

Teacher Feature

Using *Water & Atmosphere* in your classroom

One of NIWA's aims with this magazine is to contribute to science education in New Zealand. To this end, we distribute *Water & Atmosphere* without charge to New Zealand high schools. Articles are assigned 'Curriculum Connections' to indicate which of the NZ NCEA Achievement or Unit Standards they can complement as a classroom resource. These links are assigned by NZSMT Teacher Fellows who are working with NIWA scientists.

The magazine and the Curriculum Connections are also available online at www.niwa.co.nz/pubs/wa. There you'll find an archive of back issues. All online articles include a pdf of the printed version and the articles are indexed via the website's search engine. The Curriculum Connections are compiled at www.niwa.co.nz/pubs/wa/resources

Curriculum Connections for this issue

Pages	Article	Relevant NCEA Achievement Standards (AS) and Unit Standards (US)	Brief summary
10–11	From emissions to exposure: are our transport choices making us ill?	Geography Level 1 AS90207, Level 2 AS90336, Level 3 AS90706 Science Level 2 US6352, Level 3 US6355	New research is tracking exposure to vehicle emissions for people in cars, buses, trains, and city streets.
12–13	Natural purification of groundwater	Biology Level 2 US6309, US6310, AS90714, Level 3 AS90713 Environmental Sustainability Level 2 AS90814 Science Level 3 AS90728	Aquifer-dwelling crustaceans play an important role keeping bacterial contamination in check.
14–17	Ecodiagnosics: biomarkers of shellfish health in urban estuaries	Biology Level 2 US6308, US6312, AS90461, AS90769, Level 3 US8933 Environmental Sustainability Level 2 AS90811	Biomarkers in cockles are revealing exposure to chemical and metal contamination.
18–19	Harnessing the power of sunlight and nanoparticles to combat biofouling	Biology Level 3 US6320, AS90714 Chemistry Level 3 US6340	The search for nontoxic coatings to combat marine fouling is finding the answer in nanotechnology.
20–21	Biogenic habitats and their value to New Zealand fisheries	Biology Level 2 US6309, Level 3 AS90713 Chemistry Level 3 US6340 Environmental Sustainability Level 2 AS90814	Surveys are filling in the knowledge gaps about how commercially important fish species depend on different vulnerable habitats.
22–23	Improving projections of Antarctic ozone recovery	Calculus Level 3 AS90635 Chemistry Level 3 US6340 Statistics and Modelling Level 3 AS90641	Scientists are incorporating atmospheric chemistry into global climate models to focus on the future of the Antarctic ozone hole.
24–25	Linking the world's oceans: the Antarctic Circumpolar Current	Biology Level 3 US6319, US90714 Environmental Sustainability Level 2 AS90811, AS90814 Geography Level 3 US5098, US5099, AS90701 Science Level 3 US6355, US21613, AS90728	New measurements of the ACC are helping to detect changes due to global warming.

Colour key to Achievement and Unit Standards

Aquaculture **Biology** **Calculus** **Chemistry** **Environmental Sustainability** **Geography** **Physics** **Science** **Statistics and Modelling**