



Politics, Pondweed and the Park – Managing Contaminants and Reusing Resources to Create Te Pā Harakeke

by Kathryn Halder

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The pond

Location and history

Nelson Society of Modellers

Surrounding recreational assets

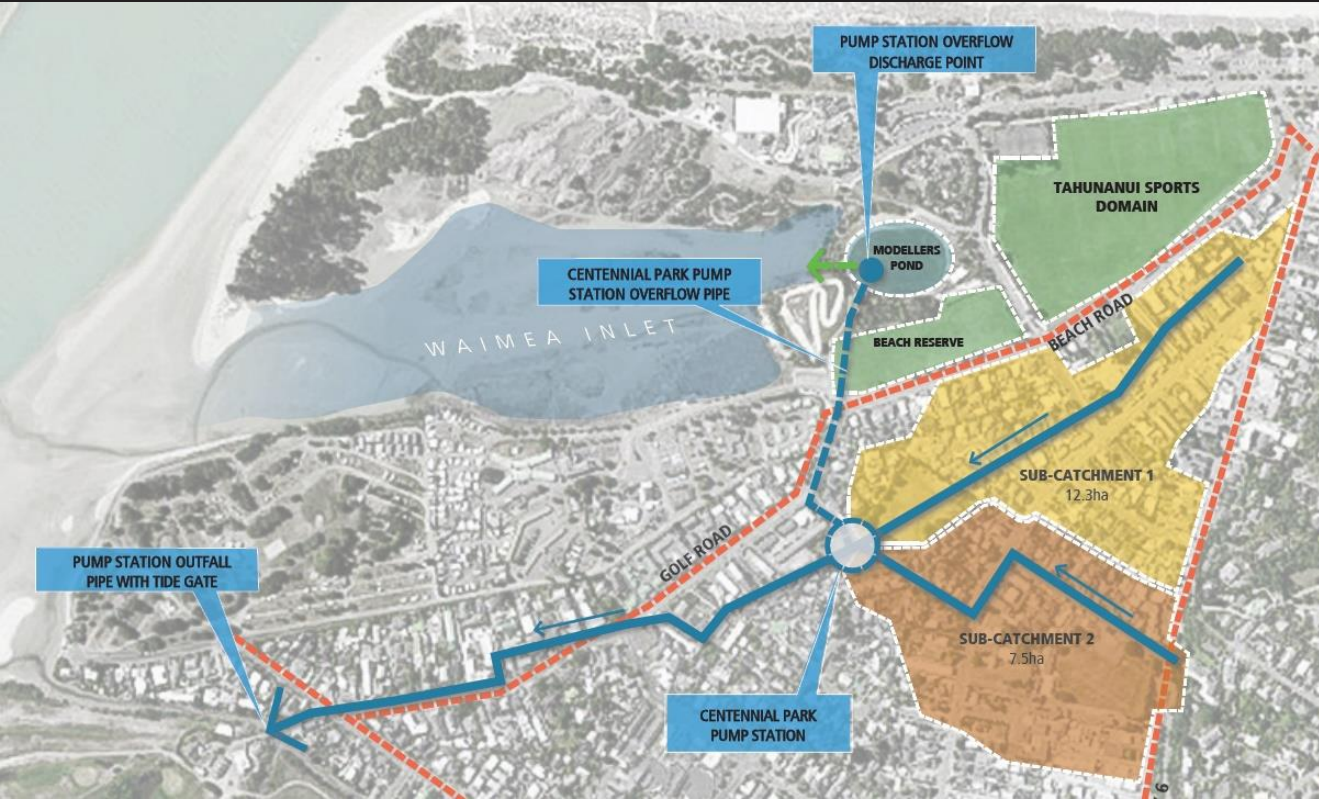


The stormwater discharge solution

Stormwater utilities network

Overflow options assessment

Increased sediments



The conundrum – politics and the pondweed

Algae and weeds

Clean up attempts

Trials and options

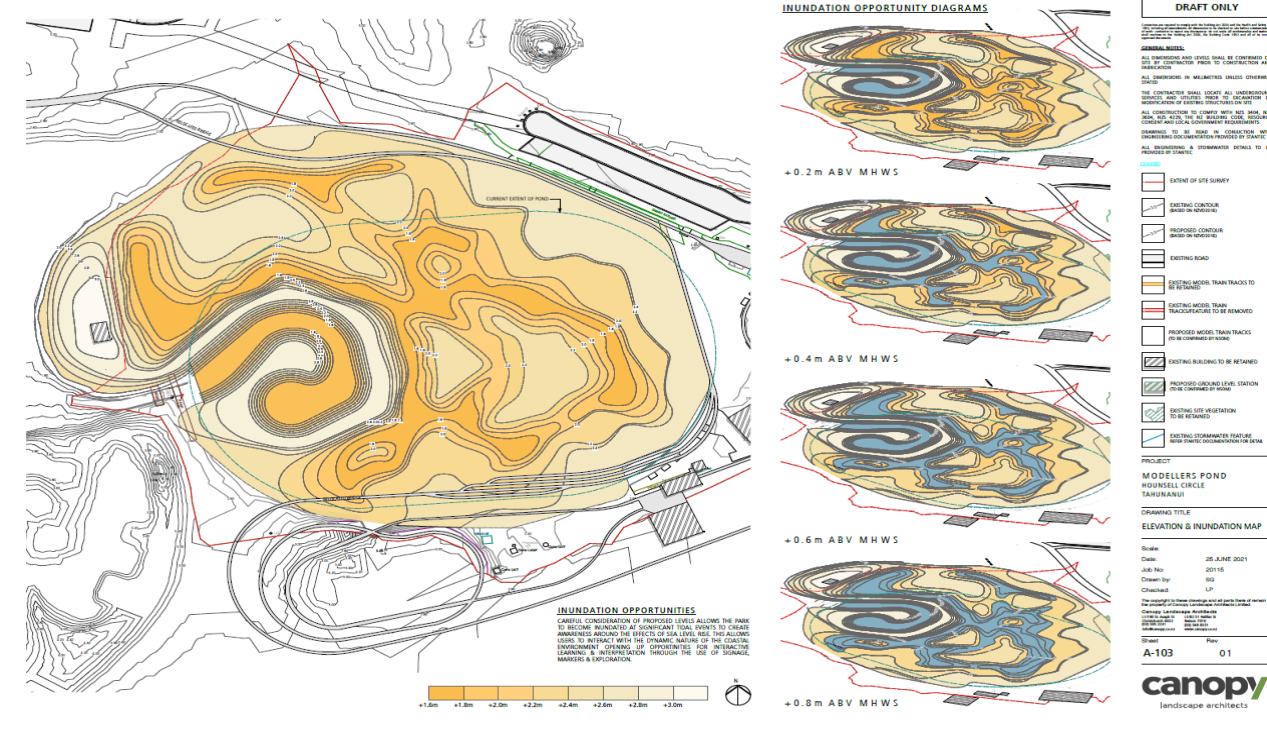
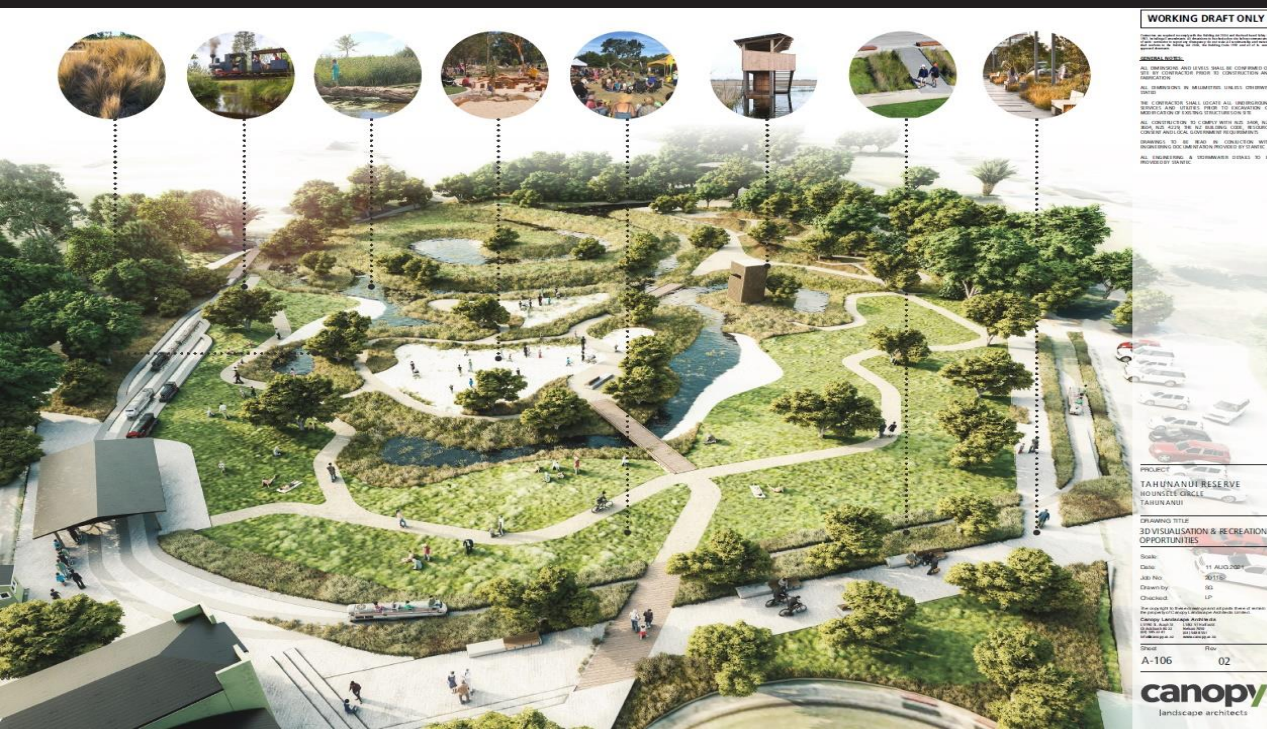


More politics, but a new solution - a park?

An alternative option

Vision for the new park

Tidal inundation, climate change, coastal erosion



Retrolens 1967

Retrolens 1967

Old landfill site



The challenges - monitoring contaminants

Stormwater analysis

Pond sludge analysis

Contaminated soils analysis



Smart solutions – in situ remediation

Sludge management options

Encasing contaminants

Earthworks and re use of surplus soils



Smart solutions – stormwater treatment

Stormwater treatment

Downstream Defender

Managing more HAIL material

Components

1. Inlet to Precast Vortex Chamber
2. Inline Screen
3. Bypass Screen
4. Outlet Pipe
5. Sediment Storage Sump
6. Access Lid

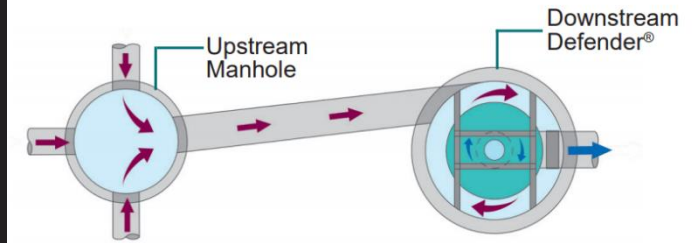
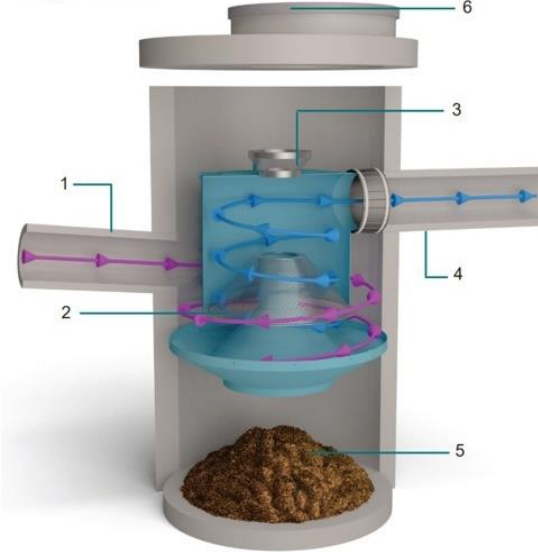


Fig.3a The Downstream Defender® in an online configuration.

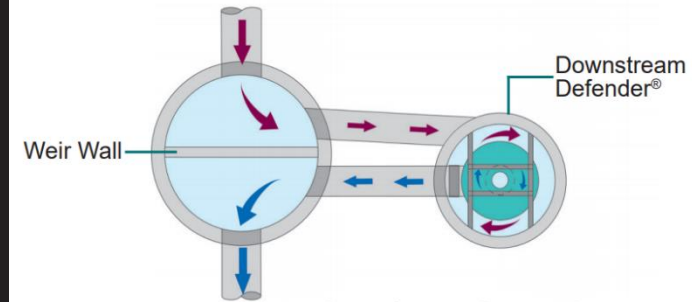


Fig.3b The Downstream Defender® in an offline configuration.



More challenges - construction impacts

Managing suspended solids

Fish management

Ongoing monitoring



Reuse of resources

Park furniture

Sustainable outcomes

Cost savings



Te Pā Harakeke

Lessons learnt...

- Utilities infrastructure and public reserves can work really well together.
- Don't be afraid to change direction mid project.
- Look for opportunities to reuse resources across projects.
- Take time to fully consider the alternatives.
- Early collaboration in planning and design can make a difference.

Modellers Pond finally laid to rest with playground's opening

Frances Chin · 15:59, Nov 26 2022



MARTIN DE BONTENHOUT



Stuff NICK SMITH — NELSON MAYOR



Thank you and any questions?



The old, polluted Modellers' Pond, and the new Te Pā Harakeke reserve (photo credit Rowan Findley)



Thanks to the Stantec project partners - Nelson City Council, Botha Miskell, Hynds, Taylors Contracting and Nelmac