

Strategy:

6

A wetland in the Kaituna Estuary

Initiatives aimed at creating a biodiversity node and enhancing Havelock's recreational opportunities by constructing a wetland in the estuary of the Kaituna River

This strategy includes the following findings and proposed initiatives:

- An additional biodiversity node
- A tourist attraction at the entrance to Havelock
- A solution for dredging, sewerage and flooding issues



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"The Kaituna estuary is an important and rich ecological area. Although its size has been reduced over the years by farming, roads and port development, it has been an important feature of this reclamation to enhance the habitat along the new shoreline. The constant rhythm of tides and river flow produce an ever-changing landscape. The native rushes, mudbanks and fingers of water are alive with a myriad of scurrying, swimming, wading wildlife, such as the crabs hiding in their holes in the mud, the fish that use the safe sheltered water to spawn, and the countless birds that visit, feed, roost or breed in the area."

Inscription on plaque placed near the estuary by Port Marlborough.

A wetland for Havelock

The area in Figure 6-19 is targeted for a wetland. This has several purposes:

- It will form a biodiversity node which will provide an ecological connection for flora and fauna.
- It will filter the outfall from the sewerage ponds in a series of natural filtration systems before it flows into the Kaituna River. Sewerage outfall will be cleaner when flowing into the river than it currently is.
- It potentially forms a long-term solution for the dredging spoils from the estuary. It is recommended to use systems to build this wetland that use the solids from the dredging, put in dewatering containers. These reduce in volume over time and additional dredging material is required over time.



ABOVE FIG. 6-18: Wetland design

ABOVE FIG. 6-19: Wetland study area

Continued overleaf

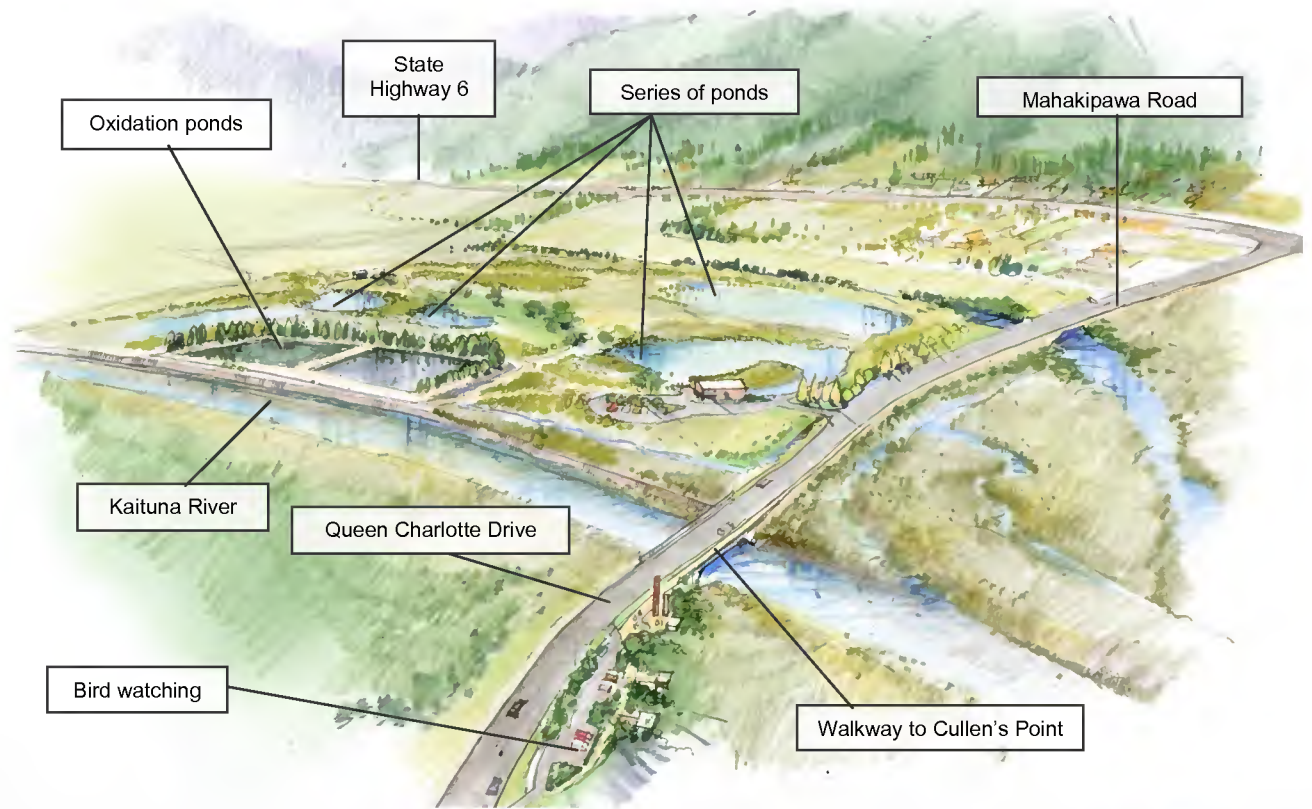
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Geotube® is such a system and is used in New Zealand by a Blenheim-based company.

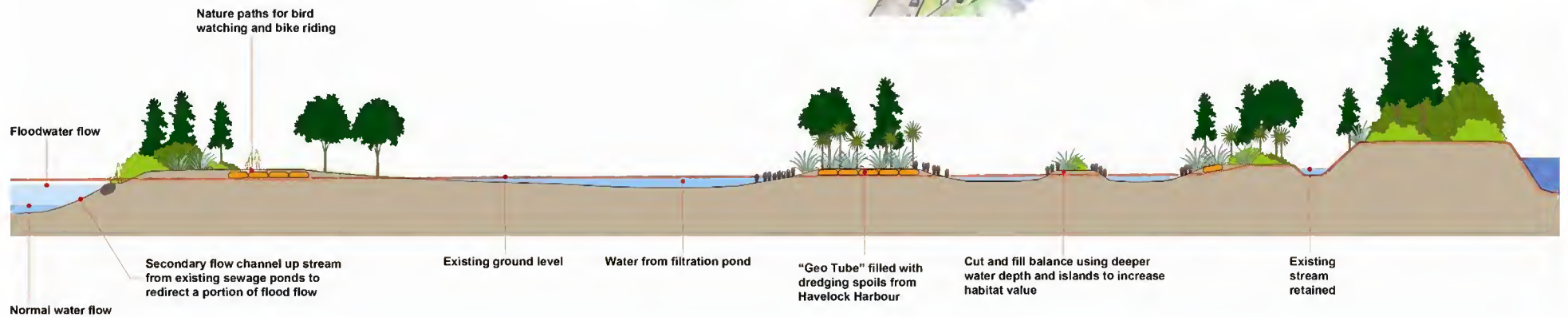
- The flora and fauna could be utilised as a tourist attraction. The design should contain carparking, bird watching areas and boardwalks.
- It could help define the entrance to Havelock from the east and enrich Havelocks identity.
- It Increases the 'storage' of the Kaituna River. When in flood, rather than inundating grazed farmland, it inundates the wetland.

Further investigations are still required, including:

- Feasibility and construction costs of this project in relation to the potential financial benefits for the port company;
- Land ownership; and
- Flooding management - required capacity of the stream 'bypassing' the wetland.



RIGHT FIG. 6-21: artist's impression of the proposed wetland



ABOVE FIG. 6-20: cross section of the proposed wetland design