

REPORT

File: RI100
Report No.: 2003/654
Prepared for: Policy Committee
Prepared by: Selva Selvarajah, Director Resource Management and Richard Pettinger,
Resource Planner
Date: 1 October 2003

Subject: Implementation of Regional Plan: Water for Otago

1. Précis

This report presents the implementation actions for the Regional Plan: Water. Key actions are discussed, while the appendix presents the range of broader matters of implementation.

2. Background

Council approved the Regional Plan: Water on 17 September 2003, and it will become operative on 1 January 2004. Many provisions of the Plan have been operative and either fully or partially implemented.

3. Water availability

Water availability is the number one issue in the Otago Region. A report submitted to the Policy Committee last year (2002/695) highlighted that water for taking was not available in many parts of the region with the exception of mainly major lakes within the Clutha catchment, Clutha main stem and certain aquifers. This paper prompted the Committee to focus on water use efficiency which resulted in a report on that topic.

This report focuses on the directions provided in our Water Plan to manage water availability issues. The review of the plan suggests that our plan provides an excellent framework and a range of tools to manage the water availability issue effectively. The present paper's main objective is to highlight the tools and framework provided by the Water Plan to manage water availability issues.

Water quantity and access to supplies to support the continuing economic base of Otago while achieving the maintenance of in-stream values such as aquatic habitat, are addressed through a range of initiatives. These include:

3.1. Minimum flows

In all catchments minimum flows have to be established to sustainably manage surface water resources. For rivers such as Kakanui, Shag and Taieri the minimum flows have already been provided in the Water Plan. These minimum flows have to be imposed on consents. Minimum flows will apply to all water permits in time, requiring cessation of taking at pre-determined flows. Currently all Kakanui and Shag River take consents are being processed and will have minimum flows imposed on them. A major part of the Taieri River takes will be called in for

review. In catchments where minimum flows are not yet set these will be determined using a priority system by the Council and then will be introduced through a plan change process.

Where minimum flows are set these will be enforced strictly either through Water Allocation Committees or by the Council, in catchments where no major mining privilege takes exist. All minimum flow catchments will be monitored through telemetry for flow information accessed by the water users, Water Allocation Committees and the Council.

All takes (except for community water supply and some permitted activity takes) will be suspended should the flow fall below the minimum flow, or a trigger level set by the Council or Water Allocation Committee. If consent holders do not comply with the rationing regime their consents will be suspended.

3.2. Over-allocated catchment management

In all catchments water has wider uses other than for irrigation. The Water Plan's policy of a sinking lid of primary allocation in over-allocated catchments (see Policy 6.4.2's explanation) means that when existing consents are not renewed or when they lapse those takes will not be re-allocated.

3.3 Community-water supplies

The existing community water supplies need the certainty of continuous access to water. To provide this certainty the plan does not require minimum flows to be applied to existing community water supplies (see Policy 6.4.8). However, these takes will be still subject to efficient water use and residual flows where necessary. Any new community water supply takes will be subject to minimum flows.

3.4 Water use efficiency

All water takes consent applications will be subject to stringent assessment of water quantity requirement for the intended use including the community water supplies. Crop water requirement guidelines will be produced to ensure excess water is not granted for irrigators.

All consented takes will be required to record the volume and rate of take to ensure compliance. Water storage and water conservation practices will be promoted among the water users.

Deemed permit holders (holders of mining privileges in respect of water) will be required to record water takes and avoid water wastage or water leakage in water races. If not available information on minimum flows will be collected in mining privilege-dominated catchments. The Plan directs the Council to not wait until 2021 to deal with mining privilege takes and associated issues. A report will be presented to the Policy Committee in the next meeting on steps taken to deal with the transition of mining privileges.

3.6 Ground water

Restriction levels for aquifers such as Deborah, Papakaio are already in place. All fully allocated aquifers will be subject to restriction levels. Water Allocation Committees will play a significant role ensuring compliance and in managing water scheduling during water shortage periods.

In the Kakanui and Shag catchments, groundwater users' takes will be restricted in accordance with the minimum flows of these rivers. All groundwater abstractions that have the potential to draw salt water will be required to monitor salt content in the water.

Most of the above provisions are already being implemented or have been implemented.

4. Water quality

4.1 Point source discharges

Most point source discharges are dealt with through consent process. The Water Plan provides excellent directions in dealing with point source discharges. The examples are:

- > Enhance degraded water bodies to support primary contact recreation (Policy 7.6.1)
- > Enhance water quality to improve the Macroinvertebrate Community Index (Policy 7.6.2)
- > Promote discharges to land in preference to water where appropriate (Policy 7.7.1)
- > To have regard to opportunities to improve water quality during renewal of existing consents (Policy 7.7.3)
- > To consider cumulative effects of discharges (Policy 7.7.5)
- > Reduce large mixing zones for point source discharges (Policy 7.7.6)
- > To restrict the term of consents for poor discharges and decline consents if no improvement is made in the subsequent application (Policy 7.7.9)

The consent process has already been implementing these policies where appropriate.

4.2. Non-point source discharges

The Water Plan directs the non-point sources be dealt with through encouragement of voluntary actions (Policy 7.8.1). Activities such as agrichemical use including fertiliser applications have been permitted provided certain conditions are met. Stock access to river or lakes beds is only permitted under stringent conditions. If landholders strictly adhere to the stock access permitted activity conditions, stock access to water bodies is not possible under most circumstances.

Because of the adverse effects intensive livestock farming can have on water, Council will continue to focus attention on these activities. The Council has adopted a policy of excluding all dairy cattle from watercourses by the end of 2005 (see Report 2003/016). The Council is currently in the process of developing a Regional Action Plan with Fonterra to address water quality issues related to dairying. Regulation would only be used if other methods failed to achieve the Water Plan's objective of maintaining or enhancing existing water quality.

Water margin stability and riparian vegetation are also important factors for maintaining or enhancing water quality.

Beds and margins

Encouragement of improved riparian management and Council's provision of public walking opportunities are among the initiatives relating to the beds and margins of water bodies. Another is the allocation and management of alluvium, to ensure extraction does not exceed the sustainable yield.

Wetlands

Biodiversity (formerly wetland enhancement) programmes involving funding for wetland management, and the increased recognition of wetland areas in district plans are among the achievements. Wetland value identification will occur as relevant resource consents are applied for.

5. Communication and Publicity

A number of documents have already been prepared and distributed in the wider Otago community. These include the State of the Environment Reports, and the Land Resources Unit's booklets for different types of landholdings or activities.

Some parts of the Plan affect only a small number of people and information may be prepared to target issues including efficient delivery or use of water, storm water management, spill containment, land disturbance in groundwater protection zones, pesticide use in or near water bodies and the exclusion of stock from the beds of rivers and lakes.

Plan implementation material will be prepared and disseminated as issues arise. Council communications, such as the Rates Newsletter, will also be used to disseminate information.

A User Guide to the Plan is being prepared. This will present the rules with an index to assist those carrying out various common activities to find relevant regulation.

6. Recommendations

That the Committee note this report.

Selva Selvarajah

Director Resource Management

**Appendix: Implementation Strategy for achieving the outcomes of the Regional Plan:
Water for Otago**

Plan Outcome	Project/Action Required	Status (Completed, no action or in progress)
Water Quantity		
Retain flows in rivers to maintain their life supporting capacity and natural character (Objective 6.3.1)	Prioritise catchments for investigations for future setting of minimum flows, (in consultation with water users, relevant agencies and the affected community). (Policies 6.4.1- 6.4.11. Method 15.9.3)	In progress since the 2002/2003 Annual Plan
	Investigate high priority catchments identified above by identifying habitat flow requirements in areas affected by takes. Minimum flow to be set by Plan Change, (Policies 6.4.1- 6 4.11. Method 15.9.3)	In progress 2002/2003 Annual Plan for Pomahaka, Waianakarua
	Review consents to apply minimum flows to all Schedule 2A catchments except the Manuhenkia and mid-Taieri (involves working with mining privilege holders to get voluntary compliance in some catchment areas). (Policies 6.4. 3., 6.4.5., 6.4.6)	Being done for all 2A catchments, except Mid-Taieri and Manuhenkia
Provide for Otago's water needs (Objective 6.3.2) Minimise conflict among users (Objective 6.3.3).	Determine 50% MALF in non-Schedule 2 catchments, where primary allocation may be full (starting with larger rivers).	Resource Science maintaining database of MALF for non-Schedule 2 catchments. Consents maintaining database of water allocated, in catchments where primary allocation may be full.
	Promote establishment of water allocation committees. (Policy 6.4.12)	Water allocation committees set up as minimum flows set for catchments.
	Provide information to water users regarding efficient use of water (Policy 6.6.1)	2002/2003 Annual Plan (irrigation efficiency). Several field days already held.
	Determine method and information requirements for transition of deemed	Method now established in Plan (Method 15.8.1.1-15.9.1.3).

	<p>Develop method for assessing quantity of water granted is no more than that required for the intended use.</p> <p>(Policies 6.4.1.5 and 9.4.8)</p>	<p>Proposed to review allocation levels from 2002. (Present system in use needs up-dating to provide the appropriate application rates for irrigation in mm ha week.)</p>
	<p>Develop policy for determining when water metering will be required and the system for recording, storing and using data</p> <p>(Policy 6.4.1.6)</p>	<p>Ongoing since 2002/2003 Annual Plan.</p>

Groundwater

<p>Ensure the attainability of groundwater to provide for recognised uses (Policy 9.4.1).</p> <p>In managing the taking of groundwater priority shall be given to the avoidance of:</p> <p>(a) The total take from all bores exceeding the annual renewal yield</p> <p>(b) Depletion of any surface water resources</p> <p>(c) Contamination of ground or surface water</p> <p>(d) Aquifer compression</p> <p>(e) Soil degradation (Policy 9.4.2)</p>	<p>Prioritise and apply restriction levels to all consents to take groundwater from the following aquifers:</p> <p>(a) Papakaio</p> <p>(b) North Otago Volcanic</p> <p>(c) Lower Taieri</p> <p>(d) Ettrick Basin</p> <p>(e) Roxburgh Basin</p> <p>(Prioritisation needs to be undertaken in consultation with resource users.)</p> <p>(Policy 9.4.4)</p> <p>Establish sustainable annual yields for Queenstown, Wanaka and Alexandra aquifers and others as still required</p> <p>(Policy 9.4.2)</p> <p>Establish whether water quality is being maintained</p>	<p>Ongoing since 2002/2003 Annual Plan.</p> <p>All new and replacement resource consents for takes from these aquifers now stipulate that the restrictions apply</p> <p>Queenstown, Wanaka and Alexandra aquifers yield investigations are in 2002/2003 Annual Plan</p> <p>Water quality indicator sites and the contaminants to test for being identified.</p>
---	---	---

	<i>(Policies 9.4.1.2)</i>	
	Establish and promote water allocation committees for Deborah and Waiareka aquifers and others as required.	Ongoing since 2002/2003 Annual Plan. Deborah Aquifer Committee appointed.
	<i>(Policy 9.4.12)</i>	
Water Quality		
Improve water quality to contact recreation standard (<i>Policy 7.6.1</i>):		
(a) Mill Creek and Lake Hayes	Impl. of Lake Hayes Management Strategy	In progress
(b) Kaikorai Stream	Three Streamscapes project	In progress
(c) Water of Leith	Three Streamscapes project	In progress
(d) Lower Waiwera River		In progress
(e) Heriot Burn	Heriot Burn catchment programme	In progress
(f) Crookston Bum	Crookston catchment programme	In progress
Increase in MCI values (<i>Policy 7.6.2</i>):		
(a) Hayes Creek	Implementation of former Lake Hayes Management Strategy	In progress
(b) Lower Horne Creek		In progress
(c) Lower Kaikorai Stream	Three Streamscapes project	In progress
(d) Lower Taieri River	Taieri Catchment Programme	In progress
(e) Lower Waipori River	Taieri Catchment Programme	In progress
(f) Lower Tokomairiro River	Tokomairiro Catchment Programme	In progress
(g) Lower Owaka River		No action
(h) Lower Waiareka Creek		Action depends on Downlands
(i) Lower Kaihiku Stream		Quality sampling in progress

(j) Lower Wairuna Stream	Wairuna Catchment Programme.	In 2002/2003 Annual Plan
Enhance aquatic ecosystem (Policy 7.6.3):		
(a) Lake Hayes	Lake Hayes Management Strategy impl.	Ongoing Strategy deleted
(b) Lake Johnson		No action
(c) Lake Tuakitoto	Lake Tuakitoto Management Strategy impl.	Ongoing. Strategy deleted
(d) Lake Waipori	Taieri Catchment Programme	In progress
(e) Lake Waiholo		
Maintain water quality suitable for natural and human use in all other water bodies (Objective 7.5.1.)	Kakanui Catchment Programme.	In progress
	Upper Taieri Catchment Programme.	Ongoing since 2002/2003 Annual Plan
Beds and Margins of Rivers and Lakes		
Water Plan policies identify the following direction: (a) Consider removal of abandoned structures (b) Ensure gravel abstraction is sustainable (c) Promote creation, retention and enhancement of appropriate riparian vegetation (Policies 8.4.1- 8.8.2)	Inventory of abandoned structures and priority for removal.	No action
	Establish protocol to manage abstraction of gravel within wet bed of rivers. Determine levels of sustainable yield of gravel in rivers.	In progress Bed surveys, inspection of sediment input in upper catchments.
	Best management practice guidelines for activities within or adjacent to the beds or lakes and rivers.	In progress: Riparian guideline. Booklets for dairying, also for sheep, beef and arable farming.
	Catchment management programmes	In progress (sec Water Quality); dairy effluent guide.
	Promote maintenance and enhancement of public access to water bodies and coast. <ul style="list-style-type: none"> • Walkways • Streamscapes • Biodiversity Committee initiatives 	In progress

<p>To maintain and enhance the following values of Otago's remaining wetlands</p> <p>(a) Habitat for flora and fauna</p> <p>(b) Natural Character</p> <p>(c) Hydrological values; and</p> <p>(d) Kai Tahu values</p> <p><i>(Objective 10 3.1)</i></p> <p>To promote the conservation, creation and reinstatement of wetland areas and the enhancement of wetland value*.</p> <p><i>(Policy 10.4.6)</i></p>	Wetland enhancement programme	In progress
	Investigate wetlands in Schedule 10 to establish extent and values, and recommend which should be transferred to Schedule 9 and which should be removed from the Plan completely.	No action

General Methods and Information Provision

Information provision <i>(Method 15.3)</i>	Provision of information relating to the results of monitoring water bodies. <i>(Method 15.3.2)</i>	Ongoing State of the Environment reporting completed
	Provision of information relating to flood risk. <i>(Method 15.3.3)</i>	Completed (flood hazard maps)
	Real time flood warning	Ongoing
	Provision of information relating to clean up of spills. <i>(Method 15.3.4)</i>	Pollution Hotline procedures in place.

<p>Codes of practice <i>(Method 15.5)</i></p> <p>Council will entourage landowners and industry groups to implement codes of practice or management systems.</p>		No action
--	--	-----------

<p>Activities of particular concern include:</p> <p>(a) Fertiliser application</p> <p>(b) Use and storage of hazardous substances</p> <p>(c) Agricultural and Horticultural spraying</p> <p>(d) Intensive livestock activities, including dairy farming, pig farming and silage production</p> <p>(e) Land use and disturbance in the margins of lakes and rivers</p> <p>(f) Forestry operations</p> <p>(g) Other activities which involve land disturbance This will involve:</p> <p>(a) Working with landholders and relevant industry and community groups to identify how the identified land use activities can be carried out in ways which minimise non-point source contamination:</p> <p>(b) Encouraging industry and landholders to implement where appropriate, existing codes of practice or management guidelines:</p> <p>(c) Maintaining a register of codes of practice and guidelines, supplied by industries that, if adhered to, would comply with specified rules in this Plan.</p> <p>(Method 15.5.1)</p>	<p>Booklet on the handling, safe use and storage of agrichemicals (1995). <i>This booklet is now out of date.</i></p>	<p>No action, but MfE are considering national collection of unwanted agrichemicals</p>
	<p>NZS Agrichemical Users Code of Practice</p>	
	<p>Dairy Conversion and Intensive Sheep. Beef and Arable Farms booklets</p>	<p>Completed (High country and Lifestyle block booklets being prepared)</p>
	<p>Riparian Management initiatives</p>	<p>In progress: Riparian guidelines</p>
	<p>Assistance with Forestry Certification</p>	<p>In progress</p>
		<p>No action</p>
	<p>Register of Codes of Practice</p>	<p>No action</p>
	<p>Promotion and Education</p>	<p>In progress</p>

<p><i>(Method 15.4)</i></p> <p>Provide information to landholders, industry groups and general public about mechanisms and techniques to maintain or enhance water quality, such as</p> <p>(a) Minimising land disturbance;</p> <p>(b) Maintaining or enhancing appropriate riparian vegetation and buffer strips;</p> <p>(c) Nutrient budgeting;</p> <p>(d) Avoiding the inappropriate use of stormwater systems;</p> <p>(e) Development and implementation of contingency plans for the accidental spill of contaminants;</p> <p>(f) Avoiding stock access to water bodies; and <i>(Method 15.4.2.2)</i></p> <p>(g) Upgrading existing groundwater bores to prevent entry of contaminants (and providing information to new users establishing bores</p> <p><i>(Policies 9.4.14 and 9.4.15).</i></p>	Enviro-Ag farm plans, field days etc	
	Enviro-Ag farm plans, field days etc	In progress
	Enviro-Ag farm plans, field days etc	In progress
	Publicity brochure; Taieri Catchment Programme; Advice to developers, territorial local authorities	Ongoing
	Pollution Hotline procedures	Completed
	Awareness of Council's policy re stock access to water bodies on dairy farms; Publicity programme for riparian management initiatives	In progress
		No action
District Plans	Ensuring District Plans are consistent with Water Plan. E.g. for earthworks on groundwater protection zones.	Ongoing
	Full analysis of any inconsistencies once Water Plan is fully operative.	Ongoing, for groundwater protection and wetlands recognition