



Capability Statement

Small Harbours Sediment Sampling

Client: PRDW



REQUIREMENTS

- Sediment sampling campaign as part of the National Department of Public Works Small Harbours Programme
- Analysis of sediment composition and the level of heavy metal contamination at the Saldanha Bay, Pepper Bay, Hout Bay, Kalk Bay and Gordon's Bay small harbours in order to determine whether dredged material is fit for disposal at sea.
- Follow-up survey investigating the bio-availability of heavy metals in the Hout Bay harbour sediment and the characterization of a suitable spoil disposal site in the Hout Bay region.

WORK DONE

- Sediment samples were collected from areas likely to be dredged within the Saldanha Bay, Pepper Bay, Hout Bay, Kalk Bay and Gordon's Bay small harbours
- The analysis of sediment for particle size, heavy metals and organic content
- Follow-up survey on the bio-availability of heavy metals in the Hout Bay harbour sediment using a metal elutriation test.

- The characterization of a suitable spoil disposal site using a repeat of the sediment characterization survey as outlined above, as well as with drop camera transects to provide information of the nature of the seabed in the proposed disposal sites.

OUTCOMES:

Lwandle produced detailed reports on the sediment composition and heavy metal contamination for all five small harbours as well as a detailed follow-up survey on the bio-availability of heavy metals in the Hout Bay harbour sediments. This has enabled the client to safely dispose of dredged sediment as well as select the most suitable spoil dispersal site in the Hout Bay region.



“Sediment sampling campaign as part of the National Department of Public Works Small Harbours Programme ”