

### Catchment Nutrient Load

Intensification of land use has necessitated the need to set catchment loads, limiting the amount of nitrate and phosphate that can be leached or discharged from farmland. Environment Canterbury continues to monitor water surface quality and groundwater flows to improve understanding of risks to drinking and recreational water quality and make this information publicly available. Work continues with water supply and health authorities and CWMS committees to meet a range of outcomes including the CWMS drinking water targets.

#### Targets

##### By 2015:

**Target 1:** Identified areas where catchment load limits for nutrients are not met, prioritised areas and implemented actions to ensure there is no further enrichment.

**Target 2:** Demonstrated, and included in implementation programmes, how land within the zone will be managed to achieve catchment load limits.

**Target 3:** Achieved nutrient efficiency targets for the zone on all new irrigated land and 50% of other rural properties (and of properties within urban boundaries that apply nutrients over significant areas).

##### By 2020:

**Target 4:** Achieved nutrient efficiency targets for the zone on all new irrigated land and 80% of other land in major rural land uses (pasture, major arable and major horticulture crops), and have 100% of rural properties working towards those targets (and of properties within urban boundaries that apply nutrients over significant areas)

##### By 2040:

Achieved nutrient efficiency targets for the zone on all new irrigated land and 100% of other rural properties (and of properties within urban boundaries that apply nutrients over significant areas).

#### Progress to 2020

Progress to 2020	Not started	Started	Progress	Good progress	Achieving
		T3,4		T1	T2
<ul style="list-style-type: none"><li>■ The LWPR, notified in 2012, provides clear direction on how land and water are to be managed in the region, including limits on the discharge or leaching of nutrients. Everyone in Canterbury now needs to be working in accordance with the new rules for farming activities relating to nutrient management. The rules maintain current water quality and prevent further increases in nutrient losses.</li><li>■ <b>Target 1:</b> Individual catchment loads are currently being set on a zone by zone basis and are being added as sub-regional chapters to the LWPR as they are completed. The priority zones have been set based on the Nutrient Allocation Zones map identified in the LWRP, see fig 12.</li><li>■ <b>Target 2:</b> As part of the limit setting process Zone Committees work with their community (see page 10) to develop a Zone Implementation Programme (ZIP). The ZIP includes recommendations on how land within the zones is to be managed to achieve catchment load limits. The recommendations are then included in the zone’s sub-regional plan change to the LWRP.</li><li>■ <b>Target 3 &amp; 4:</b> In addition to the sub-regional chapters, Plan Change 5 makes amendments to the nutrient management rules and sets industry-agreed Good Management Practice (GMP) as the minimum standard for all farming activities on properties larger than 10ha. Primary industry</li></ul>			<p>sector organisations have worked together to describe what GMP looks like for different farming types, see <a href="http://www.ecan.govt.nz/mgm-gmp">www.ecan.govt.nz/mgm-gmp</a>.</p> <ul style="list-style-type: none"><li>■ Every farmer is encouraged, and largely required by the rules, to complete a Farm Environment Plan (FEP) which includes an assessment of the environmental impacts of their farming activities.</li><li>■ Farmers can use their FEP to work out what they can do to improve water quality – for example, fencing and planting waterways and drains may help control sediment loss and smarter irrigation systems that improve water management can also help control nutrient leaching</li><li>■ Plan Change 5 requires farmers to register their farming activities on the Farm Portal. The Portal provides access to farm specific nutrient management information and a report to help them get a resource consent if required.</li><li>■ Farms that require a resource consent will need to be audited by a certified auditor. Each farm then reports a nutrient loss number and a grading on how well a farm is being managed to GMP. Auditing frequency depends on performance.</li><li>■ By 2020, Environment Canterbury will be able to report on how the region is progressing towards nutrient efficiency at a broad scale. To date, over 3,000 FEPs have been completed and more than 300 farms have been audited.</li></ul>		

Fig 12: Nutrient Allocation Zones – Land and Water Regional Plan

**Water Quality Status and Associated Land Area**

The map shows that nearly a quarter of Canterbury's fresh water quality is unacceptable and almost another half is at risk.

Much is already being done, to improve water quality in both urban and rural areas including;

- Setting limits for nutrient levels in fresh water to protect the environment
- Enhancing biodiversity and ecosystems, focusing strongly on water quality
- Driving improved practices on farm
- Introducing rules and regulations based on community expectations
- Simplifying the rules to make it easier to decide whether resource consent will be needed for an activity
- Working with communities on innovative solutions for our fresh water issues.

The Nutrient Management and Waitaki plan change (Plan Change 5 to the Canterbury Land & Water Regional Plan) sets industry agreed Good Management Practice as the minimum standard for all farming activities in Canterbury.

