

Environmental Standard Operating Procedure

ESOP Name	Reed Rond Creation (Setbacks)
ESOP Number	9
Revision Date	22/02/2024
Related ESOPs	2 Biosecurity 3 Bankside sediment disposal 10 Working with water voles 11 Reptile mitigation 13 Breeding bird mitigation



Aim

Where the floodbank has been setback and a lagoon has been created, there is valuable opportunity to re-use dredged material to assist in the creation of reedbed habitat. This standard operating procedure aims to engineer solutions to producing quality reedbed habitat in line with protected species considerations and landowners' requirements.

Standard Methodology

- Works to be identified at least 18 months prior so that an ecological assessment can be undertaken in advance of the main species survey season.

- Ecologist to carry out an ecological assessment of the site to determine which surveys may be required for protected species and advise on mitigation required, including timings for works.
- Reed rond creation to be carried out with reference to ESOP 3 bankside sediment disposal
- Ecologist to carry out follow up surveys identified through the ecological assessment, advise if further measures are required & draw up a restoration plan in conjunction with the Rivers Engineer

Procedure

Pre-works

- Ecological assessment and surveys for protected species and breeding/overwintering birds (see ESOP's 10, 11 & 13) to inform the project plan. Riverside trees may be present and should be retained where possible, or consider coppicing.
- Where appropriate, ensure project design incorporates open areas within the setback which are left free of material for fish refuges, and ensure there is a channel for water exchange throughout the soke dyke.

Operational

- Start working from one end of the setback area (preferably upstream) gradually infilling in a downstream direction, to 'push' water and aquatic fauna out of the way.
- Ensure that the overall level is left low (e.g. mean water level), as this promotes optimal conditions for reed establishment and discourages the establishment of nettles and willow. Assess each site on an individual basis to determine optimal final fill level.
- Where appropriate, following sediment deposition, cut grips through the old flood bank to allow free water exchange between the river and soke dyke – thus avoiding stagnant conditions and preventing drying out from occurring.
- Monitor vegetation establishment over two seasons, and consider planting if necessary. Manage and treat any invasive species/scrub as necessary.
- Follow up management by commercial reed cutters may be an option worth considering. Site access needs consideration from the start of the project.

Consultation

The following must be confirmed by the Ecology team before works commence:

- Exemption from Waste Management Licensing Regulations required for treatment (drying) or spreading of sediment
- Natural England assent if site is designated.
- Wildlife licence application for protected species – to be determined by Ecology team through pre-works site assessment and survey.
- Environment Agency Flood Risk Assessment Permit (FRAP) if works are within 16m of a main river
- Internal Drainage Board permission if works impact a main drain

Risk Assessment

Hazard	Initial Risk			Controls / Safeguards / Precautions	Revised Risk		
	S	L	R		S	L	R
Damage/destruction of protected species habitat	3	4	C	Pre-works survey to be undertaken and mitigation methods put in place as directed by the ecology team	3	1	A
Audible or visual disturbance of breeding/overwintering birds	3	4		Pre-works survey to be undertaken and mitigation methods put in place as directed by the ecology team	3	1	A
Reed not establishing	4	3	C	Appropriate spoil level to be determined and agreed before disposal and re-checked if reprofiling required.	4	1	B
Establishment of invasive species	4	3	C	Monitor and treat as necessary. Ensure appropriate biosecurity measures are in place.	4	1	B

Matrix

		LIKELIHOOD				
		Very unlikely	Unlikely	Moderately likely	Likely	Very likely
SEVERITY		1	2	3	4	5
Low (minimal, short-term disturbance levels and negligible damage to native habitats.)	1	A	A	A	A	A
Medium (moderate, short-term disturbance levels, some damage to native habitats/species. Regenerates quickly.)	2	A	A	A	B	B
High (high disturbance levels over a longer period and displacement of species. Damage to native habitats. Significant time to regenerate)	3	A	B	B	C	C
Very High (Long-term disturbance with displacement/death of species. Significant damage to native habitats that takes a significant time to regenerate.)	4	B	B	C	C	C

RISK	
A	OK. Work to provisions in risk assessment
B	Proceed with caution. Dynamically review risks.
C	Cancel task. Approach project in a different way.