

Ditch

Creation, Enhancement and Management Summary (DI-T01)

Provide details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 4. Ditch

Target Habitat:		Ditch – Enhancement to Moderate				
Condition Assessment Criteria	Targeted	Relevant Parcels	Creation approach	Enhancement Approach	Management Approach	
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Yes	Water C 2	N/A	N/A	Regular water quality monitoring; Address any pollution sources promptly
B	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	Yes	Water C 2	N/A	<p>1. Site Preparation and Environmental Conditions</p> <p>Water Levels: Maintain sufficient water levels through the summer, ideally around 50 cm for minor ditches and 1 m for main drains.</p> <p>Light: Ensure less than 10% heavy shading, as many aquatic plants need high light levels to thrive.</p> <p>Bank Management: Switch from annual clearing to rotational management to allow bankside vegetation to mature and support aquatic life.</p>	<p>4. Long-Term Management</p> <p>Control Invasives: Avoid introducing invasive species such as Parrot's feather, Floating pennywort, or New Zealand pygmyweed, which can choke ditches.</p> <p>Rotational Clearance: Clean only sections of the ditch at a time (e.g., one bank, every 3-5 years) to maintain a patchwork of successional stages.</p> <p>Removing Cut Material: After cutting vegetation, leave it on the</p>

Water Quality: Clear water with low turbidity is essential for submerged plant growth.

bank for 24 hours to allow organisms to return to the water, then remove the material to prevent nutrient overload.

2. Plant Selection by Zone

Select native species appropriate for the specific ditch zone (shallow margin vs. deep center).

Emergent Plants (Shallow Water: 15–40 cm)

These plants root in the mud and grow vertically into the air, providing bank stabilization and shelter for insects and amphibians.

Floating-Leaved Plants (Deep Water: 50 cm – 1m+)

These create shade, which reduces excessive algal growth, and provides surface cover for aquatic creatures

Submerged/Oxygenating Plants

These plants live entirely underwater, providing critical oxygen for fish and invertebrates.

					<p>3. Establishment Techniques</p> <p>Planting Method: Use perforated aquatic pots filled with special aquatic compost and covered with gravel to prevent soil from washing away, especially in the first few months.</p> <p>Bare Root Planting: Alternatively, use bare root material, which is cost-effective and easy to install for large projects, planting at the water's edge to allow for shifting water levels.</p> <p>Planting Density: Plant in groups or "drifts" rather than individuals to increase the likelihood of establishment.</p>	
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	Yes	Water C 2	N/A	N/A	Regular removal of excess algae and duckweed; Address sources of eutrophication.
D	A fringe of marginal vegetation is present along more than 75% of the ditch.	Yes	Water C 2	N/A	See B above	See B above
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or	No	Water C 2	N/A	N/A	N/A

	storage, or any other damaging management activities.					
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Yes	Water C 2	N/A	N/A	N/A
G	Less than 10% of the ditch is heavily shaded.	Yes	Water C 2	N/A	Review tree branch and tall forb cover at spring / summer and identify where trimming of tree/shrub branches is required in the winter. In the winter prune the trees/shrubs to reduce the level of shading.	Monitor level of shading yearly and carry out pruning as required in the winter.
H	There is an absence of non-native plant and animal species.	Yes	Water C 2	N/A	N/A	Monitor for presence and use approved/appropriate methodology to remove.

Additional Management Prescriptions (DI-B01)

Please use this space to detail any additional management measures to be conducted along with the above measures. These may for example include (but are not limited to) measures specifically relating to the presence of protected species or may be additional measures that are in support of local nature recovery targets and, or, planning policy.

Ditch

Creation, Enhancement and Management Detailed Methods (DI-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Design and layout	Water C 2	Year 1	Plan ditch profile with varied depths and gentle slopes.
Excavation	Water C 2	Year 1 Late summer/early autumn	Use appropriate machinery to minimise soil compaction; Create varied bank profiles for habitat diversity.
Sediment control	Water C 2	Year 1 During excavation	Install sediment traps or barriers to prevent siltation of existing watercourses.
Profiling	Water C 2	Year 1 Immediately after excavation	Shape banks with gentle slopes (1:3 or shallower) for marginal vegetation establishment.
Vegetation establishment	Water C 2	Year 1 First growing season	Monitor plant growth; Control any invasive species; Consider supplemental seeding if needed.
Marginal vegetation management	Water C 2	Year 1 – 30	Establish a fringe along >75% of ditch length; Rotate cutting to maintain diversity.
Water quality inspections	Water C 2	Year 1 – 30	Monitor pond water quality, turbidity, and algal growth (avoiding inspection during periods of heavy rainfall). If poor water quality or algal blooms are detected, implement the use of barley straw bales to mitigate these effects.

Invasive non-native plant species inspections	Water C 2	Year 1 – 30	Inspect all grassland areas for invasive non-native plant species. Appropriate action will be taken to remove by a suitably qualified contractor if found.
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Ditch Species Lists (DI-T03)

Provide a detailed species list for the habitat to be created.

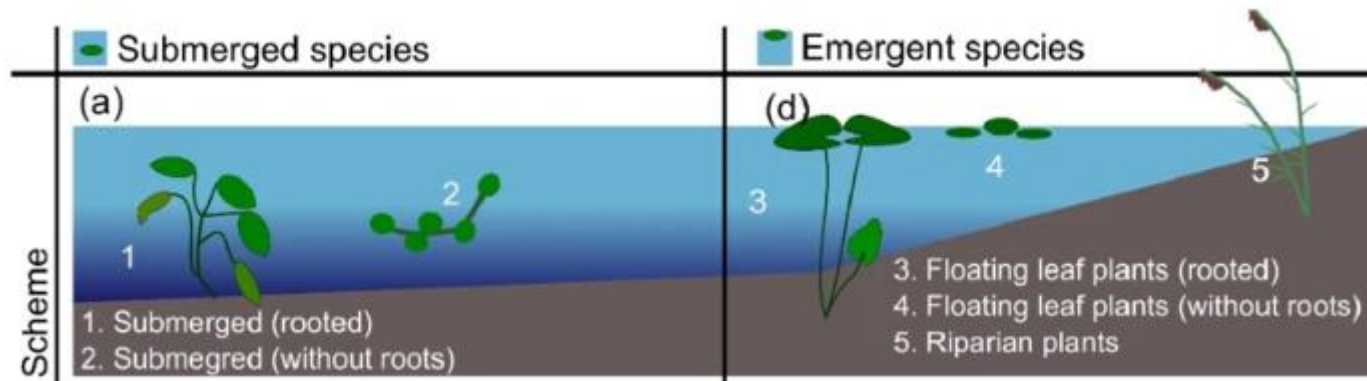
Common Name	Scientific Name	Abundance / %	Comments
EMERGENT PLANTS			
Water Mint	<i>Mentha aquatica</i>	16%	Fragrant, spreads easily.
Yellow Iris	<i>Iris pseudacorus</i>	16%	Excellent for bank stability.
Water Forget-me-not	<i>Myosotis scorpioides</i>	16%	Forms dense carpets, attracts pollinators.
Water-plantain	<i>Alisma plantago-aquatica</i>	16%	Thrives in shallow, slow water.
Arrowhead	<i>Sagittaria sagittifolia</i>	16%	Prefers slightly deeper water but often found in ditches.
Branched Bur-reed	<i>Sparganium erectum</i>	20%	Highly tolerant of various water levels.

FLOATING PLANTS			
White Water-lily	<i>Nymphaea alba</i>	25%	Requires deeper water.
Yellow Water-lily	<i>Nuphar lutea</i>	25%	Highly buoyant, excellent for larger, deeper ditches.
Common Water-crowfoot	<i>Ranunculus aquatilis</i>	25%	A native, oxygenating plant with white, buttercup-like flowers.
Frogbit	<i>Hydrocharis morsus-ranae</i>	25%	Free-floats with waxy leaves, often found in slow-moving water.
SUBMERGED / OXYGENATING PLANTS			
Rigid Hornwort	<i>Ceratophyllum demersum</i>	25%	Excellent for spawning habitat
Spiked Water-milfoil	<i>Myriophyllum spicatum</i>	25%	Feathery leaves and reddish flower spikes.
Water Violet	<i>Hottonia palustris</i>	25%	Produces white-lilac flowers above water in spring.
Tape Grass	<i>Vallisneria spiralis</i>	25%	Good for water quality.

Other Supporting Information

Supporting information (DI-B02)

Please use this space to provide any additional information where relevant.



What Does Success Look Like? (DI-F01)

