

Catchment Group Story

Tasman/Aorere | OCTOBER 2024



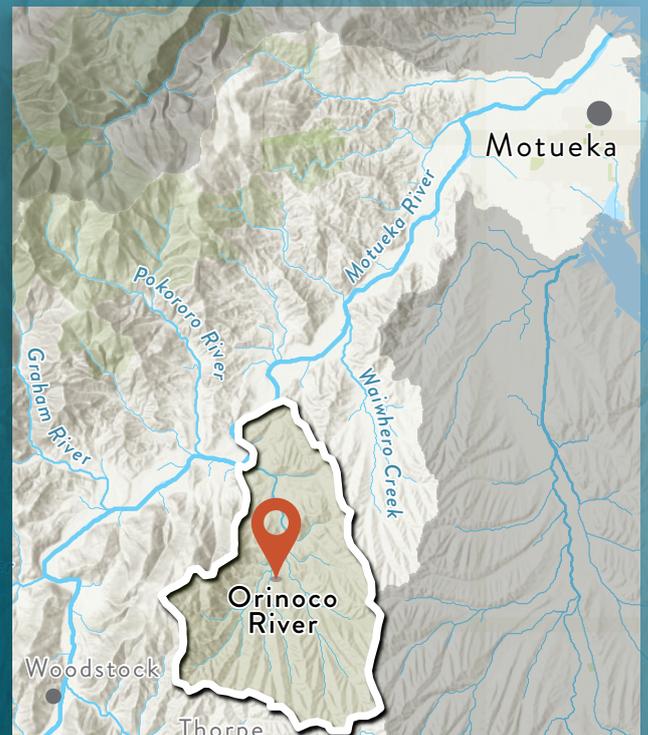
Orinoco River Subcatchment Group

Motueka Catchment, Motueka

The Orinoco Subcatchment is part of the larger Motueka Catchment. The Orinoco River Subcatchment Group is a new group, formed following a stream health monitoring event.

The Orinoco Subcatchment Group aims to monitor and improve the health of the river by gathering baseline data and conducting regular water quality tests. This includes monitoring key indicators like phosphate, nitrate, *E. coli*, temperature, and macroinvertebrates to assess the overall ecological health of the waterway.

The group seeks to understand the impacts of both natural events, such as droughts, and human activities on the stream. By tracking these factors, they aim to implement actions that protect the water quality, ensure sustainable land use, and foster community engagement in environmental stewardship within the Motueka catchment.





We all care for and want to look after our river, and this is one positive thing we can do to achieve this. We're still learning but it gets easier every time as we get used to the equipment and measurement techniques, and what's required to make sure they're accurate.



Monitoring & Protecting the Orinoco Subcatchment



Community Training on Stream Health Monitoring

16-17 FEBRUARY 2024: The Motueka Catchment Collective held a two day community training at Pokororo Hall in the Motueka Catchment on how to use a Stream Health Monitoring and Assessment Kit (SHMAK).

- » Open to locals who were interested in learning how to monitor their waterways over a two day workshop.
- » Each day a group of locals from different Motueka subcatchment groups attended the workshop.
- » Five people who lived in the Orinoco River subcatchment quickly realised they all lived by the same stream, and as the day progressed decided they wanted to form a subcatchment monitoring group to obtain baseline data and continue regular monthly monitoring.



Supporting the Orinoco Group

Elliot Easton (Tasman Bay Guardians) supported the Orinoco group with a monitoring plan and a work plan linked to specific targeted needs by scaffolding their SHMAK training at the site and supplying a SHMAK Kit to enable the group to continue monitoring monthly on targeted stream sites. Elliot has also supported the group to upload data on to New Zealand Water Citizens database and to analyse their data, so that they can see any trends occurring over time that occur.

- » Having technical support streamside for these new groups has proven imperative.
- » Having a one or two day SHMAK training course gives people a great base of knowledge and understanding with technical know-how. Following this up with on-the-ground support and resources, such as finding funding for a SHMAK kit, has given this group the confidence to start and continue on, knowing that they are undertaking their monitoring correctly.
- » Up until now, no monitoring has occurred on this stream, so this group is the first to gather important scientific data. That is what makes community freshwater monitoring so important and valuable.
- » The Tasman District Council only has capacity to monitor eight sites across the whole Motueka catchment. Having multiple community groups building a broader picture on the whole catchment, will help address any water quality issues as they arise.
- » This group has decided that monthly monitoring will help them to determine trends in their data and build an accurate picture of the health of the river, and if that decreases they will be able to act according to specific targets.

PHOTO CAPTIONS – Front page: 1. Orinoco River monitoring location, Motueka. **Page left: 2 & 3.** The group take measurements from two points along the Orinoco so they have comparisons at an upstream and downstream site. **4.** Figuring out the phosphorous test. **5.** Investigating the macroinvertebrates in the stream. **Back page:** 6. Unpacking the SHMAK testing kit streamside. 7. Steve (left), Daniel, Harnold, and Elliot by the Orinoco River monitoring location.

Next Steps



This group is now competent in all areas of the SHMAK monitoring, including phosphate, nitrate, clarity, flow (something one member was keen to test to showcase his maths skills), *E. coli*, temperature, conductivity and macroinvertebrates.

- » The results they have attained so far show low levels of both phosphorus and nitrates!
- » The macroinvertebrate results have been variable, which may be due to the drought that the region has experienced this summer.
- » Through this monitoring they will be able to tell over time if the low macroinvertebrate counts are due to the current drought conditions, or due to another unknown impact.



The group have now undertaken three rounds of monthly testing with one landowner saying:

The best thing about doing this monitoring is connecting with your neighbours and doing the testing together. It is also nice to come and spend time outdoors splashing around in a stream, being a scientist.



To learn more about the Orinoco River Subcatchment Group, or how 'Wai Connection – Tatai Ki Te Wai' is supporting them, please contact:

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<https://motuekacatchment.org.nz/community-freshwater-shmak-monitoring-in-action-on-the-orinoco-awa>

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