



<oceans

THE OCEANS ARE IMPORTANT
TO ALL NEW ZEALANDERS **SOcially,**
CULTURALLY, SPIRITUALLY AND **ECONOMICALLY**



Oceans

Most New Zealanders live within about an hour's drive of the sea, and throughout the summer we all enjoy the beach. We love to cool off in the sea, but we also wonder what is beneath the sand or out there in the ocean depths. The oceans are vital for life to exist on earth. They work with the atmosphere as one large system, controlling the earth's climate by soaking up and transferring heat, and transport nutrients around the world. Some of the tiniest living things in the sea, phytoplankton, are responsible for providing over half of the oxygen in the atmosphere. The ocean is also important culturally, spiritually and economically.

The oceans are important for Māori as a food source and for spiritual and cultural values. Māori are also involved in some of New Zealand's largest fishing interests. The sea supports fishing, petroleum mining and shipping which are important for our economy. The sea also connects us to the rest of the world, via underwater telecommunication cables. Income from tourism in our oceans is also increasing.



New Zealand is an island so the health of our oceans, our land and our people are inextricably linked.

Some of the facts about our oceans are impressive and not well known. The area offshore from 12 to 200 nautical miles is called our Exclusive Economic Zone (EEZ). This area is about 15 times the size of our land. Homes for living things include plains of mud, volcanic vents such as those near White Island and the great coral-festooned sea mounts of the deep ocean. More than 99 percent by volume of our exports are shipped by sea, and submarine cables carry 90 percent of our communications. Fishing and marine farming are New Zealand's 5th largest export industry. In 2004, other countries bought \$1.3 billion worth of New Zealand seafood. Over 10,000 people work in New Zealand's fishing business. Billions of dollars worth of energy has been extracted from the Maui gas field off Taranaki. Other resources are now being investigated, such as the manganese nodules south of the Campbell Plateau.

NEW ZEALANDERS TAKING ACTION – THE FIORDLAND (TE MOANA O ATAWHENUA) MARINE MANAGEMENT ACT

MANY PEOPLE HAVE SPENT A LOT OF TIME AND ENERGY THINKING ABOUT HOW BEST TO WISELY USE, AND PROTECT, FIORDLAND'S MARINE ENVIRONMENT.

A group that began as a local fisheries committee in Fiordland grew to include other commercial and recreational fishers, tourist operators, dive clubs, eco-tour operators and conservationists, and became the 'Guardians of Fiordland's Fisheries and Marine Environment'.

They developed a plan to protect and sustain this precious environment. The result is a resource management regime for 882,000 hectares of the majestic Milford and Doubtful Sounds.

This includes agreements that:

- < commercial fishers agreed to only fish in the open sea and outer fiords
- < recreational fishers agreed to limit their daily bag to three blue cod a catch
- < Ngai Tahu agreed to not continue to fish under its limitless customary rights.

This was cemented in the Fiordland (Te Moana o Atawhenua) Marine Management Act which came into force in April 2005. Within the region there are eight new marine reserves covering 9520 hectares, and a number of adjusted fisheries regulations to protect inner fiords.

Many scientists estimate that perhaps as much as 80 percent of our native species and plants are found in the sea – that's potentially 24,000 species, and we have only discovered a fraction of these. About seven new species are named every two weeks. Almost half of the world's whales, dolphins and porpoises have been seen in New Zealand's waters. Our oceans support the greatest number and variety of seabirds in the world and are home to lots of different species of fish, shellfish, squid, crabs, lobster, sponges, starfish, kina and seaweeds. There is a general belief that up to 10 percent of the world's marine species live in the waters around New Zealand. Our coastline is about 15,000 kilometres long, which is equivalent to the distance from Wellington to New York.

While New Zealand's marine environment is in good condition in comparison to many other countries, there are pressures on our coastal and marine areas from a range of activities.

What happens on the land affects the ocean and sea life. It has been estimated that 390 million tonnes of run-off (soil washed into the sea) enters our marine environment each year. This can include chemicals such as pesticides and herbicides. Waste water and sewage also have an effect. If something goes into a storm water drain, it will probably end up in the sea.

Some of our most vulnerable habitats, including mangroves, sand dunes and estuaries, are important for the lifecycle of many marine and coastal species. They are also among our most modified landscapes due to increasing coastal populations and development.

Fishing can have impacts by removing targeted organisms and some fishing techniques can damage habitats and take unwanted by-catch. The Quota Management System regulates our commercial take and fisheries regulations manage recreational and customary use.

So far, 28 marine reserves have been established – protecting species and habitats in 7.5 percent of New Zealand's territorial seas.

As our population has grown and trade expands, so has the demand to take more from the sea. The oceans New Zealand is responsible for are vast and the resources they hold need careful management, now and in the future.

