

Regional Planning Context for Identifying Values and Developing Draft Freshwater Objectives for Southland

Technical Report

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Executive Summary

Discussions about what is important to Southland communities about the region's water bodies and what should be aimed for in this space have been ongoing, particularly over the last 20 years. This report provides an overview of the outputs of these discussions, as contained in the relevant regional plans. The values identified in other statutory planning instruments are also described.

This report aims to provide the relevant context and history to the package of values and draft attributes and freshwater objectives contained in the report entitled *Developing Freshwater Objectives for Southland*.

In 1975 the first water quality standards for Southland were finalised for different water body classes across the region. These standards were subsequently brought across into the first Southland Regional Plan under the transitional provisions of the Resource Management Act in 1991.

A new suite of objectives, policies, rules and water quality standards was introduced with the notification of the first regional water plan for Southland in 2000. The new plan was developed via a stakeholder working party process coupled with a community engagement process. The expected outcomes of the new provisions reflected community aspirations for water in the region and the understanding at that time of the efforts that would be required to achieve these aspirations.

The plan was subsequently updated through a series of variations to incorporate new scientific knowledge and understanding. During this time it was recognised that community aspirations would take longer to achieve and require greater effort than originally thought. The final plan, the Regional Water Plan for Southland, became operative in 2010.

In 2016 a new regional water plan for the region was notified (the proposed Southland Water and Land Plan) in response to the fact that water quality in Southland continued to be degraded and was declining further in some parts of the region. This meant the objectives of the Regional Water Plan for Southland 2010 were not being achieved. The stated aim of the new plan was to "hold the line" on any further decline in water quality while the background research was being done to prepare for undertaking the freshwater management unit process contained in the National Policy Statement for Freshwater Management. The new plan also marked the start of this process and therefore the date to which water quality was to be maintained to as a minimum.

A variety of other statutory planning instruments for the region contain values and objectives for water. The Regional Coastal Plan for Southland 2013, *Te Tangi a Tauira: The Cry of the People 2008*, the statutory acknowledgements under the Ngāi Tahu Claims Settlement Act 1998 and the Water Conservation Orders for the Mataura and Oreti Rivers are particularly relevant.

1. Introduction

Discussions about what is important to Southland communities about the region's water bodies and what should be aimed for in this space have been ongoing, particularly over the last 20 years.

This report provides an overview of the outputs of these discussions, as contained in the relevant regional plans. The values identified in other statutory planning instruments are also described (Figure 1).

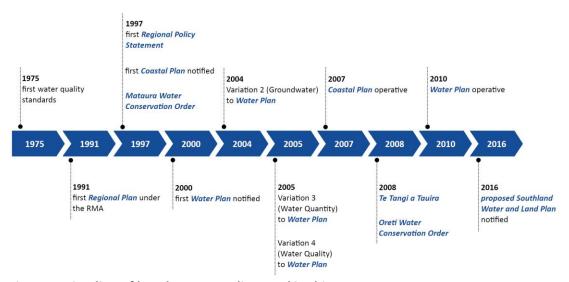


Figure 1: Timeline of key documents discussed in this report

Purpose of this report

The report is designed to provide the relevant planning context and history to the package of values and draft attributes and freshwater objectives contained in the report entitled *Developing Freshwater Objectives for Southland*.

Relation to other reports

This report is one of several reports delivering outputs of the "Values and Objectives" workstream under Environment Southland's People Water and Land Programme (Figure 1).

VALUES AND OBJECTIVES PACKAGE

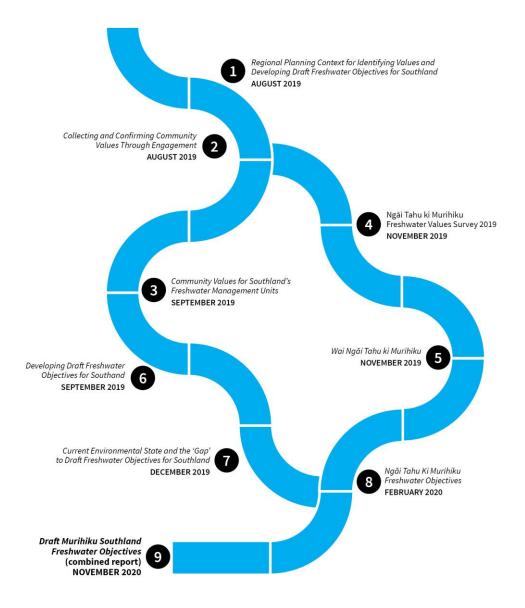


Figure 1: The sequence of reports written for the Values and Objectives workstream – this report is number 1.

This report has a focus on values and objectives. A wider description of the policy context for decision making in Southland is contained in the report entitled *The Regional Forum - Southland Context*, which sits outside the above package of reports.

2. Pre-2000 Water Objectives

Southland was the first region in the country to have water quality standards in place for different classes of water bodies across the region. The process commenced in the late 1960s following submissions by the Southland Acclimatisation Society (Fish and Game's predecessor) and finished in 1975 at the conclusion of a Supreme Court appeal. These standards were applied to point source discharges authorised under the relevant legislation at the time.

Following the enactment of the Resource Management Act in 1991 (the Act), the Southland Regional Council (now branded Environment Southland) prepared the first Southland Regional Plan under the transitional provisions of the new legislation. This brought together a number of controls that had been in place under the previous legislation, including the above.

The Act introduced a new set of water quality classes and standards (Schedule 3) and required all regional councils to set rules based on those standards, unless the council considered the standards inadequate (in which case they could set more stringent or specific standards)¹.

The first Southland Regional Policy Statement became operative in 1997 and directed a review of the Southland classification framework that had come into effect in 1975 against the new Schedule 3. It noted that many of the standards in Schedule 3 were narrative and it would be necessary to quantify these where possible.

In the late 1990s, this review occurred and a new classification framework was included in the first regional water plan for Southland established under the Resource Management Act 1991. This plan is discussed below.

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¹ The 2017 amendments to the Resource Management Act 1991 changed the Act so that Schedule 3 no longer applied to freshwater (so as to clarify that the national objectives framework introduced in 2014 and contained in the National Policy Statement for Freshwater Management applied to freshwater).

3. Proposed Regional Fresh Water Plan for Southland 2000 (the original Water Plan)

The Proposed Regional Fresh Water Plan for Southland 2000 (the original Water Plan) was developed in the late 1990s via a stakeholder working party process, coupled with a community engagement process where a discussion document was publicised and feedback sought (this included a series of public meetings).

The original Water Plan was notified in October 2000 and classified water bodies into three categories for water quality management purposes:

- 1. Natural State;
- 2. Hill country, some Stewart Island waters and main stems;
- 3. Lowland.

Two different approaches were used to determine these categories. Natural State Waters included all of the waters of Fiordland National Park, most of the waters of Rakiura (Stewart Island) and waters where 75% or more of the catchment was under forest or tussock. The intention for these water bodies was to protect existing high water quality.

The original Water Plan further divided the region's water bodies into hill country and lowland based on a preliminary source of flow approach developed by National Institute of Water and Atmospheric Research (NIWA) as part of a habitat classification approach. This work was still in development at the time of notification of the proposed Plan and the plan provisions were based on preliminary work by NIWA at a 1:250 000 scale (which was subsequently refined after notification of the Plan to 1:50 000).

Stewart Island waters, that were not included under Natural State, and the main stems of the Waiau, Mararoa, Aparima, Oreti, Waikaia and Mataura, were treated the same as hill country rivers based on the values held for those rivers.

Objectives in the original Water Plan set the expected water quality outcomes for each of the three classifications including various dates for achievement of the lowland and hill country objectives to reflect the current water quality and efforts that would be required to meet these objectives. The expected outcomes included:

- There will be no net deterioration of water quality state in the Southland region due to human influences.
- The water quality of hill country waterbodies (outside Fiordland and Rakiura, Stewart Island) will be suitable for native fish and salmonids by 2005.
- The water quality of hill country waterbodies will be suitable for contact recreation by 2010.
- The water quality of lowland waterbodies will be suitable for stock drinking water and native fish by 2010.

• The water quality of lowland waterbodies will be within human health risk guidelines for contact recreation by 2020.

Associated rules contained water quality standards for each classification. The rules required point source discharges to meet the standards at the point of discharge or undergo a consent process and non-point source discharges to be managed to meet the standards through the application of non-regulatory methods.

The original Water Plan did not classify water bodies for water quantity management purposes and contained a relatively simple approach to water quantity management². This reflected the situation in the late 1990s, with comparatively low levels of allocation (apart from the Waiau catchment, which had high allocation as a result of the Manapouri Power Scheme diversion). Most abstraction in the region was for existing domestic and stock water supplies with some abstraction for municipal supply and industrial use. Southland at the time was perceived as a region where irrigation was not required for reliable agricultural production³.

The paragraphs below come from the original Water Plan and reflect the community conversations held about values at the time. As outlined above, during the development of the original Water Plan, a freshwater discussion document was prepared and meetings held with stakeholder groups and the wider public to gain community input.

Water Quality: Resource uses and values

Water is a fundamental resource. Southland's economy is based around the availability of water. As a primary production economy, Southland needs water to grow animals and plants. Water is needed for the processing of these and other products. Water quality is a key factor in the ecological health of waterbodies, influencing what species are able to live there. The mauri (spiritual essence or life force) of a waterbody is affected by water quality. Many people recreate in or near Southland's waterbodies. Recreation includes: swimming, duck hunting, fishing, walking or tramping and boating activities. These activities should be able to occur without a risk of illness from contact with water.

Water Quantity: Surface water uses and values

Surface waterbodies, such as rivers, lakes and wetlands, contain both "instream" and "out-of-stream" values and uses. Instream values include the ecological, recreational, landscape and cultural values supported by the water. Out-of-stream uses include the abstraction, damming and diversion of water for domestic and community supply, stock-water, power-generation and agricultural and industrial purposes.

Many of these out-of-stream uses have played a major part in the development of the region and continue to be fundamentally important for economic, social, and community health and safety reasons. However, these activities can also impact on flow regimes, and as a consequence have significant adverse effects on instream

² The original Water Plan made water takes greater than 20,000 litres a consented activity with a surface water policy specifying a minimum flow of 50% of mean annual low flow for rivers greater than one cumec and 66% of mean annual low flow for smaller rivers and streams (unless a scientific assessment of low flow habitat requirements was undertaken). There was little policy guidance for groundwater takes given the low levels of allocation.

³ Irrigation had occurred intermittently in the region prior to this time. For example, there was some irrigation in the 1970s in response to a series of dry weather events.

values. This can lead to a conflict between protecting instream values and maintaining human use values, particularly during low flow or drought events.

Groundwater: Resource uses and values

Groundwater is an integral part of the hydrological cycle. Groundwater is recharged by rainfall, and in turn makes a significant contribution to water flows in rivers and streams, and to the regulation of water levels in lakes and wetlands. As a result, the quality and quantity of groundwater are very important factors in maintaining ecological and natural values.

Groundwater is also important for social and economic reasons. It is abstracted and used throughout Southland for domestic, farm, municipal and industrial supply. In excess of 60 percent of rural properties are reliant on groundwater for domestic and/or stock supply. Gore, Winton, Te Anau and a number of other communities utilise groundwater for municipal supply. In addition, the dairy, meat and fertiliser industries use significant quantities of groundwater for processing and production.

Groundwater is also used, directly or indirectly, as a receiving environment for waste. Some contaminants are discharged directly to groundwater. Other contaminants are discharged to land, but are eventually assimilated in some form by groundwater.

In addition to the above, the original Water Plan also contained information about cultural values through the inclusion of the Ngāi Tahu Statutory Acknowledgement areas for the Southland region (see Section 7 below).

4. Development of a new approach (2001 to 2010): Regional Water Plan for Southland 2010 (the final Water Plan)

2000 to 2004

Following notification of the original Water Plan, concerns were raised within submissions to the proposed Plan about the simplistic approach to water quantity management, particularly given that demand for water had increased significantly since the Plan was prepared. This increase in demand was largely due to land use intensification, with irrigation now being used as a tool to enhance reliability and production. There were also concerns raised about the classification framework for water quality management. NIWA's work on River Environment Classification (REC) had been progressed since notification of the proposed Plan and was now in a format that could be incorporated into a regional plan.

This led to background work commencing on a series of variations to the original Water Plan to refine the water quality and quantity sections of the Plan. This work started by examining the usefulness of the REC approach of grouping together spatially separate river environments, with similar physical and biological characteristics based on climate, topography, geology and land cover factors⁴. Environment Southland undertook a community consultation process in relation to this in late 2002.

Once general support for the approach was ascertained, an expert panel of stakeholders was brought together to identify significant values for each different river type, the sensitivity of those values to changes in key management variables (e.g. low flows, contaminant levels etc) and from there identify the "critical values" (the values most sensitive to low flows, contaminant levels, etc). Following this, the equivalent of freshwater objectives were developed to protect the critical values through the use of technical experts (Ryder Consulting for water quality and NIWA and Cawthron for water quantity). The approach largely followed the Ministry for the Environment's 1998 Flow Guidelines for Instream Values, and was applied to both water quality and quantity as outlined below.

In 2004 Ryder Consulting completed an updated analysis of the work it had undertaken in 2002⁵ using the previous two years of monitoring data and updated water quality guidelines. The report concluded that a classification system based on REC source of flow categories was appropriate for use in the water quality section of the Plan. The report recommended classifying surface water bodies into: lowland (hard bed), lowland (soft bed), hill, mountain, lake-fed and spring-fed classes. As outlined above, the report also proposed water quality standards for each class to protect the critical values for that class.

NIWA and Cawthron⁶ also completed an analysis in 2004, outlining a new minimum flow and allocation regime based on the REC framework. Again, the recommendations were designed to protect the critical values for the relevant classes.

⁴ Ryder Consulting 2002. River Environment Classification. Review of relationships with water quality and macroinvertebrate data.

⁵ Ryder Consulting 2004. Environment Southland Water Quality and the Draft Regional Water Plan. An examination of possible water standards.

⁶ Review of methods for setting water quantity conditions in the Environment Southland draft Regional Water Plan, NIWA, June 2004

Variation No. 2 (Groundwater) to the original Water Plan – 2004

The first Variation to the original Water Plan addressing water quantity and quality matters was an update to the groundwater provisions of the plan. This update incorporated a new framework for allocating groundwater, addressed the link between surface water and groundwater, dealt with interference effects between bores and added new provisions to maximise efficiency of water use.

The objectives and expected outcomes resulting from this Variation are outlined in the section on the Regional Water Plan for Southland 2010 below, as the operative plan reflects the final product of the submissions, hearings and appeals process.

Variation No. 3 (Water Quantity) to the original Water Plan – 2005

The next Variation to the proposed Plan was an update of the water quantity provisions introducing a new minimum flow and allocation regime based on NIWA's REC framework and advice from NIWA and Cawthron⁷. The Variation sought to better recognise the diversity of Southland rivers and values within those rivers and provide a stronger scientific basis for the minimum flow and allocation regime contained within the proposed Plan.

The Variation divided the region's surface water bodies into a number of classes for the purposes of water quantity management based largely on the "source of flow" category of the REC framework. In addition, a Mataura management unit was included to reflect the provisions of the Water Conservation (Mataura River) Order 1997, a Waiau management unit was included to recognise the modified nature of the Waiau catchment as a result of hydroelectricity generation, and a natural state management unit was included to provide for the maintenance of water bodies in their natural state.

The classes defined were:

- Lowland;
- Hill (including Hill2 Hokonui/Catlins);
- Mountain;
- Lake;
- Mataura;
- Natural State;
- Waiau.

As outlined above, during the development of the Variation significant values (both instream and out-of-stream) had been derived for each of the River Environment Classification classes through consultation with stakeholders. Following this, "critical values" for each management unit were identified. The concept of critical values is that by providing sufficient flow to sustain the most flow sensitive value, the other significant values will also be sustained.

The significant values and critical values developed with stakeholders were then reviewed by NIWA and Cawthron to ensure that the critical values identified were the most flow sensitive values and the modified list of critical values suggested by NIWA and Cawthron was used as the basis for determining minimum flows and levels within the Variation. The linkage between

⁷ Review of methods for setting water quantity conditions in the Environment Southland draft Regional Water Plan, NIWA, June 2004

the critical values and allocation framework contained in the Plan can be most clearly seen in the tables contained in *Appendix I methods for determining minimum flows and levels*.

The Hill2 (Hokonui/Catlins) management unit was separated from the general hill management unit to reflect the fact that the geology of this management unit can support large trout populations at much lower flows than would be found in rivers of the general hill management unit.

The objectives and expected outcomes resulting from this Variation are outlined in the section on the Regional Water Plan for Southland 2010 below, as the operative plan reflects the final product of the submissions, hearings and appeals process.

Variation No. 4 (Water Quality) to the original Water Plan - 2005

At the same time as the Variation addressing water quantity was notified, a Variation updating the water quality provisions of the proposed Plan was notified. The key aims of the Variation were to revise the water quality classes, update the water quality objectives to make them more realistic and revise the policies and methods to ensure that the objectives would be met.

Similar to Variation No. 3 (Water Quantity), Variation No. 4 (Water Quality) divided the region's surface water bodies into a number of classes based largely on the REC framework. The first class was retained from the proposed Plan as notified (with some amendments) and consisted of all surface water bodies within the region's two National Parks: Fiordland and Rakiura and areas of public conservation land where the overall water quality was largely unmodified or unaffected by human activities and the existing water quality was high.

The region's remaining surface water bodies were then divided into the following classes: lowland hard bed, lowland soft bed, hill, mountain, lake-fed, spring-fed and Mataura 1, 2 and 3 based largely on the "source of flow" category of the REC framework. The Mataura classes were included to reflect the water quality standards set under the Water Conservation (Mataura River) Order 1997.

As outlined above, water quality standards were identified for each class based on the 2004 Ryder Consulting report to protect the critical values and the Variation contained goals to maintain water quality where these standards were already met, and gradually improve water quality where they were not met. The Variation highlighted that significant effort would be required to meet these goals and signalled that a move to a more regulatory approach would be considered if there was no evidence that an improvement in water quality was occurring.

Objective 3 of the Variation set out the values that the consultative process (described previously) had identified for water bodies outside Natural State waters as follows:

To maintain and enhance the quality of surface water bodies so that the following values are protected where water quality is already suitable for them, and where water quality is currently not suitable, measurable progress is achieved towards making it suitable for them:

In surface water bodies classified as mountain, hill, lake-fed, spring-fed, lowland (hard bed), lowland (soft bed) and Mataura 1, Mataura 2 and Mataura 3:

- Bathing, in those sites where bathing is popular
- Trout where present, otherwise native fish
- Stock drinking water
- Ngāi Tahu cultural values, including mahinga kai
- Natural character including aesthetics

In surface water bodies classified as mountain lakes and hill lakes:

- Bathing
- Trout
- Ngāi Tahu cultural values, including mahinga kai
- Natural character including aesthetics

In surface water bodies classified as lowland/coastal lakes:

- Native migratory fish
- Stock drinking water
- Healthy aquatic habitats
- Ngāi Tahu cultural values, including mahinga kai
- Natural character including aesthetics

The objectives and expected outcomes resulting from this Variation are outlined in the section on the Regional Water Plan for Southland 2010 below, as the operative plan reflects the final product of the submissions, hearings and appeals process. However, it should be noted that the Variation as notified contained the following outcome (and associated objective):

 A minimum 10 percent reduction in levels of microbiological contaminants, nitrate and phosphorus and a minimum 10 percent improvement in water clarity will be achieved in hill, lowland and spring-fed water bodies over 10 years from the date of notification of the Plan.

The outcome above suggested a 10% improvement by 2015, given the Variation was notified in 2005. However, the version of the outcome (and associated objective) that eventually ended up in the operative plan referred to 2020 (10 years after the Plan becoming operative). The report accompanying the Variation as notified contained the following commentary around the target:

Aiming for greater or lesser reduction in different river types was considered. Lowland and some hills rivers are probably more affected by contaminants than spring fed streams and it could therefore be argued that the reduction aimed for in these rivers should be greater. However there is uncertainty about what can realistically be achieved during the life of this Plan. Improvements in lowland stream may be hardest to achieve, due to prevalence of intensive farming in the catchments, and upstream cumulative effects. Discharges of the contaminants specified into hill, lowland and spring fed classes of water body are the most significant barrier to achieving Objective 3. Until monitoring is carried out over the life of this Plan, there is little information to assist in setting appropriate improvement levels, a 10 percent improvement is considered an achievable target.

There were a number of submissions regarding this target with some submitters seeking that a higher target (20%) be included. The Council responded to these submissions by seeking

technical advice on the 10% target. In light of this technical advice which highlighted the challenge in achieving water quality improvements within a 10-year period, the Council considered the 10% improvement target was most appropriate.

Concerns about the changes to the timeframes from those notified in 2000 during the development of the Variation (i.e. there was perceived to be a "weakening" to what had been sought in the original plan) had already led to the inclusion of a long-term goal for water quality in the region in the Variation as follows:

Long-term (looking out beyond the 10-year life of this Plan)

The water quality of all surface water bodies in the region will be suitable for contact recreation, trout and native fish, stock drinking water and Ngāi Tahu cultural values, including mahinga kai.

The 10% improvement target was seen as the first step towards achieving this goal.

Regional Water Plan for Southland 2010 (the final Water Plan)

Following notification of the Variations outlined above, submissions were lodged on these Variations and hearings held before Council decisions on the submissions were released in 2007. A number of Environment Court appeals on the decisions were subsequently lodged and worked through via negotiated settlements before the original Water Plan finally became operative in 2010.

Some of the key outcomes expected to be achieved over the 10 year life of the Plan through implementation of the objectives, policies and methods included:

Water Quality Long-term (looking out beyond the 10-year life of this Plan)

 The water quality of all surface water bodies in the region will be suitable for contact recreation, trout and native fish (including all life stages the water body naturally contains habitat for), stock drinking water and Ngāi Tahu cultural values, including mahinga kai.

Short-term (indicators of progress towards the long-term outcome that are expected to be achieved within the 10-year life of this Plan)

- There will be no reduction of water quality in the Southland region beyond the zone of reasonable mixing for discharges.
- Water quality will be maintained in Natural State Waters.
- The water quality of surface water bodies will be maintained and enhanced so that it is suitable for bathing in popular bathing sites, trout and native fish, stock drinking water and Ngāi Tahu cultural values, including mahinga kai.
- An improvement in the water quality and in particular a minimum 10 percent reduction in levels of microbiological contaminants, nitrate and phosphorus and a minimum 10 percent improvement in water clarity will be achieved in hill,

lowland and spring-fed surface water bodies over 10 years from the date this Plan became operative (January 2010).

Freshwater quality does not have an adverse effect on coastal water quality.

Water Quantity

- Water quantity, flow and level regimes, and the quality and quantity of aquatic habitat are maintained at levels that protect aquatic ecosystem health and the life-supporting capacity of surface water bodies.
- River and stream flows, and wetland and lake water levels, are maintained at levels that do not cause significant adverse effects on aquatic habitats, areas of significant indigenous vegetation, significant habitats of indigenous fauna, natural character, natural features and amenity, aesthetic and landscape values.
- As a minimum, there is no net reduction in the integrity and diversity of aquatic and riverine ecosystems, including fish and wildlife habitat. Restoration of degraded habitats and creation of new habitats can offset losses.
- The reasonable needs of existing and future water users are met.
- Surface water abstraction, damming, diversion and use does not result in surface water flows/levels less than prescribed minimum flows/levels or surface water allocation regimes being exceeded and does not compromise the availability and reliability of supply for existing users.

Groundwater

- Groundwater (excluding aquifers where ambient water quality naturally exceeds guidelines) is suitable for human consumption without the need for treatment.
- Groundwater contribution to surface water bodies does not have any adverse effect on surface water quality, aquatic life or recreational values.
- Aquifer storage volumes are maintained at levels that provide for the reasonable needs of existing and future users.
- Existing bore or well yields, and the rights of existing groundwater users, are not significantly affected by interference or drawdown effects.
- Groundwater abstraction does not result in surface water flows less than prescribed minimum flows or surface water allocation regimes being exceeded.

Post 2010

Following the plan becoming operative in 2010, a number of plan changes were developed and notified dealing with specific activities such as discharges of farm dairy effluent and solid waste. This formed part of a project to merge earlier regional plans dealing with discharges

to land and water (such as the Regional Effluent Land Application Plan 1998) into the new water plan.

5. Southland Regional Policy Statement

A new Southland Regional Policy Statement (RPS) was publicly notified in 2011 and became operative in 2017. It sets out the high level direction for resource management in Southland. Chapter 4 of the RPS is on fresh water and considers water quality, water quantity and management of the beds of lakes and rivers.

The RPS seeks to maintain water quality as a minimum. The approach set out is that water quality within the region will be maintained or improved in areas where water quality needs to be improved during the setting of freshwater objectives in accordance with the National Policy Statement for Freshwater Management. The approach also recognises that water quality in the region must be safeguarded for future generations, while also recognising that people use water to provide for their social, economic and cultural wellbeing and that this needs to be recognised in its management.

6. Proposed Southland Water and Land Plan 2016

The proposed Southland Water and Land Plan (pSWLP) was publicly notified in 2016 and brought together and updated the Regional Water Plan for Southland 2010 and the Regional Effluent Land Application Plan 1998.

The pSWLP was a response to the fact that water quality in Southland continued to be degraded and was declining further in some parts of the region. That is, the objectives of the Regional Water Plan for Southland 2010, including the 10% improvement target, were not being achieved. The stated aim of the new plan was to "hold the line" on any further decline in water quality while the background research was being done to prepare for undertaking the freshwater management unit process contained in the National Policy Statement for Freshwater Management 2017.

Significant changes from previous plans included:

- the introduction of Te Mana o te Wai;
- an updated set of objectives (including new objectives to reflect matters of importance to tangata whenua and deletion of the 10% target);
- new objectives and policies setting out the freshwater management unit process to come;
- new controls for activities known to have a significant effect on water quality, such as land use intensification, wintering, cultivation and stock access to waterways based on several years of engagement around these topics.

Some sections of previous plans were carried over largely unchanged including the water quality standards contained in the Regional Water Plan for Southland, which were brought into Appendix E of the pSWLP. Some changes were subsequently made to these standards as a result of submissions. The appendix is now subject to appeal in the Environment Court.

The updated objectives contained in the pSWLP are set out below. It should be noted that these are presently under appeal to the Environment Court. The most current version of these

provisions with legal status is the Council decisions version, as notified on 4 April 2018. However, to reflect the conversations that have been occurring through the Court hearing process, the decisions version objectives with the changes recommended in the Council's closing legal submissions (shown as tracked changes) are outlined below on a "without prejudice" basis. It should be noted that the Court decision on these objectives could result in further changes to the below.

	Proposed Southland Water and Land Plan 2016 Objectives
freshwater objecti Freshwater Mana Policy Statement f	tives 1 to 18 are objectives relating to the management of freshwater, they are not ives established in accordance with Section CA2 of the National Policy Statement for gement. Freshwater objectives established in accordance with Section CA2 of the National for Freshwater Management will be developed under Southland Regional Council's gement Unit process, in time, in accordance with Southland Regional Council's Progressive
	Closing legal submissions version 31 July 2019
Objective 1	Land and water and associated ecosystems are sustainably managed as integrated natural resources, recognising the connectivity between surface water and groundwater, and between freshwater, land and the coast.
Objective 3	The mauri of waterbodies is protected through providing provide for te hauora o te tangata (health and mauri of the people), tehauora o te taiao (health and mauri of the environment), and te hauora o te wai (health and mauri of the waterbody) and te hauora o te tangata (health and mauri of the people).
Objective 2	Water and land is are recognised as an enablers of primary production and the economic, social and cultural wellbeing of the region.
Objective 4	Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems.
Objective 5	Ngāi Tahu have access to and sustainable customary use of, both commercial and non-commercial, mahinga kai resources, nohoanga, mātaitai and taiāpure.
Objective 6	Prior to the establishment of freshwater objectives, limits and targets under Freshwater Management Unit processes, water quality There is no reduction in the overall quality of freshwater, and water in rivers, lakes, estuaries and coastal lagoons is:, by: (a) maintained maintaining the quality of water in waterbodies, estuaries and coastal lagoons, where the water quality is not degraded; and (b) improved where the water quality is improving the quality of water in waterbodies, estuaries and coastal lagoons, that have been degraded by human activities.
Objective 7	Following the establishment of freshwater objectives, limits and targets in accordance with Freshwater Management Unit processes: (aa) Where water quality limits are met, water quality is maintained within those limits; and (a) Any further over-allocation of freshwater (water quality and quantity) is avoided; and (b) Any any existing over-allocation is phased out in accordance with freshwater objectives, targets, freshwater quality limits and timeframes established under Freshwater Management Unit processes.
Objective 8	(a) The quality of groundwater that meets both the Drinking Water Standards for New Zealand 2005 (revised 2008) and any freshwater objectives, including for connected surface waterbodies, established under Freshwater Management Unit processes is maintained; and (b) The quality of groundwater that does not meet Objective 8(a) because of the effects of land use or discharge activities is progressively improved so that:

	Proposed Southland Water and Land Plan 2016 Objectives
	(1) groundwater (excluding aquifers where the ambient water quality is naturally less than the Drinking Water Standards for New Zealand 2005 (revised 2008)) meets the Drinking Water Standards for New Zealand 2005 (revised 2008); and (2) groundwater meets any freshwater objectives and freshwater quality limits established under Freshwater Management Unit processes.
Objectives 9 and 9A	The quantity of water in surface waterbodies is managed so that: (a)aquatic ecosystem health, life-supporting capacity, outstanding natural features and landscapes, and natural character of waterbodies and their margins and human health for recreation are safeguarded; and (b)provided that (a) is met, surface water is sustainably managed, in accordance with Appendix K, to support the reasonable needs of people and communities to provide for their social, economic and cultural wellbeing.
Objective 9B	The <u>benefits of effective development, operation, maintenance and upgrading of Southland's</u> regionally <u>or significant</u> , nationally significant and critical infrastructure <u>are is recognised and its effective development, operation, maintenance and upgrade is appropriately provided for enabled.</u>
Objective 10	The national importance of the existing hydro-electric.generation.scheme in the Waiau catchment, is provided for, recognised in any resulting flow and level regime, and tis. their structures are considered as part of the existing environment.
Objective 11	The amount of water abstracted is shown to be reasonable for its intended use and water is allocated and used efficiently.
Objective 12	Groundwater quantity is sustainably managed, including safeguarding the life-supporting capacity, ecosystem processes and indigenous species of surface water bodies where their flow is, at least in part, derived from groundwater.
Objectives 13, 13A and 13B	Enable the use and development of land and soils to support the economic, social (including through recreation) and cultural (including through recognition of historic heritage) wellbeing of the region provided that: The quantity, quality and structure of soil resources are not irreversibly degraded through land use activities or discharges to land; and (b) The discharges of contaminants to land or water that have significant or cumulative more than minor adverse effects, including cumulatively, on human health are avoided; and [alternative wording for (b)]: (b) The health of people and communities is safeguarded from the adverse effects of discharge of contaminants to land or water; and (c) Ecosystems (including indigenous biological diversity and integrity of habitats), are safeguarded.
Objective 14	The range and diversity of indigenous ecosystem types and habitats within rivers, estuaries, wetlands and lakes, including their margins, and their life-supporting capacity are maintained or enhanced.
Objective 15	Taonga species, as set out in Appendix M, and related habitats, are recognised and provided for.
Objective 16 ⁸	Public access to, and along, river (excluding ephemeral rivers) and lake beds is maintained and enhanced, except in circumstances where public health and safety or significant indigenous biodiversity values are at risk.
Objective 17	The natural character values of wetlands, rivers and lakes and their margins, including channel and bed form, rapids, seasonably variable flows and natural habitats are protected from inappropriate use and development.

Noting that this Objective is not part of Topic A, and will be considered in Topic B.

Proposed Southland Water and Land Plan 2016 Objectives							
Objective 18	All activities operate in accordance with good management practice or better to optimise						
	efficient resource use, safeguard the life supporting capacity of the region's land and						
	soils, and maintain or improve the quality and quantity of the region's water resources.						
	All people, businesses and communities protect land and soils, maintain or improve the						
	quality and quantity of water, and use resources efficiently.						

Policy 44 of the pSWLP sets out values relevant for implementing Te Mana o Te Wai and is shown below.

Policy 44 – Implementing Te Mana o te Wai	Te Mana o te Wai is recognised at a regional level by tangata whenua and the local community identifying values held for, and associations with, a particular waterbody and freshwater management unit.
	Particular regard will be given to the following values, alongside any additional regional and local values determined in the Freshwater Management Unit limit setting process: Te Hauora o te Wai (the health and mauri of water); Te Hauora o te Tangata (the health and mauri of the people); Te Hauora o te Taiao (the health and mauri of the environment); Mahinga kai; Mahi māra (cultivation); Wai Tapu (Sacred Waters); Wai Māori (municipal and domestic water supply); Āu Putea (economic or commercial value); He ara haere (navigation).

7. Regional Coastal Plan for Southland 2013

The Regional Coastal Plan for Southland (RCP) covers the Coastal Marine Area and areas immediately landward of this within the Southland region. The RCP was originally developed in the mid-1990s and publicly notified in 1997. It became operative in 2007 (with the exception of the marine farming provisions which were approved by Council the following year). A number of minor plan changes were notified in 2012 and became operative in 2013.

Objectives in the RCP that are particularly relevant to values discussions are set out below.

	Regional Coastal Plan for Southland 2013 Objectives							
Objective 5.2.1	Protecting outstanding natural features and landscapes To protect outstanding natural features and landscapes in the region's coastal marine area from the adverse effects of use, development, and subdivision.							
Objective 5.6.1	Recognise values of Ngāi Tahu To recognise and provide for cultural, spiritual and traditional values and uses of Ngāi Tahu in the coastal marine area.							
Objective 6.1.1	Maintain and enhance the natural values of estuarine areas To maintain and enhance the natural values of estuarine areas.							
Objective 6.2.1	Maintain and enhance the values of New River Estuary To maintain and enhance those values that contribute to the mauri of the estuary and provide for its use as: (a) a city playground - a family environment, picnics on the shore and swimming in sheltered waters; and, - a variety of water sports to be enjoyed in enclosed waters without the constrains of conflict or pollution. (b) a symbol for Invercargill - an introduction for visitors, good views for people driving to and from Otatara, the airport and Bluff; and, - an estuary on display. (c) a significant habitat - where native species can exist alongside humanity; - a refuge for freshwater and marine species, and a spawning and rearing ground, and fish passageway; - a feeding and roosting area for birds including waders and waterfowl; and, - sequences of vegetation including a nationally important maritime marsh to totara sand dune forest							

Regional Coastal Plan for Southland 2013 Objectives

(d) a retreat

- a place for families to escape the pressures of the city;
- an opportunity to experience a natural setting, where the estuary predominates as an ecosystem and human influences are unobtrusive; and
- a place where tranquility and nature replenish the soul.
- (e) a place of learning
 - where people can discover the heritage of Southland,
 - where people can gain an understanding of a natural unique ecosystem, the interface of land, sea and freshwater; and,
 - where, through research, a programme for restoration of the estuary can be developed.
- (f) a food basket
 - where there are no health risks from consuming the products of recreational fishing and shellfish gathering.
- (g) an opportunity for commercial use
 - allowing commercial uses which are in harmony with nature and other uses.
- (h) a place with historical and geological values
 - historical and geological values are located near the estuary shores throughout the area.

Objective 7.2.2.1

Maintenance of coastal water quality

To maintain the quality of coastal waters in those areas where ambient water quality is suitable for:

- (a) contact recreation;
- (b) the growth of shellfish, the human consumption of which is not limited by pathogenic or chemical contamination;
- (c) the health and vitality of aquatic ecosystems; and
- (d) a fishery, including aquaculture, the produce of which is not limited for human consumption by pathogenic or chemical contamination:

and except for the area described in Objective 7.2.2.3, to enhance the quality of coastal waters in areas where ambient water quality has been degraded, to a level which is suitable for:

- (a) contact recreation;
- (b) the growth of shellfish, the human consumption of which is not limited by pathogenic or chemical contamination;
- (c) the health and vitality of aquatic ecosystems; and
- (d) a fishery including aquaculture, the produce of which is not limited for human consumption by pathogenic or chemical contamination

by the year 2020.

Objective

Protect the natural state of some coastal waters

	Regional Coastal Plan for Southland 2013 Objectives
7.2.2.2	To protect the natural state of coastal waters wherever it is considered that they can be fairly described as being in their natural state.
Objective 7.2.2.3	Enhancement of coastal water quality in Halfmoon Bay, Stewart Island To enhance the quality of coastal waters in Halfmoon Bay, Stewart Island to a level which is suitable for: (a) contact recreation; (b) the growth of shellfish, the human consumption of which is not limited by pathogenic or chemical contamination; (c) the health and vitality of aquatic ecosystems; and (d) a fishery, including aquaculture, the produce of which is not limited for human consumption by pathogenic or chemical contamination; by the year 2005.

Location and specific information about values around the Southland coastline (including estuaries) contained in the RCP has been summarised into the following table.

Values	Anchorage value	Areas of significant coastal value	Coastal landforms and associated processes	Commercial values	Ecosystems, vegetation and fauna habitats	Education values	Heritage and archaeological values	Maori values	Marine mammals and birds	Natural character and landscape values	Navigational safety	Recreational and amenity values	Values of specific areas
Awarua Point to Big River	✓	∀	√	√	∠	✓	<u>∓</u>		<u>∠</u>	∠ ✓		√ ✓	>_
Waitutu Coast (Big River to Track Burn)		✓	√	✓	✓		✓		√	✓		√	
Te Waewae Bay (Track Burn to Pahia Point)		√	✓	✓	✓		√		✓	√		✓	
Pahia Point to Jacobs River Estuary	✓		✓	√			✓			√		√	
Jacobs River Estuary and Lower Pourakino River	✓				✓		✓		✓	✓		✓	
Jacobs River Estuary to Stirling Point			√	✓	√		✓		√	✓		√	
New River Estuary		✓			✓	✓	✓		✓	✓		✓	✓
Bluff Harbour and Awarua Bay		✓	✓		✓	✓	✓	✓	✓	✓		✓	✓
Tiwai Point to Fortrose		✓	✓	✓	✓		✓		✓	✓	✓	✓	
Toetoes Estuary		✓	✓		✓		✓		✓	✓		✓	
Fortrose to The Brothers Point		✓	√	✓	✓		✓		✓	✓		✓	
Waikawa Harbour and Haldane Estuary		√	√	✓	√		✓		√	√		√	
Stewart Island and Islands offshore (including Ruapuke, Titi, Codfish and Big South Cape)	✓	✓	√	√	✓		√		√	√		√	

Appendix 10 of the RCP also sets minimum acceptable levels for metals in sediment. These were sourced from the Australian and New Zealand Environment and Conservation Council's draft 1999 national guidelines for sediment quality.

8. Values in Other Statutory Planning Instruments

Te Tangi a Tauira

Te Tangi a Tauira: The Cry of the People (2008) is the iwi management plan for Southland.

The plan contains iwi perspectives about what is important about the region's water bodies and what should be aimed for in this space. An overview of this material is contained in the report entitled *Wai Ngāi Tahu ki Murihiku*.

A key focus of Te Tangi a Tauria is the integrated management of the region's water. The management of resources from the Ki uta ki tai (mountains to the sea) is described within the document, with a key objective being managing our freshwater resources wisely for all of us and the generations that follow.

Statutory Acknowledgements

The Ngāi Tahu Claims Settlement Act 1998 gives effect to the Deed of Settlement signed by the Crown and Te Runanga o Ngāi Tahu on 21 November 1997 to achieve a final settlement of Ngāi Tahu's historical claims against the Crown.

Statutory Acknowledgements recognise Ngāi Tahu's mana in relation to a range of sites and areas in the South Island, and provide for this to be reflected in the management of those areas. There are several areas Statutory Acknowledgement Areas within Southland, which are mapped and listed within Appendix B of the pSWLP. A distillation of the values referred to in these areas is contained in *Iwi values and draft freshwater objectives* [in preparation].

Southland Water Conservation Orders

Water Conservation Orders recognise the outstanding amenity or intrinsic values of water bodies, and are the strongest form of protection of water under the Act. The Water Conservation Orders that apply within the Southland region are:

- Water Conservation (Mataura River) Order 1997
- Water Conservation (Oreti River) Order 2008

The values identified in the Mataura Order are outstanding fisheries and angling amenity. The values identified in the Oreti Order are outstanding habitat for brown trout, angling amenity, habitat for black-billed gulls and significance in accordance with tikanga Māori.

Swimmability target

The NPSFM (2017) directs all regional councils to set regional targets to improve the quality of fresh water so they are suitable for primary contact more often. "Primary contact" includes swimming and means people's contact with fresh water that involves immersion in the water. The national target is to increase the proportions of specified rivers and lakes that are suitable for primary contact (meaning C band or better for *E. coli* and cyanobacteria) to at least 80% by 2030, and 90% no later than 2040, but also to improve water quality across all categories.

In 2018 the overall state of the Southland region's rivers and lakes was estimated by modelling (MfE 2018) to be 62% and 98% swimmable (respectively). Environment Southland's Council set minimum primary contact targets for Southland in December that year as follows:

- 65.7% of rivers and 98% of lakes suitable for primary contact recreation by 2030; and
- 80% of rivers and 98% of lakes suitable for primary contact recreation by 2040.

The 2030 target is based on modelling (MfE 2018) of what could be achieved through work programmes underway at the time the target was set, while the 2040 target for rivers is highly aspirational and reliant on interventions being put in place through the People, Water and Land programme. At the time the targets were set, the Council noted the People, Water and Land programme would provide an opportunity to review these targets. As methods are developed to ensure the targets are met, conversations about the implications of these methods will be had. This could lead to changes to the targets.

References

Environment Southland (2016). Evaluation Report: Proposed Southland Water and Land Plan. Sourced from: https://www.es.govt.nz/document-library/plans-policies-and-strategies/regional-plans/proposed-southland-water-and-land-plan/background-documents/Public%20notification/Section%2032%20Report.pdf

Environment Southland (2017). *Hearing report: Proposed Southland Water and Land Plan.* Environment Southland, Invercargill, New Zealand.

Environment Southland (2000). *Proposed Regional Fresh Water Plan for Southland 2000*. Environment Southland, Invercargill, New Zealand.

Environment Southland (2017). *Proposed Southland Water and Land Plan (decisions version)*. Environment Southland, Invercargill, New Zealand.

Environment Southland (2013). *Regional Coastal Plan for Southland*. Environment Southland, Invercargill, New Zealand.

Environment Southland (2017). *Regional Policy Statement for Southland 2017*. Environment Southland, Invercargill, New Zealand.

Environment Southland (2010). *Regional Water Plan for Southland 2010*. Environment Southland, Invercargill, New Zealand.

Environment Southland (2018). *The Regional Forum - Southland Context*. Report prepared by Southern Land and Water Planning Ltd for Environment Southland, Invercargill, New Zealand. Sourced

https://waterandland.es.govt.nz/repository/libraries/id:1tkqd22dp17q9stkk8gh/hierarchy/PWL%20documents/Regional%20Forum%20documents/Workshop%20one%20-%20Bluff/Regional%20Forum%20Southland%20Context.pdf

Environment Southland (2004). *Variation No. 2 (Groundwater) to the Proposed Regional Fresh Water Plan for Southland 2000.* Environment Southland, Invercargill, New Zealand.

Environment Southland (2005). *Variation No. 3 (Water Quantity) to the Proposed Regional Fresh Water Plan for Southland 2000.* Environment Southland, Invercargill, New Zealand.

Environment Southland (2005). *Variation No. 4 (Water Quality) to the Proposed Regional Fresh Water Plan for Southland 2000.* Environment Southland, Invercargill, New Zealand.

Ngāi Tahu ki Murihiku (2008). *Te Tangi a Tauira. The Cry of the People*. Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan.

Southland Regional Council (1997). *Proposed Regional Coastal Plan for Southland*. Southland Regional Council, Invercargill, New Zealand.

Southland Regional Council (1991). *Southland Regional Plan*. Southland Regional Council, Invercargill, New Zealand.

Southland Regional Council (1997). *Southland Regional Policy Statement 1997*. Southland Regional Council, Invercargill, New Zealand.

Te Ao Marama Incorporated. (Matariki 2019) Wai Ngāi Tahu ki Murihiku.