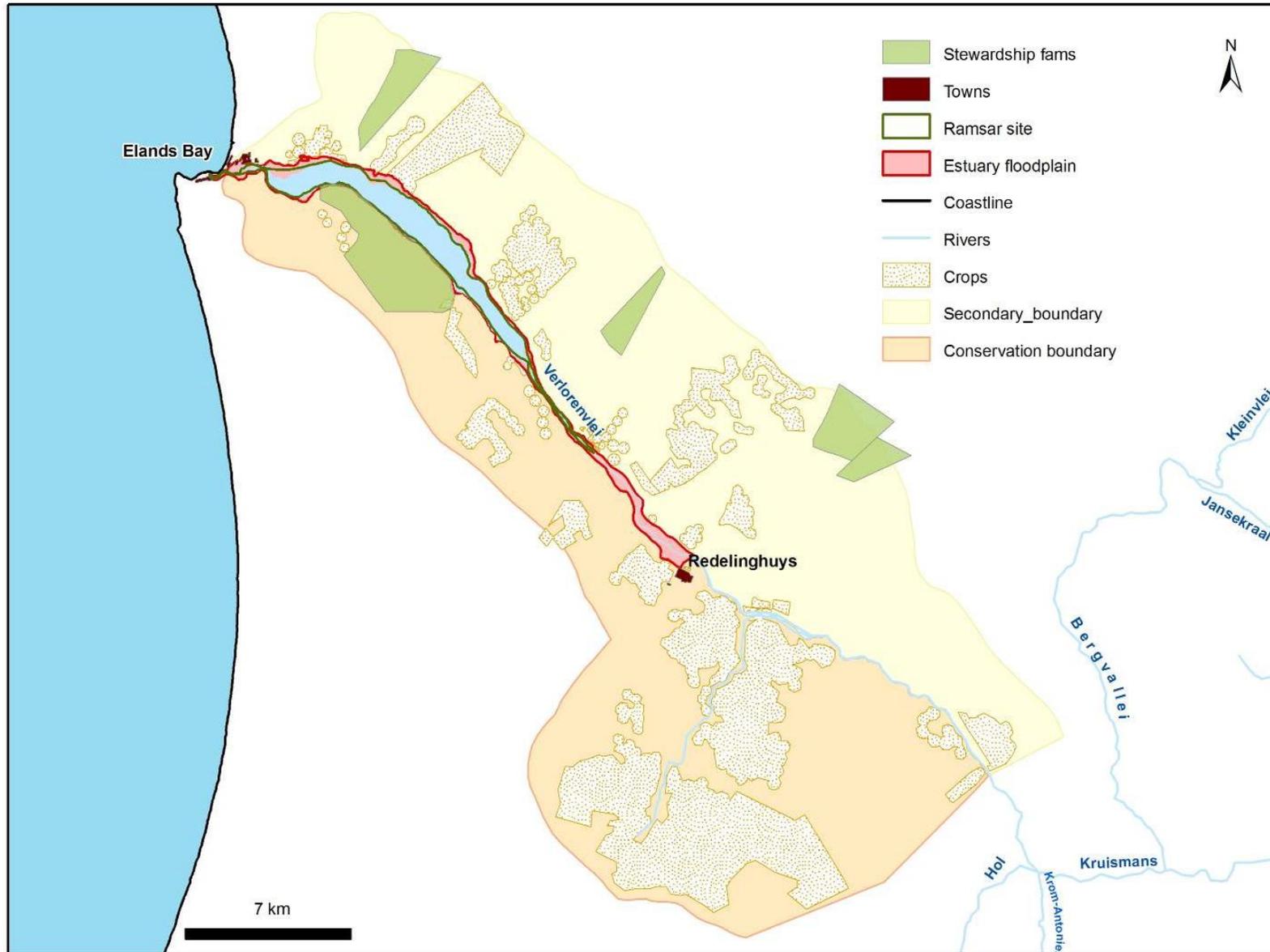


Figure 2.1: Demarcation of the boundaries of the Verlorenvlei EMP

Within the estuary the following proposed zoning applies:

ZONES (Figure 2.1)	PROPOSED ACTIVITIES	
	ALLOWED	PROHIBITED OR CONTROLLED
Primary Boundary (Red zone - Floodplain)	Swimming Birding Canoeing Line fishing Light Grazing	Gilnetting Speed boating Driving through the flood plain Farming Sumps Discharges Solid waste dumping
Secondary Boundary – Orange Zone	Light grazing Development Recreational areas	Farming Solid waste dumping
Secondary Boundary – Yellow Zone	Recreational areas Grazing Farming Development	Solid waste dumping