

24 December 2020

Thomsons Creek, Central Otago

What a year!

This year the Thomsons Creek Catchment Group has made significant progress, putting workstreams in place to improve the health of our much-loved waterways.

The really exciting news is that Ministry for the Environment are funding three immediate projects within our catchment as part of the larger Manuherekia Exemplar Catchment Project. These are:

- to build a constructed wetland;
- · enhancing Galaxiid habitat; and
- · carry out fencing and planting.

The details are further on in this newsletter.

There is a lot to do and plenty of opportunities for farmers and community members (and groups) to get involved, so please don't hesitate to get in touch.

Contact Group and Project Facilitator Nicola McGrouther 0274 939 500.

Action and vision – the road map to success

Vision "Healthy waterways, sustainable land use and a thriving community."

The Thomsons Creek catchment steering group has developed a draft plan for the Catchment Group based on feedback from a community meeting in August 2019 and a steering group meeting in November this year.

The draft is available on the 'File' tab on the Facebook page (see <u>page 5</u>) or call Nicola for a copy. Feedback is welcome, contact Nicola McGrouther (facilitator) 0274 939 500 or Hamish Stratford on 027 221 0173.



Figures 1 and 2. Catchment Steering group working on a vision, goals and actions – November 2020



Actions

The steering group identified the following actions to improve stream health.

- Develop a constructed wetland to improve water quality
- Work with all landowners to develop a fencing and planting plan for the catchment. Where possible, we will involve local schools, our community nursery and our wider community.
- We will collect and collate all the catchment information in one place.
- · Continue to monitor water quality.
- Keep funding our facilitator.
- · Keep everyone informed and up-to-date on progress.

What's great about Thomsons Creek Catchment?

Water	Farming	People
Trout, eels and native fish, freshwater crayfish and invertebrates	Happy healthy animals and management of stock	Fostering pride in what we've got
River flows	Comparatively low stocking rates	Ability to discuss issues and sort out
	Some fenced off waterways and reticulated water	Gold mining history
	Farm Plans flag what to do and a timeline to work to	Diverse land use
	Solutions quite easily achieved	Catchment more open to discussion
	Wintering on dry land	Joint ventures with farmers and schools to plant the land
	Effluent plans	Sharp business people who know their farms
	Farming is close to regenerative	Collecting and dispersing native seed
	Biodiversity on land – kowhai, birds etc	Being able to swim and access the Manuherekia River

The Ministry for the Environment's Manuherekia Exemplar Catchment Project

Thomsons Creek Project - Getting the job done

The Thomsons Creek project was announced as part of the larger Manuherekia Exemplar Catchment Project by Ministers David Parker (Minister for the Environment) and Damien O'Connor (Minister of Agriculture) on 14 September.

This is a great opportunity for our catchment, as it will help us work collectively with stakeholders and the wider community to implement the practical work we need to do to improve our water quality and stream health.

We are fortunate that our facilitator Nicola McGrouther will lead this MfE project which will be focused on constructing a wetland, enhancing Galaxiid fish habitat and carrying out fencing and planting within the catchment.

The initial goal is to stop further degradation of our catchment's freshwater resources and start making immediate improvements so that water quality is materially improving within five years. This is a chance to build on the good work farmers in the catchment have already started.

Farmer and member of the Thomson's Creek Catchment Group steering committee Hamish Stratford says the funding will allow the Group to make more rapid progress to improve/enhance water quality, stream health and biodiversity within the catchment.

Hamish says: "This is a really exciting opportunity for our community, as the funds will allow us to work collectively to fast-track progress on projects that will protect and enhance our environment for the community, ourselves and future generations."

The team

A project team has been set-up, this includes: Hamish Stratford (Thomsons Creek Catchment Group), Anna Gillespie (Manuherekia Catchment Group), Matt Hickey (Independent Scientist), Pete Ravenscroft (Otago Regional Council) Trudi Anderson and Daniel Jack (Department of Conservation) Morgan Trotter and Paul van Klink (Fish and Game Otago), Cynthia Winkworth (University of Otago), Rob Schick (MfE) and Nicola McGrouther (project lead). Ngāi Tahu rūnanga (through Auhaka) are being kept informed of progress.

It is great to bring so many stakeholders together to focus on our catchment. The Community Catchment Group is grateful for the willingness of so many enthusiastic people to be part of this Ministry for the Environment Thomsons Creek Catchment Project.



Figure 3. MfE Thomsons Creek project team members visiting the potential constructed wetland site at the bottom of the Sluice Channel December 2020

An update from the MfE Thomsons Creek project team

Phase 1: Between now and March the team will be scoping out the projects with landowners and the community to work out what's possible. **Phase 2** – the implementation phase, begins in April.

Working together: This is very much a community project and a great opportunity for farmers and community stakeholders to work together to achieve shared goals and outcomes. Engagement is key, so look out for events early in 2021. There will be plenty of opportunities for people to get involved.

Constructed wetland

The project team is exploring the option of turning the duck ponds at the bottom of the sluice channel into a wetland that would filter the channel water before it enters Thomsons Creek. This would complement the on-farm work farmers are doing within their Farm Environment Plans to enhance water quality.

If it were to go ahead, this wetland would benefit biodiversity, waterfowl habitat and recreational use.

A concept plan is underway, thanks to Chris Tanner from NIWA, who is working with scientists Matt Hickey and Morgan Trotter.

This concept plan will be shared with the community in February.

Sincere thanks to landowner Pete McLeod who is allowing the project team to explore this option.



Figure 4. Hamish Stratford (farmer) and ORC staff Pete Ravenscroft and Matt Salmon out in the wetland site on 22 December to measure depth of the water and sediment across the wetland to help with the design of the constructed wetland.

Pete said "The wetland surprised me really –its much shallower than I thought and there is some good wading bird and waterfowl habitat. It was surprisingly hard under foot even in the sluice channel where the water was deeper."



Figure 5. Matt Salmon wading through the duck ponds

Waterway fencing and planting

The team is still working through the details of this part of the project (and what funding might be available), but they need farmers and community stakeholders to identify priority areas for fencing and planting. This is a great opportunity to support Farm Environment Plans and also work alongside our community nursery, local schools and wider community to enhance water quality, stream health and enrich our local biodiversity.

Hamish Stratford, Anna Gillespie and Nicola McGrouther are leading the development of this project and they welcome any input.

Galaxiids

Thomsons Creek is home to a rare native non-migratory fish – the Central Otago roundhead galaxiid. This ancient native fish is established in stretches of Thomsons Creek and its tributaries but will only survive in the absence of trout. They are mostly protected by existing barriers like culverts and waterfalls. The project team will be working alongside farmers to identify these barriers and determine whether they need strengthening to maintain and grow those fish populations.

This is exciting work as these fish are unique and endangered. One of the aims of this project is to provide safe areas for these fish to survive and thrive while allowing trout fishing to continue in the main stretches of the river.

A workshop will be held in the new year so you can find out more about this project and how you can be involved.

Matt Hickey says these fish are unique to Central Otago and we have a great opportunity to protect these fish for the long-term while undertaking work that also enhances the water quality in Thomsons Creek, showing that farming and good biodiversity outcomes are possible together.



Figure 6. Thomsons Creek is home to a rare native fish- the Central Otago roundhead galaxiid. These are an ancient, scaleless fish and Otago is home to 13 of NZ's most endangered non-migratory galaxiids.

How you can help this project?

- Let the project team know if you see fish in the irrigation channels and creeks so they can plot them on a map.
- Don't translocate trout further upstream if it gets dry as they will eat the native fish. Move them to the Manuherekia – they'll be happy there.
- Matt Hickey will be leading a small team which will access waterways to ground truth this project. They would appreciate farmers help with this in in allowing us access to side-streams and waterways – interested family members are welcome to join our on-farm explorations.

Water monitoring

The Catchment Group is continuing to monitor water quality around the sluice channel and the lower reaches of Thomsons Creek. Special thanks to Michael Williams and his family who are carrying out the monthly monitoring. This will help us track improvements in water quality as farmers make improvements on-farm and if the constructed wetland goes ahead.



Figure 7. Amanda, Michael and Sam Williams taking a water sample in Thomsons Creek

Farm Environment Plans

If you would like a visit to get advice on your Farm Environment Plan (give Nicola McGrouther a call on 0274 939 500. She is here to help!



Thomsons Creek Catchment Facebook page

https://www.facebook.com/groups/339956760606679

You can find us here! Join us for updates about the work going on in Thomsons Creek.

Merry Christmas and a happy New Year from the Thomsons Creek Catchment Group

Beef and Lamb project

This is a Beef + Lamb NZ Freshwater Improvement Fund Project to assist farmers to improve stream health in Thomsons Creek

Catchment Facilitator:

Nicola McGrouther | Phone 0274 939 500

Steering Group

Hamish Stratford, Elliot Morgan, Tony Glassford, Michael Williams, Lloyd Harris, Jan Manson, Craig Webster, Ken Gillespie, Roger Williams, Anna Gillespie

If you would like to join the steering committee ring Hamish on 027 221 0173.

Ideas

Do you have ideas or activities you'd like to see happen? Call Nicola or Hamish.



