

Envirolink Newsletter

Newsletter – Summer 2023



Coordinator's note

Greetings

I hope this newsletter finds you well at the start of 2023.

There is still a bit of money left in the Envirolink advice grant pot but it's pretty much being held for those councils that haven't used very much this financial year. E.g., GDC and NCC.

A significant portion of advice grant funds have been invested in projects that benefit all or at least several councils. Some Special Interest Groups have been pro-active in developing these projects and these have been well received by the Governance Group and MBIE.

The funding thresholds for the three advice grant classes remains at: Small (\$10K), Medium (\$40K), and Large (up to \$80K). There will be a Tools round closing 1 October 2023. As per previous rounds the tool applications need to be submitted by a SIG. Details on how to apply are available on the website <http://envirolink.govt.nz/>.

Three new tool projects started on 1 July 2022.

1. Stocking NZ's molecular library for eDNA monitoring
2. Implementation of ecological soil guideline values and sustainable soil management of 'surplus' soils

3. Enabling flexibility and connectivity in land use classifications for state of the environmental soil quality monitoring

The eDNA project has already produced a very interesting webinar on the application of eDNA technology to resource management. The webinar is available at the link below:

[eDNA webinar_3October2022.mp4](#)

Please contact me if you have any questions.

Bill (BillDyck@xtra.co.nz)

New tools available

There are now over 40 resource management tools developed through the Envirolink scheme and available on the website, and more being developed.

<https://envirolink.govt.nz/envirolink-tools/>

The most recent ones to be added include:

- [Toxic Cyanobacteria Aerial Monitoring \[R15-2\]](#)
- [EnviroSatTools: A Collaborative Satellite Data Workspace for Regional Councils \[R15-1\]](#)
- [Microbial risk assessment tool \[R16-1\]](#)
- [Satellite MODUS-Aqua Coastal Water Quality Tool \[R14-2\]](#)

DSS to Select a Tool

Included on the website is a decision support system to help users select a tool.

<http://tools.envirolink.govt.nz>

To make this even easier to use a short video can be found on the Envirolink website and on YouTube.

https://www.youtube.com/watch?v=0DjecUxN_HM&feature=youtu.be



New reports now available

Several new reports are available on the Envirolink website. There are over 1400 projects most of which have produced reports:

<https://envirolink.govt.nz/envirolink-reports/>

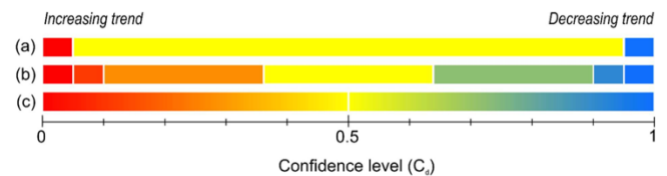
The newer reports include:

[1761-HBRC227 Review Of The Rationale For Assessing Fish Flow Requirements And Setting Ecological Flow And Allocation Limits For Them In New Zealand—With Particular Reference To Trout](#)



In addition to instream ecology, there are numerous factors that need to be considered when setting environmental flows (e.g. cultural, economic, recreational, aesthetic), but the focus of this report is on the flow requirements of fish. This review focuses on flow setting methods that have been applied for several decades in both New Zealand and internationally and does not cover recent advances in cultural flow setting methods that incorporate tangata whenua values; these are beyond the scope of this report.

[2105-HZLC154 Guidance for the analysis of temporal trends in environmental data](#)



This document provides practical guidance for the analysis and reporting of temporal trends in environmental data. The emphasis is on freshwater physico-chemical and biological variables that are commonly and routinely measured in New Zealand's rivers (collectively denoted, for simplicity, as "water quality variables"). However, the methods are applicable to other environmental variables and domains (e.g., lakes, groundwaters, estuaries and coastal waters) for which a suitable time-series record exists.

[2242-ORC002 Coastal turfs of Otago- monitoring plan](#)



This report identifies representative sampling sites and monitoring methods for the timely detection of ecological changes in coastal turf communities.

[2208-HZLC164 Weed biocontrol database upgrade](#)



This report investigates data collection and storage solutions to enable sharing of weed biocontrol agent release and recovery information between MWLR and RCs, and identifies the steps required to achieve this

[2205-NLRC228 A framework for monitoring Northland's wetlands](#)



The provisional set of priority wetlands covers a range of wetland classes, vegetation types, ecological condition, regional distribution, and historic extent, and should be appropriate for monitoring the ecological state and trend of representative wetlands in Northland region.

[2224-ESRC506 Review of approaches to setting target values for evaluating soil quality indicators for state of the environment reporting](#)



Regional soil quality monitoring (SQM) for State of the Environment reporting has been ongoing for the past 25 years. While target values developed in the early 2000s have undergone some modification, it was deemed necessary to review the indicator target system value approach before a review of the target values (as revision of indicator target values is needed to better inform the balance between production versus environmental outcomes).

[2214-MLDC162 Exploring the implementation of ecological soil guideline values for soil contaminants](#)

This project aimed to identify gaps, stakeholders, and a pathway for the implementation of ecological soil guidelines values (Eco-SGVs) for the management of contaminated land, management of surplus soils from development sites, assessment of soil quality, and disposal of waste to land under current and proposed legislation.

The project included a specific focus on incorporating te ao Māori / mātauranga Māori.

[2222-GSDC170 Land-use classification for state of the environment soil quality monitoring and reporting](#)



This project was undertaken to facilitate consistent land-use classification for SOE monitoring to use regionally and nationally.

[2234-WCRC204 Guidance for assessing earthworks effects on wetland hydrology](#)



The assessment tool has been designed to be an easy-to-apply, self-driven, spread-sheet based tool to help the council make a robust and consistent preliminary assessment of the risk of impact of any proposed activity near a wetland. The tool could be further refined in the future as the council gathers more data on the existing wetlands and other soil and hydrological features within the region.

[2210-WCRC202 Identifying protected areas for Inanga \(whitebait\) spawning in regional plans](#)



Overall, the methodology and results described here represent a practical and defensible process for defining areas of spawning habitat that are subject to protection under the law. People are often interested to learn where whitebait spawning areas are found, and the combination of visual and descriptive information will assist all Plan users to identify the locations involved.

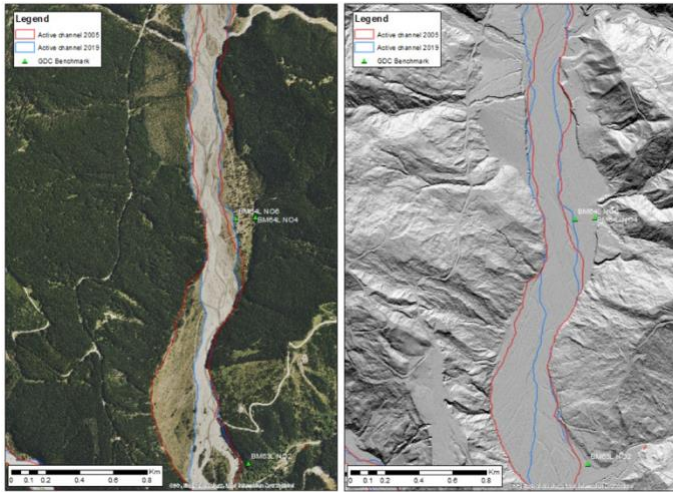
[2228-HBRC263 Assessment of the health and the restoration potential of the Putere Lakes](#)



This report combines (1.) a community consultation process with mana whenua to determine the values that the lakes provide to the local community, (2.) a scientific assessment of the current conditions of the lakes and the ecological stressors that prevent the lakes from reaching their mahinga kai and recreational potentials, and (3.) the development of a set of recommendations to begin the process of lake restoration.

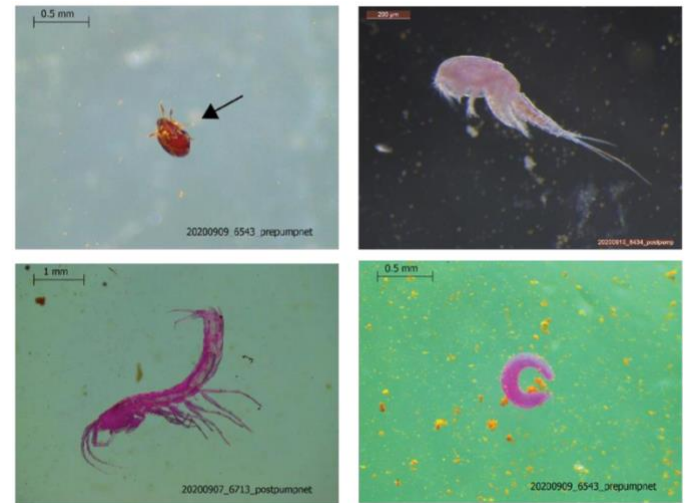
[2137-GSDC165 Application of LiDAR Differencing to assess sediment load for Upper Waipaoa River](#)

The protocol provides updated guidance on how to sample the typical biota expected in groundwater monitoring wells and springs including macro-invertebrates (stygo fauna or stygobites), meio- and micro-fauna. Guidance is provided for the sampling methodology to adopt as well as the suggested frequency. This version of the guidance has been updated since the 2018 version. It includes a methodology to collect meiofauna (microscopic multicellular motile organisms) an important part of groundwater ecosystem. The methodology also suggests the use of conical shaped sampling nets for more efficient sieving of pumped groundwater. The rest of the methodology remains the same as the 2018 report.



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[2110-TSDC172-1 Preliminary Assessment of Groundwater Dependent Ecosystems -Invertebrate Groundwater Fauna, Takaka, Golden Bay, Tasman](#)



[2110-TSDC172-2 Updated sampling considerations and protocols for assessing groundwater ecosystems](#)

The results presented in this report show that there are stygo faunal species present in both the gravel aquifer (both overlying and not overlying the Arthur Marble Aquifer e.g. in the lower Takaka valley and around Takaka township) and the Arthur Marble aquifer. There are major caveats that need to be considered in interpreting this data and the data presented in this report should be considered as a baseline. More comprehensive studies would need to be conducted to ascertain abundance, occurrence and temporal variability or trends.



PREPARED FOR: Tasman District Council under Envirolink contract C03X2002-2

[2220-TSDC181 Recommendations for accounting for stockwater takes and for setting permitted activity water takes in the Tasman District](#)



There are two parts to this research. Part 1 suggests suitable thresholds (volumes/rates) for permitted stock water takes that would ensure cumulative adverse effects of those takes on waterbodies are not likely to occur. In Part 2 we present results of a literature survey on existing methods for estimation of other permitted activity water takes used by other councils in New Zealand and recommendations on appropriate method(s) and limits to consider in Tasman.

[2211-GSDC168 Advice on the impact of forestry slash on kaimoana in the Ūawa catchment – Tolaga Bay](#)



The potential effects from logging residues identified in this report could either directly, indirectly, or cumulatively have an impact on kaimoana taxa and habitats in the Tolaga Bay coastal area.

[2216-GSDC169 Mangahauini Geomorphology and Tokomaru Bay legacy landfill](#)



In light of the risks posed to the environment by the site of a landfill in an active river corridor, and given the size of the site, removal of the landfill is recommended as soon as is practicable. Removal of the material from the site should be undertaken in a controlled approach to minimise further release of waste into the environment.

[2021-WCRC200 A geomorphological characterisation of the coastal environment_FINAL](#)



A methodology has been developed for a geomorphological assessment of coastal environments in the West Coast Region. The aim is to provide technical input for the West Coast Regional Council in their work to define the nature and extent of the West Coast coastal environment.

[2206-TSDC179 Management options for reducing particulate concentrations in Richmond 2021](#)



In Richmond concentrations of PM10 continue to exceed the National Environmental Standard (NES) of 50 μgm^{-3} (24- hour average, one allowable exceedance per year). Compliance with the NES for PM10 in Richmond was required by September 2020. In 2021 the NES was breached on three occasions with a total of four measured exceedances. Trend analysis suggests a decrease in PM10 concentrations from 2005 to 2010 but a tapering of reductions in PM10 since 2010.

[2233-NLCC121 Evaluation of seedling ratio monitoring in the Nelson City Council Waterworks Reserve](#)



Seedling ratio index data collected in the Nelson City Council Waterworks Reserve in the Maitai/Roding catchments of the Bryant Range from 2013 to 2018 were analysed to measure trends in browsing-ungulate impacts on forest understories, and to determine appropriate sample sizes for future surveys.

[2227-GSDC176 Waste Wood Processing Technologies Review](#)



Four biomass conversion technologies were reviewed/ assessed for potential use to convert the forest waste wood (biomass) in the Gisborne area. These conversion technologies include combustion, gasification, pyrolysis and torrefaction. The assessment is based on the maturity and complexity of the technology, products and applications, production costs and the environmental impact.

[2218-NLRC230 Freshwater Monitoring- Challenges And Needs Of Regional Councils](#)

Comprehensive and consistent monitoring of Aotearoa New Zealand's freshwater environments is crucial to understand what effects human actions are having on these systems, and what different actions might be required to protect and support the values New Zealanders have for their waterways. The evidence collected here reveals how ongoing changes to the monitoring system are being experienced and addressed by council staff. The NPS-FM is a major intervention into council science and monitoring activities. Local financing mechanisms limit the pace at which council investments can increase to meet demand. Central government support for the monitoring system has been crucial for getting initiatives such as LAWA and NEMS working, and council staff desire much more involvement and support from central government.

And more at [Envirolink Reports](#)

Web: <http://envirolink.govt.nz/>