

OBJECTIVES OF THE Zandvlei Inventory and Monitoring Programme (ZIMP)

1. Characterise the nature of the current and historical Zandvlei environment including the use and impact of people on the vlei and its environs.
2. Maintain an inventory of the key abiotic (e.g. water quality) and biotic components (e.g. plants, birds, insects etc) of the Zandvlei environment
3. Monitor key components of Zandvlei's abiotic and biotic environment over time;
4. Inform all stakeholders about environmental trends in Zandvlei so that informed management decisions can be made.
5. Assess the impact of management interventions on the Zandvlei environment (e.g. effect of biocontrol on aquatic weeds such as water hyacinth; lowering of the weir; opening of the mouth etc)
6. Act as an archive for information about the vlei.
7. Raise awareness about the Zandvlei environment through:
 - School participation
 - Resident involvement
 - Newsletter contributions
 - Annual ZIMP report and meeting
8. To support the City Council and Zandvlei Trust objectives.
9. ONE LONG-TERM GOAL (say over ten years) might be to update the Heydorn and Grindley volume (Estuaries of the Cape) produced in 1982

KEY ISSUES:

- Governance structure (where does it sit in relation to all the other structures)
- Project co-ordinator and data manager (who would be prepared to undertake these onerous tasks)
- Location of the digital data (the website is the obvious place)
- Location of the hardcopy data (Zandvlei Reserve is the obvious place but this brings additional responsibilities to an already overstretched municipal staff)
- Annual report back (what form, how long)
- How to get 'the community' involved

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Outline of the key components of the Zandvlei Inventory and Monitoring Programme (ZIMP). (SS = Scientific Services of Cape Town City Council)

Category	Sub-category	Variable	Frequency	Responsibility
<u>Information Management</u>	<i>ZIMP data</i>	Various	-	ZIMP
	<i>Scientific Literature</i>	Published	-	ZIMP
		Unpublished	-	ZIMP
<u>Historical</u>	<i>Archival sources</i>	Documents	-	ZIMP
		Maps	-	ZIMP
		Aerial photos	-	ZIMP
		Ground photos	-	ZIMP
	<i>Oral histories</i>	Interviews		ZIMP
<u>Abiotic</u>	<i>Physical</i>	Rainfall	Daily	ZIMP
		Water level	Monthly/bi-weekly	SS + ZIMP
		Bathymetry	Annually	Others + ZIMP
	<i>Chemical</i>	Salinity	Monthly	SS + ZIMP
		Conductivity	Monthly	SS + ZIMP
		pH	Monthly	SS + ZIMP
		Chlorophyll a	Monthly	SS
		Dissolved Oxygen	Monthly	SS
		E. coli	Monthly	SS
		Coliforms	Monthly	SS
		Ammonia	Monthly	SS
		Nitrate & Nitrite	Monthly	SS
		O saturation	Monthly	SS
		Phaeophytin	Monthly	SS
		Secchi depth	Monthly	SS + ZIMP
		SRP	Monthly	SS
		SRSi	Monthly	SS
		Temperature	Monthly	SS + ZIMP
		TPON	Monthly	SS
		Phosphates	Monthly	SS
		TSS	Monthly	SS
		TK N	Monthly	SS
		Heavy metals	Annually/bi-annually	?

<u>Biotic</u>	<i>Flora</i>	Phytoplankton	Oct, Dec, Feb, Apr	Others + ZIMP
		Macroalgae	Oct, Dec, Feb, Apr	ZIMP
		Pondweed	Oct, Dec, Feb, Apr	Others + ZIMP
		Halophytes	Oct, Dec, Feb, Apr	ZIMP
		Aquatic weeds	Oct, Dec, Feb, Apr	ZIMP
		Terrestrial	Monthly	ZIMP
	<i>Fauna</i>	Bacteriology	Monthly	SS
		Zooplankton	Monthly	Others + ZIMP
		Macro-Invertebrates	Monthly	Others + ZIMP
		Macrobenthos	Feb, May, Aug, Nov	Others + ZIMP
		Prawns	Feb, May, Aug, Nov	Others + ZIMP
		Tubeworms	Annually (April)	Others + ZIMP
		Insects	Annually (Sep-Oct)	ZIMP
		Fish	Bi-annual (Jan & Jul)	Others + ZIMP
		Amphibians	Feb, May, Aug, Nov	ZIMP
Reptiles		Feb, May, Aug, Nov	ZIMP	
Birds	Monthly/annually	Others + ZIMP		
Mammals	Feb, May, Aug, Nov	ZIMP		
<u>Social</u>	<i>Utilization</i>	Monthly	ZIMP	
	<i>Management interventions</i>	Continuous	SS + ZIMP	
	<i>Litter counts</i>	Monthly	ZIMP	
	<i>Anecdotal observations</i>	Continuous	ZIMP	



