

THE YEAR AHEAD

After the successes of the last three years, Project Maitai/Mahitahi is now in its fourth year of funding. 2017–2018 will see the construction of the Groom Creek Wetland, just downstream of the Maitai Valley Camp Ground. This wetland will be a major legacy for Project Maitai/Mahitahi, and will contribute to the long-term health of the river.

Stage one of the work, site clearing and earthworks construction, will take place between November and Christmas. Work will stop over the busy summer months, to minimise disturbance to the Maitai Campground next door, and will start again in early March, with completion expected by April 2018.

WHY DO WE NEED WETLANDS?

Wetlands have traditionally been seen as boggy wastelands – so much so that we've lost half of the world's wetlands in the last 100 years, which is of concern as they can host some of the richest ecosystems on the planet.

Wetlands are a habitat we, and nature, just can't do without. Wetlands filter nutrients and sediment from the water, and use them to sustain an incredible variety of plants and animals, which in turn contribute to the biodiversity of the surrounding environment.

They act as sponges, soaking up stormwater in times of heavy rain and reducing flood risk and erosion further downstream. By holding sediment, they stop the build-up of deposits in the river, which can damage fish habitat and change the shape and flow of the river. By filtering nutrients they prevent river pollution, and improve river health for fish and invertebrates.

And there are other benefits too.

- Wetlands act as carbon sinks – vital in these days of climate change! Currently wetlands store a third of the world's total carbon, despite only taking up 3% of the world's surface.
- Globally, more than 100,000 animal species (half of which are insects!) rely on freshwater ecosystems alone.

- Wetlands help to provide most of the world's drinking water by slowly feeding into our rivers, reservoirs and groundwater.
- Wetlands can remove up to 60% of metals in the water, trap and retain up to 90% of sediment from runoff and eliminate up to 90% of nitrogen from the water.
- Wetlands are financially valuable. They provide us with essential services for free, including cleaning our water and buffering us from floods.
- Wetland plants are used extensively in medicine. More than 80 per cent of the world's population relies on traditional medicines from plants and animals.
- And, of course, wetlands are beautiful – spend time on a summer's evening by a pool of still water, watch the birds and water-fowl, and you'll understand just how valuable these natural assets really are.



The planned wetland at Groom Creek

HOW CAN YOU HELP?

We can't all build a wetland in our back yard, but we can help our waterways by harvesting and storing rainwater, which reduces the load on the stormwater system and has the benefit of providing us with a free supply of fresh water in our back garden.

Harvesting can be as simple as installing a rainwater barrel under a downpipe to catch water when it rains. There are many well designed low cost systems available.



MAITAI RESERVOIR LAKE SPI SURVEY

Earlier in the year, Council engaged the Cawthron Institute to undertake a LakeSPI (Submerged Plant Index) survey of the Maitai Dam to assess the health of the ecosystem.

The survey looks at the native and non-native plants in the lake and the depths at which they grow. Submerged aquatic plants are excellent biological indicators of the health of the lake, because they are easy to observe, reflect environmental conditions within a lake over a long period of time, and focus on the edges of a lake, where the greatest public interaction occurs.

The Maitai Dam received a LakeSPI index score within the high category, as it was found to have a healthy population of a native pondweed (*Potamogeton ochreatus*), within a narrow band down to about 5m deep. The report recommends that care is taken to prevent the introduction of

non-native invasive weed species. "Over time we'd expect low light native species to develop in deeper water, but the lake is relatively young and isolated so this could take some time," says Clare Barton, Group Manager, Strategy and Environment.



Potamogeton ochreatus growing in the Maitai Dam

TEAMUP 2 CLEANUP MAKES A DIFFERENCE

The Victory area around York Stream is looking much cleaner now, thanks to about 60 volunteers who came together on Saturday 16 September to take part in a community working bee, TeamUp 2 CleanUp, during Keep New Zealand Beautiful week.

Teams of locals, school children and NMIT students cleared rubbish from the streets, railway reserve and York Stream surroundings. They were rewarded with shared food and giveaways, and took part in a tree planting ceremony to commemorate the occasion.

The kawakawa tree was chosen for this event for its cultural significance and for its heart shaped leaf – in reference to the heart of the community that had come together to care for its environment.

Much of the rubbish collected was take-away containers and coffee cups as well as plastic drink bottles and cans. There was also recyclable glass and cardboard and plastic containers. The more unusual items were bedding, clothing and various large objects such as metal, a mirror, shopping trolleys, bikes, and old fencing material.

The Team Up to Clean Up event was supported by Victory Community Centre, Te Wairepo (Project Maitai/Maitahi), NMIT and Nelson New World.



Volunteers with some of the rubbish collected during the TeamUp 2 CleanUp event