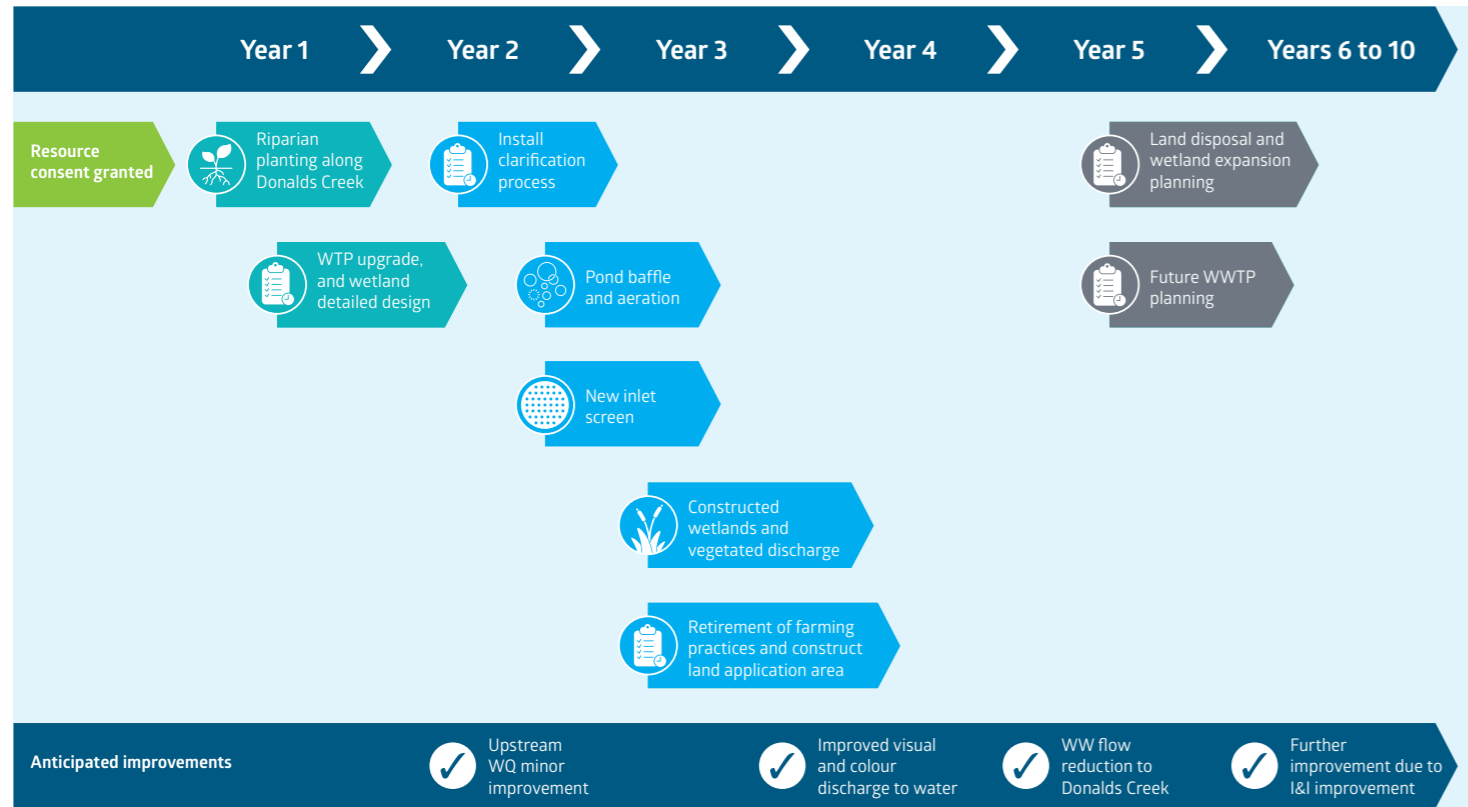


High level implementation timeline

An indicative timeline for implementation of the proposed upgrades and establishing the land application area is outlined below



Measures to manage effects on the environment

We are requesting a short term consent to allow time to trial the solution to ensure that there are no adverse effects. Resource consent conditions have been proposed that outline the measures to manage environmental effects. These include discharge limits, management plans, specific monitoring requirements for both the discharge and the receiving environment and compliance triggers to identify environmental risk and require a response to avoid, remedy or mitigate any actual or potential effects.

Have your say

Greater Wellington Regional Council (GWRC) has announced public notification of the consent from 2 October 2024 and interested parties are invited to have their say.

GWRC is running the submission process.



You can view the consent application and make a submission at www.haveyoursay.gw.govt.nz

Please also send a copy of your submission to fntp@wellingtonwater.co.nz

Submissions close on 31 October 2024

Depending on the nature of submissions, GWRC may choose to hold a hearing where submitters can speak to their submissions. If no major issues are raised, there may be no need for a hearing.

Have Your Say on the Featherston Wastewater Treatment Plant Consent

Wellington Water on behalf of South Wairarapa District Council (SWDC) has submitted an application for a new resource consent for the Featherston Wastewater Treatment Plant with Greater Wellington Regional Council (GWRC).

The consent application is now open for public consultation. This is your opportunity to have your say.

The proposal

SWDC seeks resource consents for the ongoing discharge of treated wastewater to Donalds Creek alongside a series of upgrades to the wastewater treatment plant and treatment processes. This includes:

- Trialling land application (trickle or subsurface irrigation to avoid spray drift) to understand the constraints and opportunities of SWDC-owned Hodder Farm.
- Installing a constructed wetland and vegetated area to improve treated wastewater quality.

A range of consents are required from GWRC including the discharge of treated wastewater to water (Donalds Creek) and land, and the discharge of odour to air.

Ancillary consents related to construction activities to establish the land application area and constructed wetland are also required.

The proposal is the result of extensive consultation with mana whenua iwi and the community to identify a fit-for-purpose solution that delivers value now and into the future.

Key upgrades to improve the performance of the existing wastewater treatment plant include:

- Installing inlet screens and equipment in the oxidation pond to improve treatment performance
- Installing a new clarification system such as a Dissolved Air Flotation (DAF) system to reduce sediment and contaminants in the wastewater.



For more information about the project visit www.wellingtonwater.co.nz/projects/featherston-wastewater-project



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Artist Impression of priority improvements for FWWTP



A 10-year consent duration is sought to:

- Provide SWDC with sufficient time to implement the proposed upgrades
- Monitor the performance of plant upgrades and refine the treatment process in response to monitoring results
- Trial, monitor and refine the land application process prior to expanding the area of land application.

Benefits of the proposal

The proposal will:

- Reduce concentrations of fine sediment and contaminants in the wastewater discharge that impact Lake Wairarapa and stream clarity and colour and can adversely affect aquatic life.
- Improve water quality in the short-term while allowing SWDC to monitor performance and collect valuable information to inform the development of a longer-term solution for treatment of wastewater alongside mana whenua iwi partners and the community.

The proposal responds to iwi Māori and community aspirations to transition discharges of wastewater from freshwater to land by:

- Introducing the land application trial area that means treated wastewater can be diverted to land during dry periods and improves treatment of wastewater at all other times by passing wastewater through the constructed wetland and revegetated area.

Proposed upgrade works

New Inlet Screen, oxidation pond baffles and aeration

Installing an inlet screen will stop large solids and un-biodegradable waste from entering the oxidation ponds. Baffles and aeration equipment will improve the performance of the oxidation ponds.

Clarification system (Dissolved Air Floatation (DAF))

A new clarification system such as the DAF will improve wastewater clarity by reducing suspended solids and contaminants bound to solids in the discharge. Improved clarity of wastewater is also expected to enhance the performance of the UV disinfection system and minimise risks to the performance of the land application and constructed wetland infrastructure by reducing the potential for clogging and frequency of maintenance.

A pilot trial of a DAF system at the Featherston wastewater treatment plant between January and March 2024 showed significant improvements in treated wastewater quality.



Photo of DAF System Trial Plant

Constructed wetlands and revegetated area

A constructed sub-surface wetland system is proposed and the existing discharge channel will be revegetated to be more like a natural wetland. The constructed wetlands and revegetated area will improve treated wastewater quality as planting will absorb nutrients and other contaminants in the wastewater and reduce the cultural impact of wastewater discharge by providing land contact before the wastewater reaches Donalds Creek. Treated wastewater not diverted to land application will be passed through the constructed wetland and revegetated area as a diffuse discharge before entering Donalds Creek.

Land application area (initial trial area of 3.5 ha, expanding to 7ha)

Land application using trickle irrigation is proposed to distribute wastewater to land without causing spray drift and maximise the number of days land application can occur. This will reduce the volume of wastewater reaching Donalds Creek.

- **Stage 1** – The initial land application area will be 3.5 ha including a 10m gap from surface water features giving a total irrigation area of approximately 2.8 ha.
- **Stage 2** – An additional 3.5 ha area is set aside for expanding the area if the process is shown to be effective. A total of 7 ha is available for land application over the term of the consent.

Land application will enable SWDC to establish the sustainable irrigation rate for soils on SWDC owned land and this information will be used to understand the feasibility of transitioning the discharge of wastewater from Donalds Creek to land in the long-term.

DAF pilot trial results

Total suspended sediment removal increased to **86%**

Total Phosphorous removal increased to **90%**

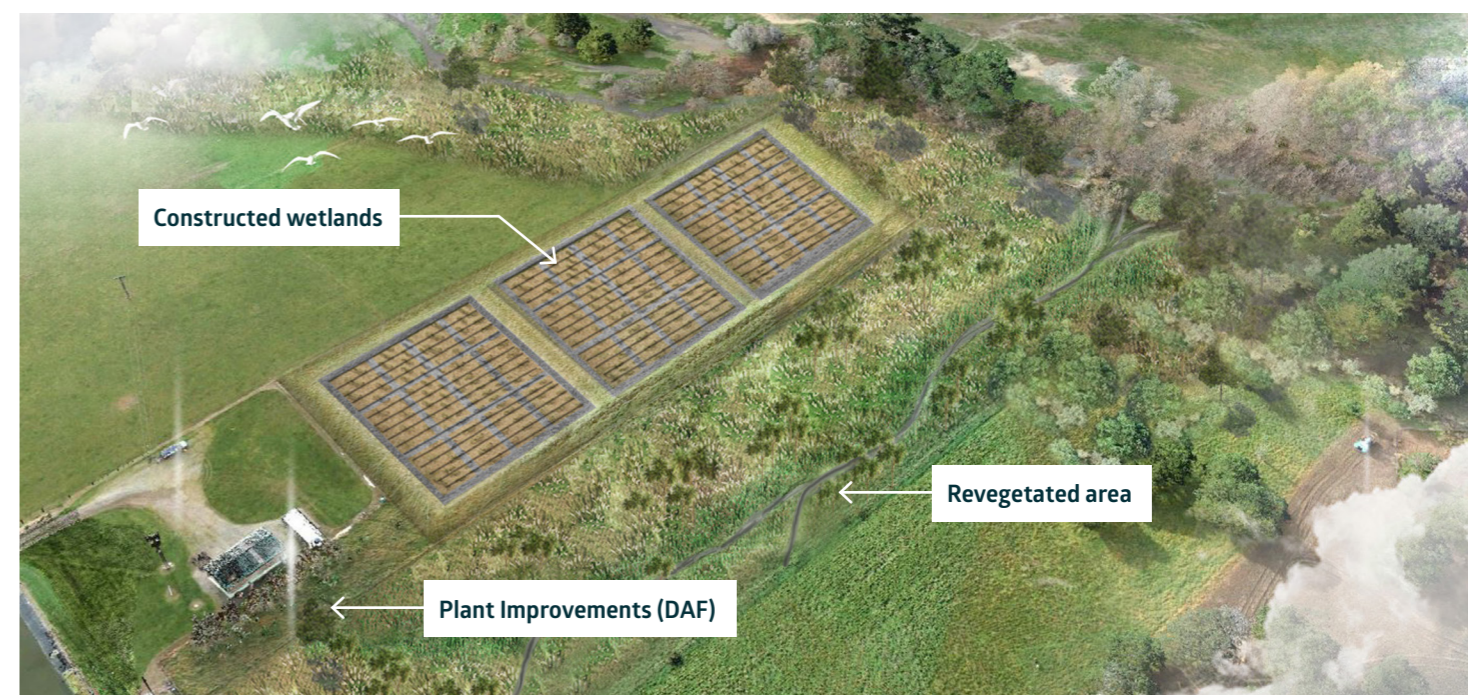
Total Nitrogen removal increased to **63%**

Carbonaceous Biochemical Oxygen Demand (CBOD)* removal increased to **86%**

*CBOD measures the potential of wastewater to deplete oxygen levels in receiving water



Donalds Creek



Artist Impression of priority improvements for FWWTP