

# Environmental Standard Operating Procedure 7

## Mud-pumping

Mud pumping, or suction dredging, is used to remove sediment in areas where access for large machinery is not possible. This approach is often used in small or isolated waterbodies for conservation purposes.

### Aim

To remove, with the mud-pump vessel, recently accumulated sediments, to provide increased water depth for plant growth and to remove nutrients stored in the mud.

### Environmental Risk

Risk	Likelihood	Mitigation
Removal of sedentary species such as freshwater mussels or water plants	High	Pre-works surveys; correct season for works
Re-suspension of sediment	Medium	Temporary impact minimised through Operator training
Release of liquid mud into open water or other sensitive habitat	Low	Determine appropriate disposal site and method; daily checks of pipeline
Introducing invasive non-native species to isolated sites on machinery / equipment	Low	Refer to Biosecurity ESOP – assess risks on site by site basis & mitigate accordingly.



### Delivery Method

Mudpump vessel, with a pipeline, pumps liquid mud to lagoons, geobags, spread site, or where possible directly onto adjacent land. In-line (secondary) pump can also be used for long (>300 m) distances or up slopes.

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### Standard Procedure

- Sediment stratigraphy and depths to be analysed to guide project design.
- Sediment chemical quality report to be produced prior to works.
- Target water depth determined using Waterways Standards (see Sediment Management Strategy) or a site specific survey guided by the palaeolimnological study.
- Leave a minimum non-intervention margin of 3m from the bank, unless otherwise stated.
- Determine a suitable site for disposal of liquid mud within distance of pipeline with permissions from landowner. Determine appropriate method for storing liquid mud to dry out if required, for example lagoons or geobags.
- Exemption from Waste Management Licensing Regulations required for treatment (drying) or spreading of sediment
- **TIMING** – carry out works in autumn and winter months to avoid plant growing season.

### Consultation Required

- **Broads Authority internal** – Planning
- **External** – Natural England, Internal Drainage Board, Environment Agency, Landowners

### Further Information

Sediment Management Strategy:

[www.broads-authority.gov.uk/looking-after/managing-land-and-water/Dredging/sediment-management-strategy](http://www.broads-authority.gov.uk/looking-after/managing-land-and-water/Dredging/sediment-management-strategy)