HABITAT ENHANCEMENT & MANAGEMENT PLAN

Clearwater Fisheries, Kellet Lane, Over Kellet LA6 1FQ

Version 1 – September 2023

Introduction
This Habitat Enhancement and Management Plan has been developed in response to Condition No20 of Planning Approval LCC/2021/0006.
The overall aim of the Plan is to develop, enhance and maintain the biodiversity of the site within a viable commercial fishery.
The Plan adopts a similar strategy to the Ecological Management Plan in place for the original Clearwater Fisheries site and seeks to expand on the
successesful habitat development that has taken place in this section of the site.
<u>OBJECTIVES</u>
Develop/enhance and maintain the marginal/emergent vegetation around the lakes.
Develop/enhance and maintain the aquatic vegetation in the lakes.
Promote greater structural diversity around the lake banks through increased tree/shrub cover and allowing the development of taller grassland
swards up to the edge of the lake banks.
Develop/enhance and maintain the plantation of woodland to promote growth and structural diversity.
Develop/enhance and maintain areas of marshy grassland.
Develop/enhance and maintain scrapes/ponds.
Develop/enhance and maintain terrestrial and aquatic invertebrate diversity.
Develop/enhance and maintain and provide adequate habitat for nesting and foraging.
Control/eradicate invasive Indian balsam.
Develop a site monitoring programme.

1.0 MANAGEMENT OBJECTIVES AND PROJECTS

Read in conjunction with the separate Proposed Landscaping Plan.

The following section lists all the management objectives and projects that relate to the ecological management of the site.

1.1 Site Management

Objective: To co-ordinate the implementation of site management in accordance with the plan.

Project 1.1A: Site Manager to review management plan on an annual basis.

1.2 Grassland Management

Objective 1.2A: Restore areas of bare ground created during lake / bund construction works.

Project 1.2A: The areas of newly created bare ground will be restored by sowing with lowdiversity grassland seed mixes. Two mixes might be required here, one a hard-wearing lowmaintenance mix where pedestrian traffic is high, and another a tussocky grassland mix where restoration adjacent to the lake banksides is required.

Objective 1.2B: Allow the development of taller grassland swards around the lake banks.

Project 1.2B: Apply non-intervention management around the lake banksides outside of the fishing peg areas. This will provide increased cover for invertebrates and small mammals and a natural bankside edge to the lake banks at the interface with the marginal zone. Rotational cutting on a three-year basis might be considered for future management of these areas. It should be noted that the general amenity maintenance of the site is not covered by this plan and will be applied when and where considered appropriate by the site manager.

Objective 1.2C: Prevent scrub development in marshy grasslands.

Project 1.2C: Remove developing scrub saplings from areas of marsh.

1.3 Scrape / Pond Management

Objective 1.3A: Prevent scrub development in scrapes / ponds.

Project 1.3A: Remove developing scrub saplings from scrapes / ponds.

1.4 Woodland/Tree Management

Objective 1.4A: To enhance structural development within Compartment W2 to provide shelter and noise attenuation on the site.

Project 1.4A: Provide supplementary planting on the embankment adjacent to the M6. Plant with native species at 2.1m centres. Thin all spindly and poorly formed trees at a rate up to 40% of the stand and apply stump treatment. The aim here is to promote the growth of well formed trees within the stand and to improve shelter and noise attenuation on the site. The formation of a mature wooded stand along this boundary will also improve nesting bird and bat foraging potential on the site.

Objective 1.4B: To create new woodland stands on the new Bund and north side of the site.

Project 1.4B: A stand of native woodland will be planted to the new Bund W1 and north of the new lake W3 that will provide a barrier from the M6.

Objective 1.4C: To improve structural diversity on the lake banks through the provision of native shrub and tree planting.

Project 1.4C: Native trees and shrubs will be planted throughout a five-year period along the lake banks between fishing pegs. The location of the trees will be guided by the site manager to ensure that angling isn't significantly constrained.

1.5 Marginal and Aquatic Habitat Management

Objective 1.5A: To promote the development of marginal vegetation in the fishing lakes.

Project 1.5A: Marginal vegetation should be allowed to spread and develop naturally throughout the marginal emergent zones of the lakes. Apply nonintervention unless cutting or removal locally is required to maintain angling viability.

Project 1.5B: Create new areas of emergent vegetation including areas of Phragmites reed bed where shallow conditions allow. Reed rhizome should be planted at strategic locations over several years to establish viable emergent stands.*

Other native species of emergent monocotyledons and dicotyledons can be planted at any point around the lake margins at the discretion of the site manager.

Project 1.5C: Native aquatic species should be introduced in specific areas of the lake guided by the site manager. Species to be considered include yellow water-lily, white water-lily, arrowhead, broad-leaved pondweed and amphibious bistort.

Project 1.5D: Manage established aquatic communities through non-intervention unless cutting or removal locally is required to maintain angling viability.

1.6 Invasive Species Control:

Objective 1.6A: To remove Himalayan balsam adjacent to the M6 embankment and to isolated area of the site as indicated on site plan.

Project 1.6A: Carry out Himalayan balsam removal as per separate Himalayan balsam Management Plan.

1.7 Site Monitoring:

Objective 1.7A: To develop and maintain the sites habitat and species diversity through a general ecological assessment and monitoring of management work. Primarily due to the sites relatively robust nature, it is not the intention of the plan to undertake detailed site monitoring. This can often be expensive and may take resources away from potentially valuable enhancement and management work. In addition, it will take several years for new habitats to develop and for new species to adopt the site.

Project 1.7A: The Site Manager will monitor the success or otherwise of the management recommendations on an ongoing basis.

Notes

Formal maintenance of grass pathways, fishing pegs and metalled access tracks etc will be managed under a general maintenance programme and will not form part of this plan. These areas have intrinsically low biodiversity value.

The installation and maintenance of otter fences is not included in the plan.

PROJECTS			ACTIVE MONTH											
REF	DESCRIPTION	J	F	М	Α	М	J	J	Α	S	0	N	D	
1.1	Site Management													
1.1A	Review site management and revise and re-issue final 5 year plan.													
1.2	Grassland Management													
1.2A	Restore areas of bare ground following site works.													
1.2B	Apply non-intervention management to grasslands on lake banks excluding fishing peg areas.													
1.2C	Remove developing scrub saplings from marsh areas													
1.3	Scrape Management													
1.3A	Remove developing scrub saplings from scrapes / ponds.													
1.4	Woodland / Tree Management													
1.4A	Provide supplementary planting on embankment adjacent to M6.													
1.4B	Create new native woodland.													
1.4C	Plant native trees on shrubs on lake banksides.													
1.5	Marginal & Aquatic Habitat Management													
1.5A	Allow natural development and spread of marginal vegetation where appropriate.													
1.5B	Create new areas of emergent vegetation.													
1.5C	Introduce new native aquatic plants where appropriate.													
1.5D	Apply non-intervention to aquatic vegetation unless angling viability is compromised.													
1.6	Invasive Species Control													
1.6A	Remove Himalayan balsam as per the separate Himalayan balsam management plan.													
1.7	Site Monitoring													
1.7A	Undertake regular monitoring / assessement of the site and management plan. Use experience gained to update the plan as necessary.													