



OCEAN  
CANADA

**Building sustainable  
coastal-ocean communities across Canada**

# PARTNERSHIP OVERVIEW

- 6 years core funding provided by Social Sciences and Humanities Research Council of Canada (SSHRC) Partnership Grants programme (2014-2020)
- A multi-institution interdisciplinary research partnership
  - 15 formal partners from university, government, industry and non-governmental sectors
  - 38 researchers and collaborators
  - Over 35 student trainees
- Emphasis on integrating diverse disciplinary perspectives as well as regional and local knowledge

# RESEARCH CHALLENGE

RESEARCH QUESTION: How can Canada promote healthy, ocean-related economies and communities without further degrading the marine environment?

- Develop an enhanced understanding of the current and future social-ecological stressors affecting Canada's three coastal-ocean regions
  - Climate change
  - Ocean acidification
  - Market and cultural globalization
- Effectively integrate local and national social science and ocean science research in order to optimize national-level policy planning and management
  - Facilitate knowledge sharing across regions
  - Integrate local and traditional knowledge into national policies
- Work collaboratively towards a pan-Canadian vision for sustainable and healthy coastal-ocean regions by 2050
  - Foster public awareness and promote engaged national dialogue

# THEORETICAL APPROACH

- Oceans are complex social-ecological systems (Ommer, 2007)
  - Vital economic role
    - Canadian fisheries contribute \$26 billion annually to GDP
    - Employ roughly 315,000 Canadians
    - Contribute to familial subsistence in remote areas
  - Culturally significant
    - Cornerstone of traditional Aboriginal way of life
    - Important part of regional history and identity
  - Distinct geo-bio-physical characteristics
    - Marine biodiversity
- Overarching theoretical concern is to better understand the interaction of communities and ocean systems with environmental and social change and increase their capacity to deal with, and adapt to, the impacts of change (Allison et al., 2009; Charles, 2012)

# GUIDING CONCEPTS

- **Ecosystems and economic valuation**
  - **Ecosystem services** refers to the ways in which humans may derive direct and indirect economic benefits from global ecosystems
  - **Discounting** introduces a temporal dimension to economic theories and consider future outcomes in light of present conditions
  - **Political ecology** provides a crucial link between ecosystems, economic processes and public policies
  - **Social capital** in the form of networks, norms and social trust can also help explain key societal relationships, as can the application of **game theory** to co-operative and non-cooperative approaches to resource management
- **Traditional knowledge**
  - **Traditional Aboriginal knowledge** presents a unified worldview that incorporates all aspects of Aboriginal society, spirituality, economy and culture – a ‘knowledge, practice belief complex’ of which **traditional ecological knowledge** is an important subset
  - Fosters **knowledge co-production** – a collaborative process of bringing together a plurality of knowledge sources and types
- **Ocean acidification and climate change**
  - **Climate change** refers to the impact of changing global temperatures on communities, infrastructure and ecological systems
  - Understanding **ocean acidification** and the causes and consequences of marine debris and pollution are also critically important to health marine ecosystems and the humans that rely on them

# PARTNERSHIP ORGANIZATION

## 2 spatially-oriented research clusters

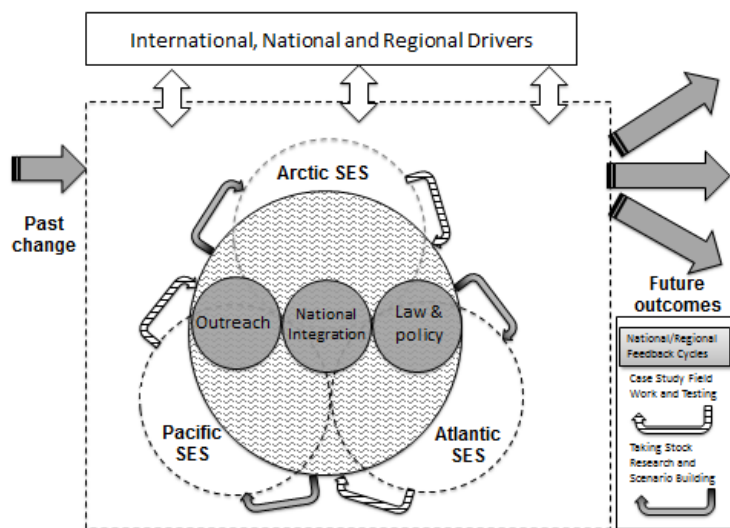
### NATIONAL

- Legal and policy working group
- Data and integrated scenarios working group
- Communications and engagement working group

### REGIONAL

- Arctic working group
- Atlantic working group
- Pacific working group

The OceanCanada Partnership is also supported by an Advisory Board and Management Committee



# NATIONAL RESEARCH CLUSTER

## Law and policy working group

- Conducts detailed policy analysis of Canada's performance in implementing national and international legal commitments to ensure integrated coastal/ocean management
- Investigates Canadian approaches to, and challenges faced in, seeking principled governance in the fisheries sector by evaluating existing national fisheries law and policy framework
- Addresses Canadian law and policy approaches and challenges related to aquaculture

## Data and integrated scenarios

- Collects and integrates secondary data to assess status and trends and identify knowledge gaps
- Works with regional working groups to develop a searchable 'living' online database for use by researchers, policymakers and the public
- Works with regional working groups and with legal and policy experts to project qualitative and quantitative outcomes for Canada's oceans under different socio-economic and biophysical changes, particularly as they relate to distinct policy pathways

## Communications and engagement

- Uses online and visual tools, such as videos, social media and interactive educational tools to inform and engage public

# REGIONAL RESEARCH CLUSTER

## Arctic working group

- Synthesizes current knowledge of key issues to Arctic coastal communities and to specific communities
- Plan is to assess potential future development, environmental change and conservation factors and impacts
- Findings feed into Geomatics and Cartographic Research Centre Atlas Group

## Atlantic working group

- Plans to undertake case studies based on criteria that allow a multi-scale approach

## Pacific working group

- Plans to address marine management and conservation challenges and identify how to effectively and constructively engage local people and stakeholders
- Focus is on strengthening the adaptive capacity of communities and key marine industries



# 6-YEAR RESEARCH PLAN

## **TAKING STOCK (YEAR 1-2)**

- Review existing knowledge and identify gaps
- National and regional case-studies
  - Economic analysis
  - Ecosystem and climate modelling
  - Legal and policy analysis
  - Community-based consultation and engagement

## **BUILD SCENARIOS (YEAR 3-4)**

- Map future health of marine living resources under different policy pathways
  - Resource management policies
  - Environmental policies
  - Economic and industrial policies
  - Human and social development policies
- Understand risks to communities and marine ecosystems under each scenario

## **DEVELOP A SHARED VISION (YEARS 4-5)**

- Work with policymakers to integrate data and research into policy planning
- Disseminate research findings to community stakeholders and broader research community
- Initiate national dialogue using interactive public engagement tools

# KNOWLEDGE MOBILIZATION

- Several avenues for knowledge mobilization
  - Multi-media outreach using visual tools and social media
    - Partnership website
    - Google Ocean
    - Twitter and similar applications
- Canadian and international media
  - Special TV series
  - Video and radio documentary
  - Op-eds
- Use of participatory approaches with fishers, resource managers and industry representatives to collaboratively develop their view on the future states of Canada's oceans
- Investigating and monitoring communications approaches and developing best-practices

# OCEAN CANADA PARTNERS

The University of British Columbia  
ARCTIConnexion  
Carleton University  
Dalhousie University  
Ecotrust Canada  
Fisheries and Oceans Canada  
Friends of Port Mouton Bay  
Living Oceans Society  
McMaster University  
Saint Mary's University  
Simon Fraser University  
The University of Winnipeg  
University of Victoria  
University of Waterloo  
Vancouver Aquarium Marine Science Centre  
WWF-Canada