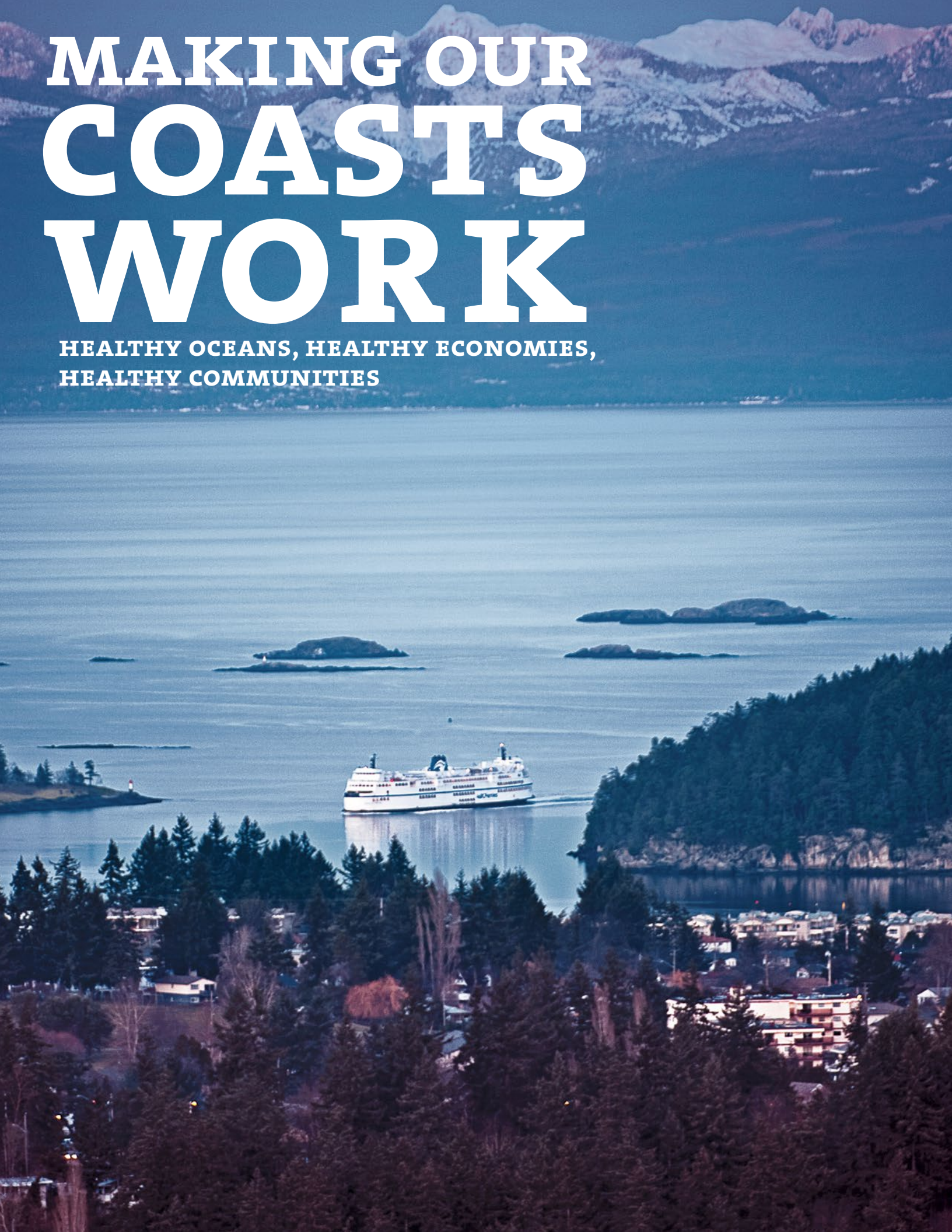



MAKING OUR COASTS WORK

HEALTHY OCEANS, HEALTHY ECONOMIES,
HEALTHY COMMUNITIES



ECONOMIC IMPORTANCE OF B.C. COASTAL WATERS



OCEANS GENERATE
\$13.5 BILLION^{7*}

ANNUAL GDP B.C. OCEAN-BASED INDUSTRIES

84,400 JOBS⁷

DIRECT EMPLOYMENT IN PERSON-YEARS, 2005

Illustrations: Laura Timmermans, except: Wind, Alex Sheyn, from The Noun Project

BUT HEALTHY OCEANS ARE WORTH EVEN MORE

NATURAL CAPITAL

TOTAL ANNUAL VALUE OF THE GREAT BEAR SEA ALONE

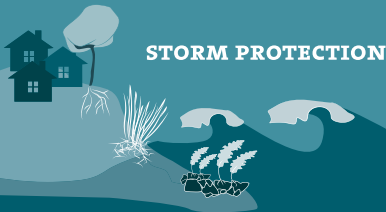


\$101 BILLION^{13*}

Healthy ecosystems clean our air and water, stabilize shorelines, provide raw materials, medicines and food. **Natural capital** valuation quantifies these benefits to our economy and survival.

WHAT DOES NATURAL CAPITAL LOOK LIKE?

STORM PROTECTION



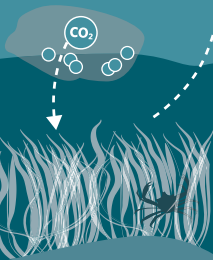
OXYGEN GENERATION



NUTRIENT CYCLING



CARBON SEQUESTRATION



RESILIENT ECOSYSTEM



ABUNDANT SEAFOOD



WATER QUALITY



*IN 2014 \$CAD PER YEAR.



SUMMARY

OUR ECONOMY RELIES ON A HEALTHY MARINE ENVIRONMENT

British Columbia's economy was built on a healthy marine environment. For thousands of years, Canada's Pacific coast has supported a vibrant fishing industry and provided transportation corridors against a backdrop of stunning and inspirational beauty, all of which have benefited local and national economies. But marine businesses, communities and ecosystems face real threats as overlapping uses of B.C.'s ocean and coast increase without adequate planning.

The best way to protect our economy and communities is to invest in marine planning and a variety of protection measures. Marine planning, like urban planning, aims to ensure that activities taking place in an area are not incompatible with each other or the area's health. Adequate planning now will create certainty, helping to avoid future conflict and reduce the risks that development pressures bring.

THE VALUE OF HEALTHY OCEAN ECOSYSTEMS



Photo: lastonein via Flickr

Economic activity in coastal B.C. is driven by ocean-based businesses

Ocean-based industries contribute \$11.1 billion* to B.C.'s GDP annually, of which ocean recreation makes up 32 per cent and the seafood sector 15 per cent.⁷ The 2010 wholesale value of fisheries in B.C.'s Pacific North Coast region alone was \$415 million.¹⁷

Ocean-based industries are a key direct employer for coastal British Columbians, directly providing 10 per cent of the jobs on B.C.'s North Coast. This employment number increases to 30 per cent when both direct and indirect jobs connected to ocean-based industries are included.¹⁰

Clean water and abundant sea life are the foundation for the fishing and ocean recreation sectors. Safeguarding healthy oceans protects the assets that provide these industries with provincially significant economic benefits.

A healthy ocean protects a broad range of economic values

While the \$11.1 billion of economic value from ocean-based industries in B.C. is substantial, it's only a small part of the economic benefits derived from our oceans.

Ocean ecosystems provide habitats for fish and wildlife, cycle nutrients to maintain food webs, sequester carbon to mitigate climate change, and give us food, enjoyment and more than half the oxygen in our lungs.¹² Collectively, these kinds of outputs are referred to as "ecosystem services" by environmental economists.

Ecological services tend to be shared as public goods — not bought and sold — so we often overlook, undervalue and mismanage them. Properly accounting for ecological services could help governments make better choices to ensure natural systems continue to provide these services that generate wealth and sustain health and well-being.

The people of the Pacific North Coast region receive an astonishing \$92 billion* per year in ecosystem services.¹³ Aquatic ecosystems in the Lower Mainland provide up to \$61 billion in similar ecosystem services, also known as non-market benefits, every year.²³

*These figures were converted to 2014 dollars in the infographic that appears earlier in this report.

Ecosystem services enjoyed by healthy fishing communities include food security, strengthened families, continued traditions and a way of life.¹⁷



Photo: Lynn Lee

A 20-year study shows that ecosystems in marine protected areas are better able to withstand the effects of global warming, such as the entry of non-native species, compared to fished areas.¹

PROTECT THE OCEAN TO STRENGTHEN ECONOMIES AND REDUCE RISK

Without fish habitat, there are no fish

Fisheries are a cornerstone of B.C.'s economy. With increased pressures from developments in other ocean-based activities, it's more important than ever to ensure we maintain the habitats needed to produce healthy fish stocks.

Aquaculture can lose money due to environmental degradation

Increased acidity of sea water is blamed for the loss of more than 10-million scallops and millions of dollars on a scallop-farming operation on Vancouver Island. The socio-economic impacts were immediate and severe to both the company and the staff, with one-third of the workers being laid off as a result.²

Tourists pay to see a clean, healthy ocean

People travel to coastal British Columbia from around the world to experience B.C.'s wildlife and spectacular ocean vistas. Visitors to Vancouver Island were asked in 2008 what they like most about the region. Sixty-six per cent said scenic beauty, 30 per cent said the environment and 14 per

cent said marine activities.¹¹ Revenue from nature-based tourism directly depends on a healthy ocean and coast.

Ocean recreation is predicted to be among the fastest-growing sectors in the B.C. economy for the next 20 years.³ In 2013, the northern Vancouver Island region alone saw \$12 to \$16 million in gross revenue from wildlife viewing, diving and kayaking.²¹ Protecting the infrastructure that supports these industries — healthy ecosystems — is more important than ever.

Marine protection and planning insure against future risk

Governments, industries and communities must work together to ensure we don't harm the fish, wildlife and ecosystems whose health and abundance underpin the economic benefits derived from the ocean.

The economic risks of some developments exceed their benefits

The potential economic benefits of industrial projects are the primary rationale for their approval; however, better attention must be paid to the potential financial risks from ecological degradation. For example, the costs of a single oil tanker spill on the North Coast, including spill response, cleanup and litigation (estimated at up to \$9.6 billion), plus social, cultural and environmental damages, would tally to negate all projected economic gains of the proposed Enbridge Northern Gateway project.¹⁰

BEST STRATEGIES TO PROTECT OUR OCEAN ECONOMY



Photo: The Foreign Flash via Flickr

Marine planning creates certainty for coastal communities

Marine planning helps make sure that when we transport goods, entertain tourists, harvest seafood and operate other industries, we organize these activities to obtain lasting economic benefit without endangering each other, our livelihoods or our values.

Investing in marine planning and protection can protect our coast's value and bring long-lasting returns, providing us with seafood, enjoyment and half the oxygen we breathe. Clear, inclusive and meaningful planning can also help find solutions and avoid conflict among communities and marine users.

Resource users, scientists and academics interviewed in Atlantic Canada suggest that designating specific areas for specific activities maximizes economic benefits through certainty, increased revenue and identification of suitable areas for various activities.⁴

Representatives of port, fisheries, oil and gas, tourism, recreation, aquaculture and renewable resource sectors in the U.K. reported a multitude of benefits from

marine planning, including addressing their vulnerabilities, avoiding costly disputes, identifying acceptable sites, maximizing long-term benefits, involvement in decision-making and reducing costs.⁵

Marine protected areas enhance fisheries

MPAs can be an effective tool to rebuild and maintain fisheries productivity.^{18,22} Multiple studies from a diverse set of global locations demonstrate that no-take areas benefit fisheries, particularly those fisheries that are directly adjacent. The economic benefits from no-take zones include doubled catch without the fishers having to travel further for them¹⁴, doubled revenues per hour¹⁶, fish from these zones moving into fished areas⁸ and world record-sized catches.¹⁹ MPAs have been shown to increase the value of adjacent fishing and tourism areas, with benefits offsetting costs of the establishment of the MPA in as few as five years.²⁰

Marine protection can pay for itself

Marine protection can be financed through multiple means, including partnerships, donations and fees.¹⁵ Polling suggests

Canadians are willing to pay to support research, monitoring and enforcement in protected areas, particularly if they offer interactive experiences — for example, live feeds from wildlife cameras.⁹



Photo: Adriana McM via Flickr

ACTIONS

Designate marine protected areas where the objective is conservation of biodiversity and protection of ecosystem services. These designations must include no-take areas, and may include multi-use areas.

The provincial government should allocate \$34 million over the next five years to implement the plans developed by the Marine Planning Partnership for the North Pacific Coast.

The federal government should implement the following recommendations from the Green Budget Coalition⁶, a collection of leading Canadian environmental organizations that provides recommendations to the federal government regarding strategic fiscal and budgetary opportunities, by investing:

- \$35 million per year to establish a network of marine protected areas that honours Canada's commitment to protecting 10 per cent of our oceans by 2020
- \$20 million per year toward cumulative effects and risk assessment, human use mapping, ecosystem valuation and marine spatial planning
- \$10 million per year for state-of-the-ocean reporting to set and track marine environmental quality standards for marine industries

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Citation: Rao, A.S. 2015. *Making our coasts work: healthy oceans, healthy economies, healthy communities*. David Suzuki Foundation, Living Oceans Society and WWF-Canada, Vancouver.

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ISBN: 978-1-897375-89-1





We need a healthy ocean environment for a healthy ocean economy

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