

Questions from the Regional Forum

Workshop 2

The questions raised by the Regional Forum members during the course of their work are recorded and will be shared on the People, Water and Land website along with responses as they become available. Below are summary responses compiled by the Regional Forum's technical team which includes members of Environment Southland and Te Ao Marama. If organisations or members of the public have further information they would like to share they can contact Rhiannon Suter, Regional Forum Lead at Environment Southland.

The role and work of the Forum

The community are asking what the Forum will do. How can we explain our role?

The Regional Forum has been established to provide advice to Environment Southland's council and on how we can achieve the communities' aspirations for freshwater. The forum will consider the specific policies and rules as well as the on-ground initiatives required to make change to improve our water and land for future generations. Those considerations must include the limits (e.g. water quality and quantity), required by the government.

What does the community expect of us?

The Regional Forum's role over the next three years is to work together to consider a wide range of information to produce a package of advice for Council on how to achieve the community's vision and values for freshwater. The forum is not a representative body – each of the 16 members are present as individuals bringing a range of skills, experiences and perspectives. None are there to represent particular industries, areas of the region or interest groups. The council will receive the advice of the forum and utilise it in their decision making around water quality, both through the implementation of water limits through a plan change and through any non-regulatory measures they may also choose to adopt. The Regional Forum is a new group and many members of the public may not know yet what to expect from its work. The forum will meet regularly in locations right around the region, with opportunities at each session for members of the public to engage with the forum and share their views.

Do other regions have fewer/more/different issues to manage in comparison to Southland? How do we benchmark?

Each region has different and varied issues to deal with in the area of freshwater. The Ministry of the Environment report 'Environment Aotearoa' provides an overview of different issues being experienced across the country.

<https://www.mfe.govt.nz/publications/environmental-reporting/environment-aotearoa-2019>

Environment Southland looked at a range of different processes being used in other regions to manage freshwater issues and how these might apply to the Southland context.

<https://waterandland.es.govt.nz/about/reports>

Will we use information from the Water and Land 2020 & Beyond Steering Group?

The work of the *Water and Land 2020 & Beyond* steering group helped to shape the proposed Southland Water and Land Plan, and the approach taken with the Regional Forum. There is no report that needs to be referred to.

How does Council make a decision and how Regional Forum role fits within that?

Question will be answered in workshop 3.

What happens if a newly elected Council decides the work of the forum should cease?

The Environment Southland Council has made a significant commitment to the establishment of the Regional Forum. Collaboration with the community is essential to fulfil the requirements of the National Policy Statement for Freshwater Management. New rules are required to be fully operative by 2025 which requires significant work to be completed by the Forum over the next two years. As a result it is unlikely a future Council will decide to take a fundamentally different approach.

Will we look at the River Liaison Committees in our work?

Environment Southland is in the process of undertaking a capacity building project, which includes a review of the structure, aims and objectives and operation of the River Liaison Committees which were established in 1979. There are **eight** committees **across the region**. The Forum will be kept informed about this review and will have the opportunity to comment on potential ways in which these committees could work in the future to support achieving the community's vision and values for freshwater.

What is the role of Overseer in the work of the forum?

Overseer is a nutrient budgeting tool originally developed to enable farmers make improved decisions on fertiliser application. Some councils have begun making use of Overseer as a regulatory tool to better manage nutrient leaching from the land into water. Environment Southland does not currently use Overseer in this way. It is important to note that overseer information is produced from modelling and the Government is currently reviewing the use and application of the tool.

Overseer may provide useful information for the forum to consider and it may be a tool which the forum wishes to consider in its recommendations to council.

<https://www.pce.parliament.nz/media/196493/overseer-and-regulatory-oversight-final-report-web.pdf>

What are the implications of climate change and biodiversity to water quality/ quantity and the work of the forum?

There are many challenges facing the community, such as biodiversity and climate change, which also impact on water issues. The role of the forum is to consider the potential impact of a wide range of factors on the ability of council to achieve the community's vision and values for freshwater. While climate change and biodiversity are not the core focus of the forum, they will be considered as part of a systemic approach taking into account a broad range of factors that impact on Te Mana o Te Wai (the integrated, holistic health of the water).

Some key pieces of guidance on climate change which the forum will utilise include:

<https://ngaitahu.iwi.nz/environment/policy/climate-change-strategy/>

<https://www.es.govt.nz/council/news-and-notice/Pages/default.aspx?newsItem=id:25uoq84551cxby7zmnal>

Does the Mātaitai and the conservation order sit within the framework of our work?

During Phase One of their work, the forum have been learning more about the natural environment and the policy context of their work. Both the Mātaitai and the Water Conservation Order are two different policy mechanisms which affect the Mataura Catchment and the water quality and quantity issues which the forum will address under the National Policy Statement for Freshwater Management. The forum will not make recommendations affecting either the Mātaitai or the Water Conservation Order as both these elements sit outside of the framework of decision making.

Andrew Morrison (Beef and Lamb NZ) stressed the interacting impacts of biodiversity, climate change and water quality issues and the importance of considering them altogether. How could this be done by the forum?

The forum is taking a systems approach to the issue of water, understanding that there are many actors and interactions within the natural, economic, social and physical environments which all have an impact on freshwater. Hearing directly from as many groups as possible is an important step in understanding the many perspectives which need to be considered. The community's values and objectives for freshwater will be integrated and outcome focused, taking into account a range of factors, including activities people undertake in and on the water.

How can the ES team help the forum members communicate with local communities if they want to?

Forum members have been chosen to reflect the community rather than to represent specific industry groups, interest groups or areas of the community. The Environment Southland communications team is taking the lead on supporting the forum through providing public communications and engagement. They are available to assist forum members with ensuring they have the resources they need to explain their work at meetings or via online channels where they wish to do so.

Can we hear from organisations like Gore District Council and Fonterra?

At each workshop the Forum will hear from a range of stakeholders. All the Territorial Local Authorities, as well as processors and other key industry like Fonterra will have an opportunity to

engage with the Forum. Agendas are available on the Regional Forum web page showing which sessions stakeholders participated in.

How can we reach those people who are not usually engaged in processes like this but who this issue affects?

During the ShareYourWai campaign we trialled a number of different ways to approaching people that council doesn't normally engage with. We will use some of the methods and learnings from this campaign to ensure that the 'sense checking' engagement reaches those audiences that are affected by the possible changes. If you have ideas or want to hear more please email communications@es.govt.nz.

How can groups with fewer resources (e.g. community groups like Anglers groups) respond to this process?

We will work with groups to ensure they have an opportunity to contribute. We are considering a range of ways to involve community groups. If you have ideas or want to participate please email communications@es.govt.nz.

What extent of interest is relevant for the register of interests?

The register of interests includes both financial and non-financial interests of each member of the Regional Forum. This register is a tool to ensure that members are able to undertake their work in a fair and impartial way and reflects the commitment of Environment Southland and Te Ao Marama to transparency in the work of the forum.

Policy, consents and compliance

What has the impact of the Maitai Mātaitai been? Has it been successful?

Assessing the effectiveness of the objectives in the Maitai Mātaitai and the Maitai water conservation order are not a regional council requirement and therefore do not fall into the policy review cycle. Ngai Tahu consider the Maitai Mātaitai Management Plan to be finalised and are under no obligation for a continual policy cycle. The Ministry for the Environment administers the Water Conservation (Maitai River) Order 1997 and is not subject to the review cycle either. However, policies objectives and rules within Environment Southland's proposed Southland Water and Land Plan give regard to Mātaitai and water conservation orders. It would be these regional objectives and policies which would be reviewed and assessed within the regular policy cycle.

The policy cycle



How do the conservation order and Mātaitai interact? Are they supporting or at cross-purposes?

The Water Conservation (Mataura River) Order 1997 and Mataura Mātaitai Management Plan 2007 appear at face value to be complimentary as the following vision and explanatory note summarise. The conservation order provides direction to council on interpreting the RMA in the Mataura catchment and the Mātaitai is considered through policies, objectives and rules within regional plans. There have been no instances of conflict between the two.

Water Conservation (Mataura River) Order 1997 explanatory note: This order declares that the Mataura River and the Waikaia River and various other rivers, streams, and tributaries include outstanding fisheries and angling amenity features. The order includes various provisions to preserve and protect these features.

Mataura Mātaitai Management Plan 2007 vision is a sustainable, healthy and abundant fishery that provides for the customary fishing needs of the community. Mō tātou, ā, mō ngā uri ā muri ake nei. For us and our children after us.

How does policy work in the consenting process?

The role of the consents team is to apply the policies and rules laid out in the relevant plan. The Forum will have the opportunity to hear from the consents team at a future workshop.

What reports/ data are publicly available from organisations like Alliance, Fonterra and TLAs? How have they been received?

The compliance of industry bodies is included in the annual Compliance Monitoring report – available online at <https://www.es.govt.nz/services/consents-and-compliance/Pages/Compliance-monitoring-reports.aspx>

In thinking about the Mataura River, has there been any independent testing that confirms the Alliance monitoring results?

This report completed with ESR in 2017 provides a review of risk of Campylobacter infection associated with children swimming in the Mataura River in the environs of Mataura township.
<https://www.es.govt.nz/Document%20Library/Research%20and%20reports/Various%20reports/Science%20reports/Science%20reports%20September%202018/Mataura%20QMRA%2024%20August%202017.pdf>

Can we see consent information at a catchment level?

The annual Compliance Monitoring Report provides some information on consent compliance across a range of industries and sectors. There is also catchment summaries, which provide some insight into the consent compliance of each catchment.

<https://www.es.govt.nz/services/consents-and-compliance/Pages/Compliance-monitoring-reports.aspx>

More specific catchment consent information can be made available for key issues if required.

What is the current legal state of the proposed Southland Water and Land Plan?

Question will be answered at workshop 3.

How does the RMA balance economic, cultural and environmental preservation?

Question will be answered at workshop 3.

How does it work when there are a number of overlapping guidelines across NPS' e.g. NPSFM and NPSREG?

Question will be answered at workshop 3.

Can we have a stocktake of other Region's limit-setting methods e.g. a menu?

This will be considered further by the Technical team.

How do you report when you see people polluting?

Call the Environment Southland pollution hotline on 0800 76 88 45 – when it is happening. That way our compliance officers have a better chance of seeing the issue and being able to respond.

Land management

Is there a diagram or report which will help us visualise the scale of sheep and beef intensification?

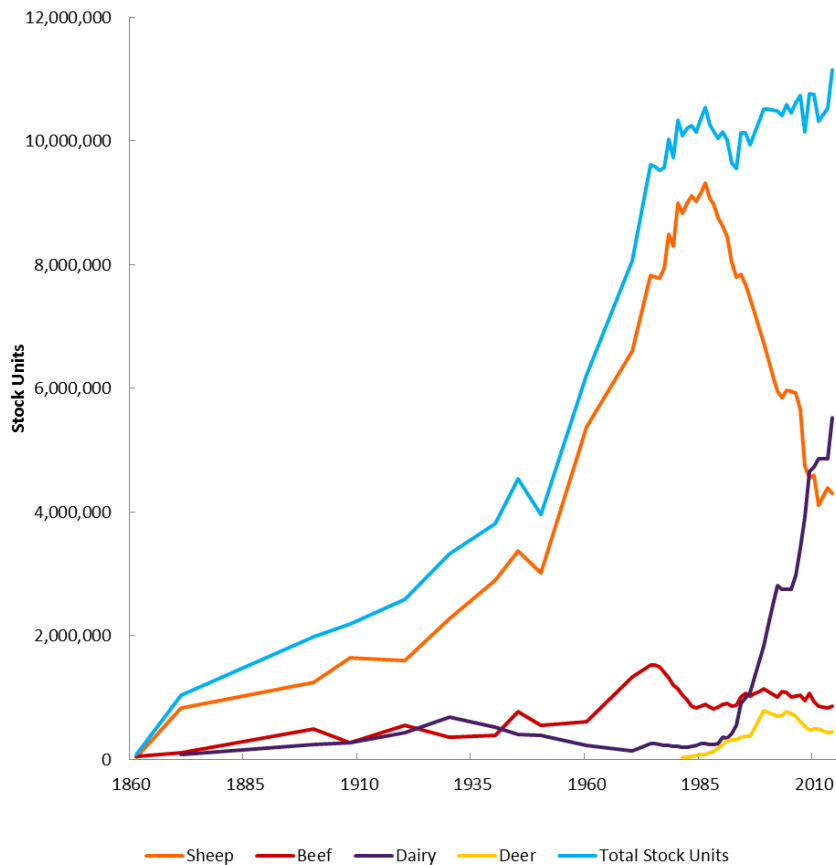


Figure 3: Stock units in Southland by stock type 1860-2014

Source: Ledgard (2013)

(From page 28 – Agriculture and Forestry Report

<https://contentapi.datacomsphere.com.au/v1/h:es/repository/libraries/id:1tkqd22dp17q9stkk8gh/hierarchy/Scientific%20reports/Agriculture%20and%20Forestry%20Report.pdf>)

How much dairy support is there in the region?

Summary information can be found in the Southland Economics Project report which will be covered at Workshop 3

What is the impact of the dairy industry on the arable industry?

Summary information can be found in the Southland Economics Project report which will be covered at Workshop 3

What is the impact of industry on the Mataura?

Summary information can be found in the Southland Economics Project report which will be covered at Workshop 3

What is the alternative to using tile drains? What are the pros and cons?

Areas can be turned into open drains and fenced off or just straight fenced off. The positives of open drains are the drain is open and can be maintained as well as stock excluded if fenced. Also stock are

not grazing directly above as they do with a tile drain. If the area can be left and fenced off there may be benefit from building a constructed wetland, but on the other hand it may not be a practical option for the farm. With tile drains some filtering of water does occur as it moves through the soil profile to the drain. Every situation is slightly different.

What mitigations on farm have people voluntarily begun and are they successful?

There are many mitigations occurring on farm. They range from straight riparian fencing, to fencing and planting, installing culverts, bridges etc. The list is extensive. The success of the mitigations vary. But in general we know that excluding stock from waterways, shading the water and lowering water temperatures via riparian plantings will make a positive difference to water quality. The area we can't control so readily is contaminants bypassing the riparian area via tile and mole drains or natural variability in the geology. There are options for constructed wetlands/sediment traps to be built at the bottom of some tile drains.

What impact does it have on good management practice when a farmer is leasing land? What impact does the length of the lease have?

It's hard to say as it does vary with the lessee. Generally, long term lessees tend to implement more GMPs and look after the land better as they have more security over the land.

What were the drivers behind draining wetlands?

The main driver is to produce more land that is suitable for farming.

How do banks respond? For those farmers who are owners, have improvements in environmental management resulted in improved valuations?

We don't have information on valuation changes. Increasingly, we have rural banking staff making contact with Environment Southland for more information on new planning requirements, timelines, how new or 'increased' applications will be considered.

Does Overseer physically track nutrients or model them in the land? What real life calibration is used? How will Overseer be used by Environment Southland and the forum in the regulatory space and how has it improved over time?

Overseer does not physically track nutrients, it models their movement. Real life calibration has and is continuing to occur through trial and research. Many of these trials have occurred in Otago and Southland. Each year there are one to two version upgrades of the Overseer programme.

There's some useful reports on Overseer here: <https://www.overseer.org.nz/overseer-explained/environmental-compliance> - particularly the 'Technical Description of Overseer for Regional Councils (Ag Research) and <https://www.pce.parliament.nz/media/196493/overseer-and-regulatory-oversight-final-report-web.pdf>.

It is important to note that overseer information is produced from modelling and the Government is currently reviewing the use and application of the tool.

Overseer may provide useful information for the forum to consider and it may be a tool which the forum wishes to consider in its recommendations to council.

How was the land and flood mitigation measures managed by the River Liaison Committees paid for?

Environment Southland has established seven River Liaison Committees comprised of representatives evenly spread throughout each river catchment and elected annually by their communities.

Their role is to advise and assist Council in the development of annual maintenance works programmes and budgets, and provide an important local contact for each river community regarding special river and land drainage management issues.

A targeted rate is applied to a rating district (set area) to gather money for capital works, and ongoing maintenance. This happens via the Local Government Act.

When creating a river management approach what are the tensions which need to be considered?

Managing rivers has become more challenging with increased community expectations. Working to restore cultural and ecological values, maintain flood capacity for economic purposes, and ensure land is not eroded is challenging. New approaches are being developed and tested to try to meet these sometimes divergent outcomes.

Has there been investment in freshwater storage in Maitara catchment?

There has been, but only at a localised (e.g. farm) scale to date. However, back in 2010, in response to concerns about water availability and minimum flows in the catchment, Environment Southland co-funded with the government a study looking at options for water management.

<https://www.es.govt.nz/document-library/plans-policies-and-strategies/strategies/Pages/Maitara-Catchment-Strategic-Water-Study.aspx>

What enables a successful community group to achieve change in the catchments?

The most successful groups are farmer-driven but needs strong leaders. Groups need good structure eg. a chairperson.

They need good demonstrative examples in the catchment or other environmental farming leaders. Also need good agency support eg, DairyNZ, Environment Southland, Beef and Lamb.

How often do key stakeholders for the river (Alliance, Fish and Game etc) meet and does it work?

The Maitara River Liaison Committee meet each year in February. Catchment groups from Three Rivers, Lower Maitara, Waikaka, Wendon, Balfour meet regularly. There is also a lower Maitara Landcare Group that meets occasionally. The need for a diverse range of stakeholders to meet more regularly and work together is something the Forum could choose to consider further.

Science

Science reports from the last four years as part of the Southland Science Programme are available here:

<http://esgis.maps.arcgis.com/apps/MapSeries/index.html?appid=71fb36dcd1a441d29bf95213d9a8b561>

How is the science research agenda managed?

We listen to the community wishes, look ahead to the legislation coming from Central Government, anticipate any future regional issues and look at previous work programmes. The science agenda is set down in the Long-term Plan, and is also partially dictated by requirements under various legislation.

What influences the science work which Environment Southland undertakes?

Same as below.

What size of rivers are monitored? How are decisions on where and what to monitor taken?

Our monitoring programme consists of all sizes of rivers and is driven by legislative requirements, specific monitoring programmes in Southland and new research requirements. Monitoring sites are determined by a number of factors including history (we have long-term monitoring sites that have a historical record), practical measures like access and staff safety, sites that are particularly impacted by land use/water quality, public sites (for swimming, mahinga kai etc), sites where we want to monitor improvement, and financial constraints. We essentially do a scientific review covering all these things, and then come up with a list. All sites have to have a clearly articulated outcome and purpose for monitoring.

What do we/what does Council do about urban wastewater treatment plants operating outside compliance parameters?

If a pollution incident is reported, then the compliance team will launch an investigation. If a breach is found then enforcement action can be taken. What action is taken depends on the situation. You can read more about this process here: <https://www.es.govt.nz/services/consents-and-compliance/Pages/Compliance-information.aspx>

What contaminants do we need to focus on? Is nitrogen the only one?

Nitrogen is important, but you will also need to consider (as a minimum) phosphorus, *E. Coli* and sediment.

What do we need to understand about wetlands?

Information on the importance of wetlands is available here:

<https://www.es.govt.nz/environment/wetlands/Pages/default.aspx>

There's also been an inventory report, available here:

<https://www.es.govt.nz/Document%20Library/Research%20and%20reports/Various%20reports/Science%20reports/Science%20reports%20September%202018/ES%20Wetland%20Inventory%20and%20Monitoring%20Project%20final%20report%202018.pdf>

What goes into assessing swimmability?

When the community talks about swimmability, they are usually referring to the bugs. When council refers to it they are usually assessing it from a wider perspective which also includes access, safety, amenities, algae (periphyton), local discharges and *E. Coli*.

The Bad Bug survey was mentioned – is that a useful resource to review?

The survey is over 20 years old and was used to develop the 2003 Freshwater Guidelines that are currently used. You can see these here: <https://www.mfe.govt.nz/publications/fresh-water/microbiological-water-quality-guidelines-marine-and-freshwater-0>

Useful guidance can be found here: <https://www.mfe.govt.nz/fresh-water/tools-and-guidelines/microbiological-guidelines-recreational-water>

Would the Waiau flood more if it was not diverted?

Yes – This topic will be covered further at future workshops.

Do the rivers go through various classifications on their journey from source to sea?

Yes, in River Environment Classification (REC), individual river sections are mapped according to their physical characteristics such as climate, source of flow, topography, geology and catchment land cover (<https://www.niwa.co.nz/freshwater-and-estuaries/management-tools/river-environment-classification-0>).

The proposed Southland Water and Land Plan defines 13 classes of surface freshwater bodies, including 10 stream/river classes. Seven classes are based on a combination of elevation and river bed type (Mountain/Hill/Lowland – Hard Bed/Soft Bed). The remaining three classes correspond to different parts of the Maitai catchment, primarily dictated by the Maitai Water Conservation Order (Maitai 1, 2 and 3). Three classes are based on a source of flow (natural state waters, lake-fed and spring-fed) (<https://www.es.govt.nz/document-library/plans-policies-and-strategies/regional-plans/proposed-southland-water-and-land-plan/Pages/default.aspx>).

Is there a report which shows water quality changes over time in the region?

There are numerous reports showing water quality changes over time but a couple of key reference reports are:

Water quality:

<https://www.es.govt.nz/Document%20Library/Research%20and%20reports/Various%20reports/Science%20reports/Water%20Quality%20in%20Southland%20-%20Current%20State%20and%20Trends%20-%20April%202017.pdf>

Periphyton: <https://www.es.govt.nz/Document%20Library/Research%20and%20reports/Various%20Reports/Science%20reports/Science%20reports%20September%202018/Technical%20Report%20-%20Periphyton%20state%20in%20Southland%20-%20September%202018.pdf>

Macroinvertebrates: <https://www.es.govt.nz/Document%20Library/Presentations/Science%20Conference%20Posters%202016/State%20and%20Trends%20in%20Freshwater%20Macroinvertebrate%20Community%20Health%20in%20Southland.pdf>

LAWA website: <https://www.lawa.org.nz/explore-data/southland-region/>

A review of lakes is not available as we need one more year of data (min) to report trends.

Reports for estuaries are not typically completed as they are very expensive – but we have a New River Estuary report:

<https://www.es.govt.nz/Document%20Library/Research%20and%20reports/Estuarine%20reports/New%20River%20Estuary%20Water%20Quality%20Report%202018.pdf>

In the Maitava what is the impact of lignite seams on water issues?

This will be better explained when we get into physiographics and Phase 3 of the process. For now, this is the best place to go to for a summary:

https://waterandland.es.govt.nz/repository/libraries/id:1tkqd22dp17q9stkk8gh/hierarchy/Physiographic%20zone%20factsheets/lignite-marine_terraces.pdf

What types of soil are seen on Maitava catchment farms and what effect do they have on water quality issues?

Our website provides information on soils in the region (from the Topoclimate South survey 1999-2002) and if you click on the map, a fact sheet about the soil will come up:

<http://gis.es.govt.nz/index.aspx?app=topoclimate>

The second part of the question will be covered in a subsequent workshop.

What impact has Maitava Valley Milk had on water? How does a new plant like Maitava Valley Milk compare to an older plant?

The new plant is more efficient than older plants. It uses less water and discharges less than anticipated. The discharges are managed by resource consent.

How do estuaries work?

We are just completing an estuaries summary booklet which will be made available at future workshops – there is also information on estuaries here:

<https://www.es.govt.nz/environment/estuaries/Pages/default.aspx>

What effect does the municipal water system have? What effect does the outfall have on water quality?

The Southland Economic Project has completed an Urban and Industry report which members will receive a hard copy of shortly. This report will go some way to answering this question, and wastewater systems will be covered in more depth in future workshops.

<https://www.es.govt.nz/council/major-projects/Pages/Southland-Economic-Project.aspx>

Was the flow of the Mataura normal?

On the day the forum visited the Mataura River – yes.

What do we need to understand at a sub-catchment level?

This issue will be discussed at future workshops. In addition, the Values and Objectives workstream is looking at issues of scale e.g. how do values differ at regional to sub-regional scale.

Importance of considering how different contaminants interact and to manage them as a whole rather than focus on them individually – how can this be included in the forum's consideration?

Many different factors affect water quality and water quality can be assessed in different ways. Environment Southland monitors for a number of factors but taking a holistic view is important both in order to give effect to Te mana o Te Wai and in order to meet the requirements of the NPSFM. Both these topics will be discussed further at Workshop 3.