Environmental Flows and Catchment Load Limits

Collaborative process is at the heart of the CWMS. It empowers communities to make their own decisions about how best to meet agreed, region wide and local targets. Through the CWMS, the process of setting Environmental Limits (including environmental flows, allocation limits and nutrient loads) provides an opportunity for the community to take local ownership of water management, and to work together through complex information, to reach decisions around priority outcomes and values.

Zone Committees and communities are working collaboratively through the Resource Management Act (RMA) plan development timetable. This intensive process transfers the priority outcomes and values into resource management plans, supports Environment Canterbury to meet its statutory responsibilities, and achieves sustainable management of the region's water and land resources and aligns the planning framework to CWMS targets. For a summary of this process see page 10.

Targets

By 2015:

Target 1: Set environmental flows for surface streams, rivers and groundwater that are consistent with the fundamental principles of the CWMS.

Set catchment load limits for nutrients for each water management zone that are consistent with the fundamental principles of the CWMS. Established and begun to implement a programme to apply environmental flows to existing consents.

By 2020:

Target 2: Review of environmental flows and catchment load limits in response to changing monitoring information, new understanding and technologies, and if requested by regional and Zone Committees.

Target 3: Established and begun to implement a programme to review existing consents where such review is necessary in order to achieve catchment load limits.

By 2040:

Review of environmental flows and catchment load limits in response to changing monitoring information, new understanding and technologies, and if requested by Regional and Zone Committees. Environmental flow and catchment load limits achieved in all water-bodies.

Progress to 2020



- Target 1: Environment Canterbury has made significant progress towards setting environmental limits through the Land and Water Regional Plan (LWRP). The LWRP, effective from January 2012, sets environmental limits that require farmers and other land users to 'hold the line' and not increase nitrate losses.
- The LWRP provides a region wide planning framework within which catchment specific plan changes (subregional chapters) are added which introduce local limits. Several catchment specific plan changes are either completed or underway in each zone, see fig 2 for progress on these numbered plan changes. The sub-regional chapters are developed via a detailed and intensive community engagement and planning process, outlined on page 10.
- In addition to sub-regional plan changes, a suite of improvements has been made to the LWRP through the Omnibus change (Plan change 4), relating to improved biodiversity outcomes, protection of īnanga spawning habitat, storm-water management, drinking water source protection, and the exclusion of livestock from lakes and rivers.
- The latest update to the LWRP (Plan change 5) will require farmers to reduce nutrient losses and manage their land in an environmentally sustainable way.
 Environment Canterbury has worked with the primary

- sector over several years to define acceptable farming practices. These 'Good Management Practices' (GMPs) now provide farmers and council with a shared understanding of how to limit nutrient losses and manage environmental impacts.
- Zone committees are central to developing the planning framework, and are focused on a work programme to deliver a range of on-the-ground projects to improve water quality, see page 11.
- Target 2: Catchment loads and flows are being monitored by Environment Canterbury through the regular state of the environment monitoring programme. Water levels and river flows and water quality are monitored monthly and include over 100 recreational sites. Zone committees are regularly updated with this information which is used for decision making for the sub-regional plans.
- Target 3: Specific catchment load limits have been, or are being, set in sub-regional plans; for progress, see fig 2. Environment Canterbury continues to monitor and model catchment loads and work through zone committees to determine whether consent reviews are necessary to achieve catchment load limits. Because there have been several recent updates to the planning framework the approach has been to set consent durations to deliver on catchment load limits.

Fig 2: Progress on Catchment Level Environmental Limit-setting

Hurunui Waiau

- Environmental limits for Hurunui and Waiau rivers established in 2013 Plan.
- Collaborative process underway to address aspects of 2013 Plan.

Waimakariri

- Zone Committee developing solutions package through community collaborative phase.
- Working towards recommending Solutions Package of environmental limits and complementary on-the-ground actions in 2018.
- Plan change to be notified in 2019.

Selwyn Waihora/Wairewa (Plan Change 1 and 6)

- Environmental limits in place (environmental flows, allocation limits, nutrient limits for phosphorus and nitrogen).
- Communications campaign underway in Selwyn Waihora.
- Resources for farmers in place for both catchments.

Hinds Catchment (Plan Change 2)

- Council has adopted Hearing Panel recommendations.
- Council working with Barrhill Chertsey Irrigation and Rangitata Diversion Race to resolve their appeals.

Orari-Temuka-Opihi-Pareora

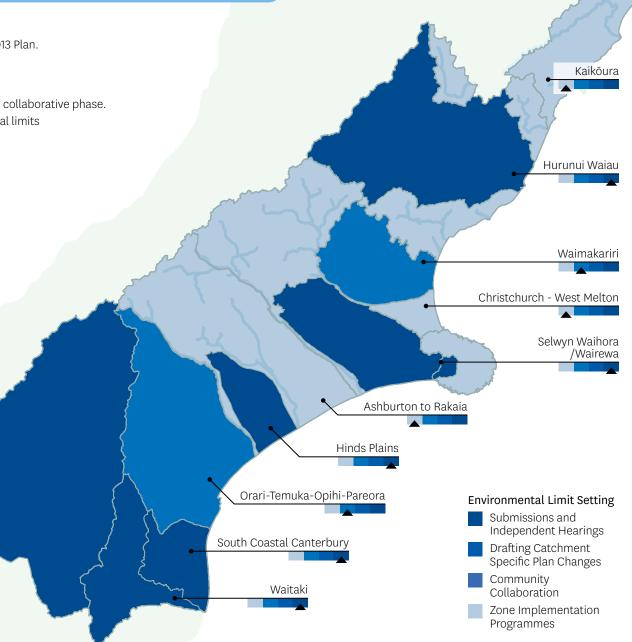
- Zone Committee developing solutions package through community collaborative phase.
- Working towards recommending Solutions Package of environmental limits and complementary on-the-ground actions by early 2018.
- Plan change to be notified in late 2018.

South Coastal Canterbury (Plan Change 3)

- Council has adopted Hearing Panel recommendations.
- Appeals have been resolved.
- Media campaign underway and resources. to support farms are being developed.

Waitaki (Plan Change 5, Part B)

- Council has adopted Hearing Panel recommendations.
- Media campaign for environmental limits underway.
- Research into complementary on-the ground actions has begun.



Chapter 1: Environmental Limits

The Collaborative Process

The CWMS provides an opportunity for the community, through Zone Committees, to take local ownership of water management and work together through complex information to reach decisions on priority outcomes and values, and to develop catchment-specific action plans ('solutions packages'). The solutions packages include a range of measures to inform catchment specific resource management rules. Typically the solutions packages include environmental flows, allocation limits, and catchment nutrient load limits. Environmental flows include minimum flows at which abstraction must cease, and allocation limits that set the total volume of water allocated for abstraction. Catchment nutrient loads set limits in terms of total nutrients that can be absorbed in the catchment. Land use activities must be managed to meet these limits.

There are four stages to the collaborative process:

Zone Implementation Programmes (ZIPS)

The collaborative community process is supported by ten catchment based Zone Committees, established as joint committees of the District or City Councils and Environment Canterbury, with membership from local rūnanga and five appointed community members. Each of these committees has developed a non-statutory Zone Implementation Programme (ZIP) that identifies priority outcomes and practical water management actions for their zone. Implementation of these ZIPs by committees, councils and other agencies is underway throughout the region.

Community Collaboration

Options for environmental limits are considered by the community with consultation led by Zone Committees. Using the outcomes and values described in the ZIP and with technical, facilitation and administrative support from Environment Canterbury, the community explores a range of scenarios to determine the social, cultural, economic and environmental consequences of setting limits. Community members work together to understand complex technical information and incorporate local knowledge to arrive at meaningful options for water management.

The process is intensive, typically requiring between 70 and 100 community and stakeholder meetings and workshops, over a period of 18 months to 2 years. Each meeting requires considerable preparation and involvement of Zone Committee members and interested people from the community as well as scientists, planners, and facilitators. A full range of social, economic, environmental, recreational and cultural values and interests are taken into account during decision making.

The final output from this process is a solutions package comprising actions on the ground, and recommendations for changes to regional plans. The solutions package is formally adopted by the local council(s) and by Environment Canterbury and work priorities and programmes are reorganised and developed to facilitate implementation.

Drafting Catchment Specific Plan Change

The solutions package is used as the basis for drafting catchment policies and rules to incorporate into the Land and Water Regional Plan (LWRP). Council planning staff liaise with the Zone Committee to check if there are issues of inconsistency or conflict. As the plan change is drafted, particular regard is given to the vision and principles of the CWMS (incorporated in the Environment Canterbury Act 2010). Once drafted, the council notifies the plan change in line with RMA requirements, providing time for further public consultation.

Submissions and Independent Hearings

The plan change goes through a rigorous process of public consultation, with submissions and further submissions being made. All material is then considered by an independent hearing panel. Hearings commissioners are appointed for their understanding of the law, technical expertise and knowledge of tikanga Māori. The independent hearing panel makes recommendations to Environment Canterbury. These recommendations are then adopted as the Council's Decision. Unlike other parts of New Zealand where merits of decisions are appealable first to the Environment Court, decisions of Environment Canterbury can only be challenged on points of law to the High Court. This has proven to be a key driver in focusing stakeholders on investing considerable resource into the collaborative community process. Once appeals to the High Court are resolved, Council formally adopts the plan change and it becomes operative.

Fig 3: Work Programmes by Zone

Action on the Ground

- The ten zone committees (largely based on river catchments) are tasked with implementing the targets in each zone. Every committee has now developed a Work Programme, setting out how they want to see progress made in their area.
- Zone teams have a mix of skills and backgrounds and have been established to support actions on the ground.
- Zone teams' work programmes cover all CWMS target areas and include work on; community outreach, lowland stream health, promoting and encouraging industryagreed Good Management Practice (GMP), biodiversity projects, support for community groups, hapua & lagoons projects, work on braided rivers and drinking water protection. Progress reports are available online at ecan.govt.nz/myzone
- The Zone teams are instrumental in facilitating the on-the-ground changes in farming practice which will protect and ultimately improve water quality and ecosystem health. Having set the rules, the approach, is to work with farmers to measure and understand what's happening on their farms, take responsibility for any nitrates leaching from their farm, and show how they are dealing with it through a Farm Environment Plan (FEP).
- Zone teams also work closely alongside industry organisations like DairyNZ, Fonterra, Beef & Lamb and Irrigation New Zealand to support farmers through the changes. Information on the new planning rules is now available at canterburywater.farm. With the establishment of industry-agreed good management practices for farming and approved auditors in place, there are now over 3,000 FEPs in place and more than 300 farms audited.
- Biodiversity officers are members of Zone teams and, working with community groups and individuals, have supported the development of more than 400 restoration projects, awarded funding totalling \$6.8 million, to deliver 420km of fencing to protect over 1,700 ha of stream riparian margins, wetlands, lagoons and native bush.

