

## Understanding Emergent Contaminant Risks

Managing emerging contaminants is fundamental to ensuring safe drinking water. District health boards, Environment Canterbury, territorial authorities and water suppliers are conducting ongoing monitoring and reporting, are implementing and enforcing catchment load limits and are working with communities to improve water quality.

### Targets

#### By 2015:

Understood any emerging contaminant risks and identified any at-risk areas for targeted management.

#### By 2020/2040:

Understood any emerging contaminant risks and identified any at-risk areas for targeted management.

Note: In the CWMS targets, the 'Emerging Contaminant Risk' target is repeated under the Drinking Water targets. It is reported once only in this report, here under the Ecosystem Health and Biodiversity targets.

### Progress to 2020

Not started

Started

Progress

Good progress

Achieving

- Environment Canterbury undertakes various monitoring programmes to assess the state of the environment (SoE), to understand environmental status and trends and to measure the effectiveness of policies and plans.
- Currently monitoring programmes include legacy persistent organic pollutants (POPs) but do not include Emerging Organic Contaminants (EOCs). However, mounting evidence suggests some EOCs may cause harmful environmental effects.
- With no current national strategy on EOCs, each regional council needs to provide their own impetus to ensure they are meeting their obligations for environmental protection. Consequently, Environment Canterbury worked with Auckland Council and Greater Wellington Regional Council to initiate a review completed in 2016. The review summarised recent national strategies to identify EOC research priorities, along with national and international legislation and guidelines. It provided recommendations for future monitoring of EOCs in urban environments.
- Environment Canterbury is now working through options to identify chemical markers for EOCs to determine concentrations in selected streams.
- Low concentrations of metals are common contaminants in road run-off, but may be found in very high concentrations in association with industrial sites, official and unofficial waste disposal facilities. There are many metals which may be toxic to ecosystems and routine monitoring of the full suite is not practical. However, Environment Canterbury regularly tests for metals during investigations based on potential presence and requires strict monitoring as part of consent conditions during construction, maintenance or remediation of potentially contaminated sites.
- Environment Canterbury monitors pesticides and hydrocarbon contaminants in some parts of the region, and conducts more detailed investigations in specific areas where contamination has been detected. Results are used to assist Canterbury Public Health to implement and evaluate communicating potential risks with the community.