## **Teacher Feature**

## Using Water & Atmosphere in your classroom

ne 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. Most of the magazine's articles are assigned 'Curriculum Connections' to indicate which of the NZ NCEA Achievement Standards they can complement as a classroom resource. These links are assigned by Royal Society of New Zealand Teacher Fellows who are working during the year 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 beginning with September 2000 (vol. 8, no. 3). 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/

We also hope that our new Profile feature on the next page will appeal to high school students. We want to intrigue and inspire students with the interesting and exciting work available to today's scientists.

## Curriculum connections for this issue

Pages	Article	Relevant NCEA Achievement Standards	Brief summary
12–13	Accessing climate information: the National Climate Database	Science 2.2	The National Climate Database is an archive that can be used for many purposes and products. Some of these are described, including their use as an educational resource.
14–15	Keeping the global environment safe: monitoring for the nuclear test ban treaty	Physics 2.5 Science 2.2, 3.2, 3.6	As part of the implementation of the Comprehensive Test Ban Treaty, NIWA has helped set up stations to detect radionuclides and shock waves in the atmosphere.
16–17	Rapid shoreline building on a stormy coast	Geography 2.1, 3.1 Science 1.5, 2.2, 2.5, 3.5	A study of the dynamics of Piha Beach explores west coast sand sources and the history and mechanisms of sand accumulation.
18–19	Wave-assisted coastal flooding	Geography 2.1, 3.1, 3.3 Science 2.2, 2.5	The risk of flooding is calculated based on a combination of ocean and weather factors. The article explains the role of wave set-up, set-down, and run-up.
20–21	The life and death of planktic foraminifera	Biology 3.5 Science 2.5	Research reveals the natural history of forams in subantarctic waters and shows how fossil forams can indicate past ocean and climate conditions.
22–23	Making concrete: ecological implications of gravel extraction in New Zealand rivers	Biology 2.5 Geography 3.1	A map shows where and how much gravel is taken from NZ rivers. A study based on two rivers measures the effects of gravel mining on aquatic invertebrate communities.
24–25	When fish meet fords	Biology 2.5 Geography 3.1	Migrating native fish are often obstructed by fords in streams. The article describes features of fords and compares their effects on different species.
26–27	Eumadicole midges – film stars of the freshwater world	Biology 2.5, 3.5	The egg, larva, and pupa of various midge species live in thin films of water. This article describes characteristics of the species and their NZ habitats.

## **Colour key to Achievement Standards:**

Biology Chemistry Geography Horticultural Science Physics Science

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