PORT GRIMAUD
VIVRE LA PROVENCE ET LA MER

Preliminary studies, ensuring safety and environmental standards

SUMMARY SHEETS

Silting of channels

Background.

The channels are susceptible to **silting** due to land-based deposits of suspended matter (soil erosion, stormwater discharges).

This material sediments and, after several years, forms silt deposits that hinder or even block navigation.

Dredging operations are governed by the French Environment Code, which requires physico-chemical and ecotoxicological analyses to be carried out to determine the level of pollution in the sediments to be dredged.

The pollutants monitored under the regulations are: 8 metals, 16 PAHs, 7 PCBs and TBT.

The concentrations of pollutants are then compared with the N1 and N2 thresholds of the French Ministerial Order of 30 June 2020, which makes it possible to assess the impact that dredging may have on the marine environment, and therefore to direct the management of the sediments either towards dumping at sea or towards management on land.

When managed on land, and once removed from the water, sediment becomes waste within the scope of the regulations. It is therefore either disposed of in a waste treatment or storage facilities, or reused as a substitute for other products or materials that would have been used for a particular purpose.

Sediment characterisation for land-based management involves: leaching tests, hazard tests (HP14 "ecotoxicity of sediments"), INERIS and CEREMA scientific criteria and protocols.

Estimated cost of silting processing:

- Dredging of silt and temporary storage on land: €50/T
- Recovery and processing of silt: €50 to 150/T
- Silt management on land in ISDI: €20/T (chloride issues)
- Silt management on land in ISDND: €120/T
- Silt management on land in ISDND: €200/T

Pilot recovery project supported by

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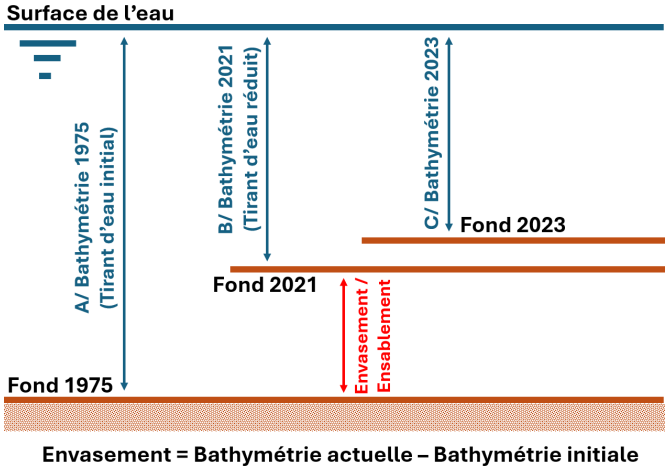
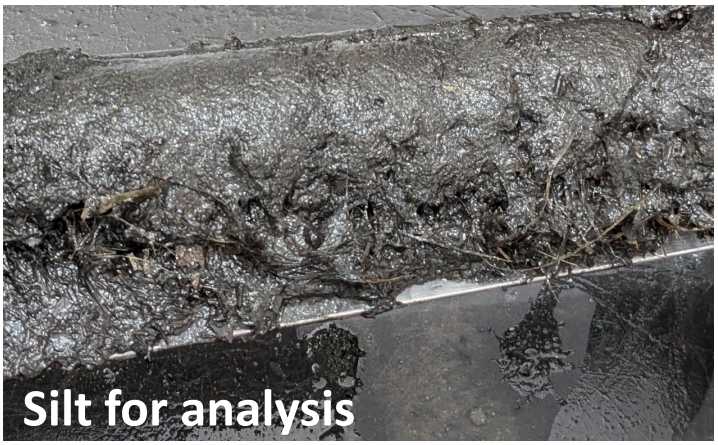
Methodology. As part of the preliminary studies, bathymetric surveys, as well as laboratory sampling and analysis are used to assess the volumes and physico-chemical quality of the sediments to be dredged.





Assessment. Volume calculations based on the 2023 bathymetric survey show that 50,000 to 70,000 tonnes of silt would have to be extracted to reach the -3m level on all the channels.

Physico-chemical analyses of the silt show metal concentrations in excess of the N2 threshold (poor quality) and positive HP14 "ecotoxicity" tests (sediments classified as hazardous).

Consequently, sediments dredged from the channels must inevitably undergo a simple and controlled treatment (clean-up) phase in order to reduce their level of risk.

Glossary.

ISDI: Inert waste storage facility.

ISDND: Non-hazardous waste storage facility

ISDD: Hazardous waste storage facility

Project objectives

- Establish the regulatory framework for dredging works
- Identify the environmental issues associated with dredging inside and outside the port
- Draw up an inventory of sediment processing and management solutions
- Prioritise the areas of intervention, identify sediment management scenarios, plan the works and estimate their costs