Stodmarsh Stream Enhancement Scheme – Management and Monitoring Plan

Management Plan

Vegetation establishment and management

Planting of vegetation in the ditches and buffer strips will be timed to minimise the risk of vegetation failing to establish. Table 1 details a plan for vegetation establishment and management for the proposed mitigation scheme.

Table 1: Actions and a timeline for vegetation establishment and management.

Actions	Description	Timeline
Floodplain bench grass seeding	Grass seed will be planted on the newly formed floodplain benches within the ditches.	Spring 2026
Buffer strip grass planting	The grass zones for each buffer strip will be seeded with a mix of seeds comprising predominantly perennial grass species with some annual species within the seed mix.	Spring 2026
Buffer strip tree planting	Tree zones within each buffer will be planted with native tree and shrub species. Planting will take place between November and March.	Jan 2026-Mar 2026
Vegetation establishment	Following grass seeding, inspections will be carried out in late summer and remedial action taken where vegetation is failing to establish. Following tree planting, inspections will be carried out either during the following spring (between April and June) if trees are planted before February, or three months after planting if trees are planted in February or March. Remedial action will be taken where trees are failing to establish.	Jul-Aug 2026
Long-term grass management	Grasses within buffer strip grass zones and within ditches will be left to grow until they reach a height of around 0.25 m. Once this sward height has been reached, grass will be cut at the end of summer to remove nutrients from the buffers and ditches. The arisings from cutting will be removed for composting.	Beginning from the first year in which grasses reach a height of 0.25 m
Long-term tree management	Trees within buffer strips will be coppiced at five-year intervals. Woody biomass removed from the buffers will be composted or sold for alternative uses, such as use as fuel wood or in basket making.	Every five years starting between Feb to Mar 2031

Actions	Description	Timeline
INNS management	If monitoring identified INNS, control and eradications measures will be implemented, supervised by a suitably qualified specialist.	Following the monitoring intervals specified in Table 3 below.

Management actions

Table 2 details the key management and maintenance action that form the outline management plan. The frequency of the required management and maintenance works will be determined through monitoring, based on the monitoring plan detailed below. Where monitoring highlights the requirement for remedial actions, these actions will be taken during the summer and early autumn period prior to onset of wetter conditions in late autumn. As part of the lease agreement for the land being used to deploy the scheme at each deployment location, the landowners are taking on responsibility for the day-to-day monitoring and management of the scheme. Greenshank Environmental will remain engaged on the scheme as an expert advisor to the landowners to ensure the monitoring and management plan is delivered.

Table 2: Management and maintenance actions required to provide confidence that the proposed scheme will continue to provide mitigation.

Actions	Description	Timeline
Rectify damage to the two-stage channel cross-section	If the two-stage channel cross-section has been damaged by erosion, stabilisation of eroded areas will first be attempted by replanting vegetation at increased densities. If erosion is found in subsequent monitoring, natural materials such as coir matting will be installed to stabilise eroding areas.	Beginning from June 2026 with works conducted during Spring 2026.
Removal of excess sediment accumulation	Where the two-stage ditch cross-section is being impacted by sediment deposition, sediments will be removed from the ditch and spread within the ditch catchment. Where sediment removal impacts vegetation, remedial actions will be taken to replace vegetation.	
Repair damage to logjams	Where logjams are damaged, they will be repaired and where necessary, replaced.	
Logjam clearance	Logjams are likely to trap sediment and vegetation being washed downstream. This may reduce the leakiness of the kerplunk design for the logjams. If material trapped in the logjams accumulates to the point that the logjams are causing water to flow onto the floodplain benches at low flows then the logjams should be cleared to maintain flow conveyance within the floodplain channel.	

Actions	Description	Timeline
Repair damage to fencing	Any damage to fencing should be repaired so that livestock or other grazing animals cannot access the buffer strip and watercourse.	

Post-implementation monitoring plan

Monitoring to support adaptive management

The following monitoring actions (Table 3) will be used to inform adaptive management of the mitigation scheme. Due to the dynamic nature of the proposed mitigation scheme, management and maintenance requirements will not be fixed over the scheme's *in perpetuity* period. Adaptive management led by monitoring will allow management and maintenance actions to be taken in response to degradation of the scheme that may compromise its nutrient mitigation function.

Table 3: Monitoring actions that will be used to facilitate an adaptive management regime for the proposed mitigation scheme.

Actions	Description	Timeline
Vegetation monitoring	All vegetation within the buffer and drainage ditch mitigation options will be monitored as follows: • Visual inspections to determine the health of vegetation. • Fixed-point photography will be used to record the continued presence and growth of vegetation at each mitigation option location. Monitoring data will be collated into monitoring reports for submission to the Competent Authority. Where problems related to vegetation establishment are found, this will trigger remedial actions to maintain vegetation health or replacement of vegetation where required. Vegetation monitoring will be carried out at the following frequencies over the 90-year in perpetuity period: • Quarterly for the first year of the scheme. • Bi-annually in spring and autumn for the remaining 90-year period. If monitoring identifies problems with vegetation establishment resulting in management actions, quarterly monitoring will be conducted until vegetation is well established at the site and not requiring regular management. Monitoring data will be collected for reporting to a Responsible Body at frequencies specified in the Conservation Covenant that will legally secure delivery of the scheme.	Beginning from June 2027

Actions	Description	Timeline
	Each monitoring event will include a check for the presence of INNS and where presence of INNS is observed, specialist advice on control and eradication will be sought.	
Drainage ditch monitoring	Each drainage ditch will receive visual inspections to check whether the two-stage ditch cross-section and the logjams in each ditch require any maintenance. Fixed-point photography will be used to monitor changes to the morphology of the ditches and the presence and condition of logjams. Monitoring will be conducted: • Quarterly for the first year of the scheme. • Bi-annually in spring and autumn for the remaining 90-year period. For ditches located within Flood Zone 3, the ditches will be inspected following any flow events that exceed a 1-in-2 year return period, as specified in the hydrology report for each site commissioned as part of the detailed design process[1]. A monitoring procedure will be detailed for each site whereby the most appropriate EA river flow gauge will be checked[2] following larger rainfall events. The gauged flow data will be scaled based on catchment size in order to derive an estimated gauged flow for each drainage ditch catchment, which can be referenced against the 1-in-2 year return period flow for the site to determine whether a site inspection will be required. It is recognised that river flow does not always scale perfectly linearly with catchment size, so an element of precaution will be included in scaling of flow data, so as to reduce the risk of not inspecting a site which has experienced a high flow event. Beaver are starting to recolonise parts of the Stour catchment. The impacts of beaver colonisation on any of the mitigation options could be positive or negative. Should beaver begin to colonise any of the mitigation option deployment locations, their activities will be monitored if required, protected species licences will be obtained so that they can be removed. A monitoring sheet and data recording system will be established to record changes in condition of the ditches, including areas of excess erosion or sediment deposition that may start to impact the nutrient reduction function of the ditches. Where problems requiring remedial actions are identified through monitoring, the relevant management actions detailed in Table 2 will be carried out. Monitoring data and any remedial actions resulting from monitoring will be collated into monitoring reports for submission to the Competent Authority. Monitoring of drainage ditches will be conducted at the same frequencies as detailed above for vegetation monitoring.	Beginning from June 2027

[1] CBEC. 2025. Stodmarsh Stream Enhancement Scheme, Final Hydrology Report.
[2] Using data made available on the EA Hydrology Data Explorer, available from: https://environment.data.gov.uk/hydrology/landing, accessed on: 01/07/2025