

Carterton Sustainable Wastewater Project Update.

September 2018



Carterton District Council has a long term vision to improve fresh water quality by removing treated urban wastewater effluent from streams. A great deal of work has taken place over the past few years to move us towards that vision.

In 2014 we started irrigating treated wastewater to land during the summer months using a newly installed pivot irrigator.

Long term consents have been obtained to further increase discharge to land.

This leaflet describes the works for the second stage of our upgrade, started in mid January this year.

Firstly, a bit of background:

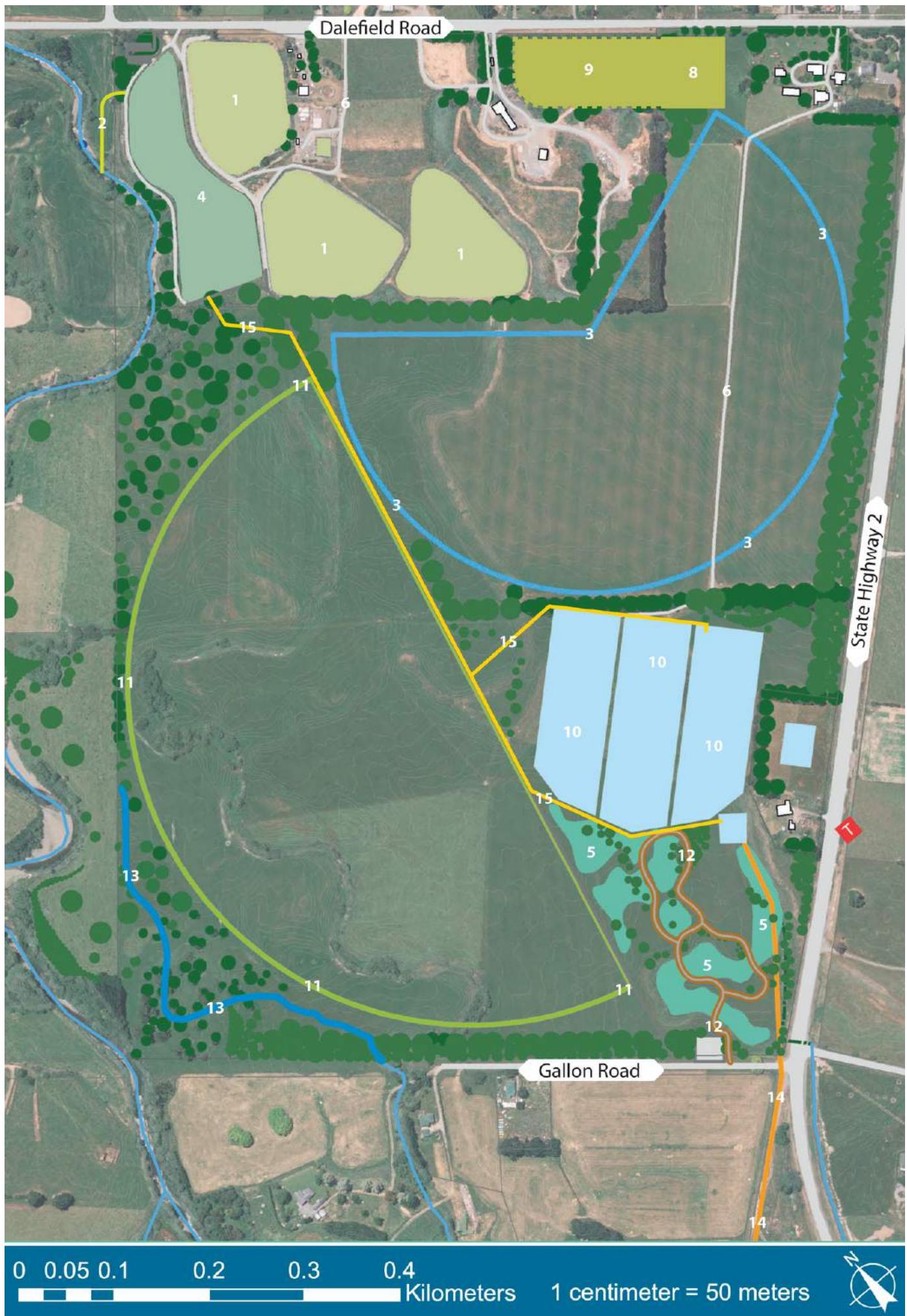
2014

We started reducing our discharges to stream by irrigating to land during the summer months

2018

New consents were confirmed allowing further improvements to be delivered by the end of 2021. Included is extra storage reservoirs.

The plan.



Making progress.

Existing	Key
— Stream/River	
■ 1. Oxidation ponds	
— 2. Existing stream discharge	
□ 3. Pivot Irrigator 1	
■ 4. Original wetland	
■ 5. New wetland (under development)	
— 6. Tracks	
□ 7. Buildings	
■ 8. Lined sludge disposal cell	
Proposed	
■ 9. Lined sludge disposal cell	
■ 10. Storage Reservoirs	
— 11. Pivot Irrigator 2	
— 12. Wetland walkway	
— 13. Ephemeral waterway	
— 14. Relocated stream discharge	
— 15. Distribution pipe	
T 16. Transformer	
● 17. Restoration planting	

What we've done so far this year

- Installed potable water supply to Gallons Road
- Additional planting along SH2 and in the new amenity wetlands
- Solar pump power supply installed at the amenity wetlands
- Sale of house by auction to make way for the storage reservoirs
- Completed engineering design review for the storage reservoirs
- Large tree shelter-belt removed
- Wetland improvements undertaken to re-home native Mudfish (hauhau).

Storage Reservoirs

Treated wastewater effluent will be stored in three reservoirs. It will improve freshwater quality through further treatment of tertiary effluent and provision of irrigation water.



Next steps.

Optimise use of Daleton Farm

The next stages of the project will see the landscape of Daleton Farm continue to change shape and develop as the major works are undertaken. This will include further redevelopment of amenity wetlands, which continues to be an important focus of the project team.

2018/19

- House removal from SH2
- Complete ephemeral channel relocation and mudfish re-homing
- Install new power supply to service pump installations
- Construct a 200,000m³ storage reservoir

2020

- Relocate discharge from the unnamed tributary above the original wetlands to the lower reaches of the Managatārere Stream only when it is at high flow (more than 3 x the median)
- New pumps and pipelines installed

2021

- Install a second pivot to irrigate an additional 20ha of Daleton Farm, doubling the irrigated area.