

Sounds Advice

A newsletter from the Marlborough District Council
January 2015

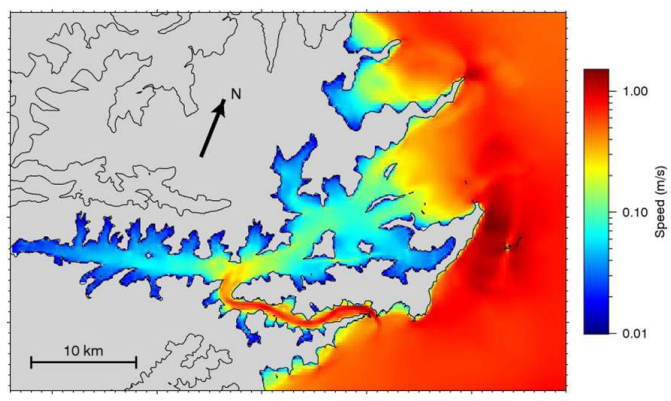
Welcome to the second edition of Sounds Advice, a Council newsletter to keep in touch with what's happening to protect and enhance the Sounds environment. Good water quality is crucial for aquaculture, farming, fishing, tourism and recreation and what happens on the land has a direct impact on that. This newsletter provides a snapshot of activities and services that Council is involved with in your community.

Boost in monitoring Queen Charlotte Sound

The Queen Charlotte Sound is a special place for many people and to keep it that way the Marlborough District Council is improving how it monitors and manages the coastal environment.

The NZ King Salmon Board of Inquiry in 2012 highlighted the lack of good quality information on our coastal ecology – how the tides and currents flush in and out of the Sounds, how nutrients come and go and the effects of marine farming on plant and fish life.

With the help of NIWA scientists, their super computer in Christchurch, and some of the \$350,000 coastal monitoring budget, Marlborough District Council is now building up a picture of what is happening in the waters of the Queen Charlotte Sound.



Mean current speed through Tory Channel and Queen Charlotte Sound

The computer modelling is based on real-life information collected by Council staff and scientists. It has confirmed what many fishermen, boaties and Sounds residents have always believed – Tory Channel is like an aorta, a vital artery to refresh and flush out the water and nutrients in the Queen Charlotte Sound.

At this stage, the modelling also shows that the amount of permitted marine farming is unlikely to fundamentally change the Queen Charlotte Sound ecosystem.

The Pelorus Sound is the next area to be modelled with work due to be completed in early 2015.

Coastal monitoring provides essential information for good decisions on resource consents, future planning and protection for the Sounds, and Council aims to make this information easy to access through the website in early 2015.

<http://www.marlborough.govt.nz/Environment/Coastal/Hydrodynamic-Models-of-the-Sounds.aspx>

<http://www.marlborough.govt.nz/Environment/Coastal/Water-Quality-Monitoring-in-the-Sounds.aspx>

Testing swimming beaches

Having the chance to swim at beaches throughout the Sounds is one of the great things about living in Marlborough but our enjoyment and health relies on the water being clean.

Pollution from sewage discharge and land run-off can result in pathogens such as *Campylobacter* and *Giardia* which cause illness or infection.

Council monitors 12 popular swimming places including Momorangi, Picton foreshore and Whites Bay from November to March each summer to check how they rate according to water quality standards set by the Ministry for the Environment.

The latest monitoring results go up on the Land Air Water Aotearoa (LAWA) website which uses a “traffic light” system to show safe (green), potentially contaminated (orange) and unsafe (red) to swim. Click on where you want to go for a swim to find out how clean it is.

Last summer’s swimming beaches with the best water quality were Whites Bay and Ngakuta Bay.

www.lawa.org.nz



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Getting to the bottom of Havelock Estuary

Healthy estuaries are home to a wide range of birds, fish and aquatic invertebrates and they have an important role in processing run-off from different land uses in the surrounding area.

Council is systematically studying the health of the main estuaries in the Sounds starting with Havelock, which receives waters from the Kaituna, Pelorus, Wakamarina and Rai catchments. Since the last study in 2001, scientists have found the estuary has become a lot muddier which reduces the habitat for shellfish, fish and birds. Seagrass which shelters fish at low tide is being covered with fine sediments while nuisance species such as sea lettuce and Pacific Oysters expand.

The increase in sediment and mud could be due to large storms in 2008, 2010 and 2012, more forestry harvesting, and the decay of 50 hectares of the invasive *Spartina* estuarine cord-grass after spraying by Council and the Department of Conservation.

Council is planning to increase monitoring and investigate the sources of sediment to try to reverse the trend and let the estuary system flush itself out. Staff will work with the community and industry on ways to restore the estuary. Other estuaries coming up for study are Wairau Lagoon, Mahakipawa, Kaiuma, and Whangarae Harbour.

The Havelock study report will go on the Council website to make the information easily available. "Our job is not just to monitor and investigate," says Council's Environmental Science and Monitoring manager Alan Johnson. "We are also information brokers, receiving information from scientists and the community and passing it on."

<http://www.marlborough.govt.nz/Environment/Coastal/Estuaries-Special-Ecosystems.aspx>



Pelorus Estuary

Stepping back in time to learn about Pelorus Sound

A Council study is drawing on local knowledge and old newspaper articles for information about what the sea floor of Pelorus Sound used to be like and what has changed in the past century.

There is growing concern about the increase in mud on the bottom of Pelorus Sound (Te Hoiere) but we need to know what has been there in the past and what is causing the sediment build-up now.

NIWA scientists have already found out there used to be extensive mussel beds covering about 2000 hectares throughout Kenepuru and Pelorus Sound. These beds filtered the sediment running off the land and provided habitat for coral, algae and invertebrates that fish feed on. However the beds were dredged out in the 1960s and 70s and with them went the natural filters and much of the habitat for snapper and other marine life.



2m Ling caught in the Marlborough Sounds Archer Family (1950s)

This study includes interviews with residents, long-time Pelorus fishermen, local iwi and marine farmers about how the Pelorus has changed and the effects of human activities such as dredging, trawling and mussel farming.

The findings, which are due in early 2015, aim to help Council understand the ecological changes in the Sound and provide more information for decisions on resource consents, especially for future marine farms.

This study is part of a larger project to help understand long-term ecological changes in the Pelorus Sound. The next step is to take core samples of seabed sediments to see how the seafloor and the life it supports has changed over the past 500 years.

The research will also analyse sediment sources and sediment rates over time. NIWA has developed isotopic techniques that can distinguish between sediments from native forest, pine forests and farming sources. The results from this research will be available in early 2016 and is being supported by the Ministry for Primary Industries and the Marine Farming Association.



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New guidelines for salmon farming

The NZ King Salmon 2012 application for more farms in the Marlborough Sounds highlighted the need for co-operation between industry, Council and the community when it comes to protecting in Sounds.

That protection comes from conditions in a farm's resource consent that state what can and can't be done in the marine environment and it's the Council's job to monitor and enforce those conditions.



Prof Kenny Black from the Scottish Association of Marine Sciences talks to the Guidelines Working Group.

Historically, environmental standards vary from salmon farm to salmon farm, depending on when the consents were given. To get consistency and help with compliance, NZ King Salmon volunteered to work with Council, scientists and the community (represented by the Sounds Advisory Group) to develop best practice guidelines.

With the benefit of more science about the environmental impact on the seafloor of fish farming, this collaborative approach has come up with clear performance targets that aim for well managed salmon farming in balance with the ecology of the Sounds.

NZ King Salmon and Council sought public comment on the guidelines and after some minor changes the next step is for NZ King Salmon to progressively put them into practice at the company's five older farms at their eight sites. The three farms approved in 2013 already have tougher consent conditions.

<http://www.marlborough.govt.nz/Environment/Coastal/Best-Practice-Guidelines-for-Salmon-Farming.aspx>



The fouled vessel hull where Mediterranean Fanworm was discovered in Waikawa Bay in February 2014.

Challenges of underwater pests

Council's Biosecurity Team has had plenty on their plate with invasive marine pests over the past 18 months. The sea squirt (*Styela clava*) was found in Picton marina in June 2013 and the Mediterranean Fanworm (*Sabella spallanzanii*) was identified on the hull of a boat in Waikawa Bay in February 2014. These species are already established in other parts of New Zealand but were a first for Marlborough.

Unfortunately *Styela clava* was found in both Picton and Waikawa but a joint programme between Council, the Ministry for Primary Industries, Marine Farming Association and Port Marlborough is looking to ensure the population remains low enough to minimise the chances of boats carrying it off to other parts of the Sounds. *Styela clava* can have a serious impact on mussel farms.

On a positive note, no further Mediterranean Fanworm has been found in Waikawa Bay or at various moorings used by the boat since it arrived from Auckland two years earlier. Mediterranean Fanworm is very invasive and can overwhelm native marine organisms. It also has the potential to become a fouling issue for the aquaculture industry.

To stop any further spread make sure your boat hull or anything else that is moveable in the water is clean before travelling to other parts of the Sounds or further afield. To reduce the risk please antifoul hulls every 12 months.

If you think you've found a marine pest call the MPI Hotline 0800 80 99 66. They are well equipped to investigate and work out what action needs to be taken.



Some of the Styela clava removed from Picton Marina.



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Close watch on significant marine sites

In 2011 the Council published Ecologically Significant Marine Sites in Marlborough which gives a summary of special seabed habitats in the Sounds and the creatures and plants that live there.

The book described 129 sites and Council will soon start monitoring some of those sites in the Queen Charlotte Sound to understand how they are faring, and also survey areas that we know are important but need more information on.

These seabed habitats are special because they provide nooks and crannies for plants and creatures to grow, hide or feed. They are the breeding and nursery grounds for the fish we like to catch and also support the marine mammals and sea birds that make the Sounds so special.

Dredging and trawling can seriously damage these habitats so scientists are monitoring to check on them. With good information and management we will be able to protect these habitats to help the Sounds ecosystem, recreational and charter fishing.

“Because these special places are underwater they’re easy to overlook,” says MDC Coastal Scientist Steve Ulrich. “If it was on land we would be loath to chop down a rare remaining stand of Rimu. We see the trees, we know they’re important, but we just can’t see these sites underwater.”

As well as increased monitoring, the Council has developed a protocol for members of the public to nominate new ecologically significant marine sites. For more information contact Steve Ulrich, 520 7400, steve.urlich@marlborough.govt.nz

<http://www.marlborough.govt.nz/Environment/Coastal/Ecologically-Significant-Marine-Sites.aspx>



White Rocks Current Community

Reviewing the Sounds Plan

Good things take time, and that applies to the review of the Marlborough Sounds Resource Management Plan which Council aims to release for public submissions in July 2015.

Every 10 years Council is required to review the Plans that set out policies and rules on how to manage Marlborough’s natural resources so, for example, if you want to build a jetty, subdivide land, or harvest a forest it needs to be done under the policies and rules of the Resource Management Plan.

As part of the review process Council has taken a collaborative approach with stakeholders, including the Sounds Advisory Group, to develop policy.

Draft proposals and material have been prepared for public comment, and potentially affected landowners have been consulted on landscape management and significant wetlands.

In the past year Council has received substantial feedback on proposals for coastal occupancy charges and marine farming management. More than 80 submissions in both cases attracted a wide and varied range of views. We also received 1360 responses to a questionnaire sent to landowners about proposed landscape provisions for buildings and future management of commercial forestry in the Sounds.

All of this feedback will help guide Councillors and Council staff as they work on the final Plan for public notification in 2015. Chapters completed and considered by the Regional Planning and Development Committee and other background material is available on the Council website.

<http://www.marlborough.govt.nz/Your-Council/RMA/Review-of-Resource-Management-Documents.aspx>



“I am keen to see the collaborative approach to reviewing the Plan continuing” – Trevor Hook, Chair, Regional Planning and Development Committee



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