

PACIFIC REGIONAL WORKING GROUP

2018 Update on Activities

Co-Chairs:
Natalie Ban (University of Victoria)
nban@uvic.ca
Nathan Bennett (UBC)
nathan.bennett@ubc.ca



PACIFIC REGIONAL WORKING GROUP

Collaborators and Co-Applicants:

Natalie Ban
Nathan Bennett
Evelyn Pinkerton
Tom Okey
Grant Murray
Kai Chan

University of Victoria
UBC & University of Washington
Simon Fraser University
University of Victoria
Vancouver Island University, now Duke U.
University of British Columbia

Past and Current Partners

Devlin Fernandes
Kiera Vandeborne
Megan Eadie
Ian Perry
Robyn Forrest
Duncan Wilson/Carrie Brown
Allison Stocks
Cathy Rigg
Steve Diggon

Ecotrust Canada
T. Buck Suzuki Foundation
T. Buck Suzuki Foundation
Fisheries and Oceans Canada
Fisheries and Oceans Canada
Port Metro Vancouver
T. Buck Suzuki Foundation
Council of Haida Nation
Coastal First Nations

PACIFIC REGIONAL WORKING GROUP

Active HQP:

Nathan Bennett	UBC
Charlotte Whitney	University of Victoria
Allison Witter	UBC
Rachelle Beveridge	University of Victoria
Edward Gregr (PhD completed)	University of British Columbia

Past HQP

Haley Milko	Simon Fraser University
John Driscoll	University of British Columbia
Elena Buscher	University of Victoria
Paige Olmsted	University of British Columbia



Original Focus

From proposal:

- “The Pacific WG will select **case studies** based on criteria that will allow them to develop **innovative solutions** to marine management and conservation challenges and identify how to **effectively and constructively engage local people** and stakeholders, for issues the case-studies mutually identify with the selected communities.”



Initial Approach (2014-2017)

First met in 2014 to develop proposal, further developed ideas in in-person meeting in Mar. 2015.

Themes of mutual interest from 2015 meeting, within broad theme of marine management:

1. **Plight of fishing communities**, esp. opportunities (or lack thereof) for youth, First Nations
2. Need for **innovative solutions** to address marine issues (e.g., ecosystem services, governance arrangement, species-specific options, marine planning)
3. **Adaptive capacities** of coastal communities



Initial Approach (2014-2017)

Use limited funds each year to support HQPs and collaborative projects on these themes through **call for proposals**

3 calls for proposals from 2014-2017

Decisions based on:

- Fit with OceanCanada themes
- Collaborations with OceanCanada members
- Novelty and community-connectedness
- Fairness in distributing funds



Plight of fishing communities (esp. youth and FNs)

Haley Milko, Master's student, Best Practices in Fisheries Monitoring Training to Engage Aboriginal Youth (2014/2015)

Rachelle Beveridge, PhD student, Eulachon loss and recovery: a case study of central coast stewardship priorities and perspectives (Bella Coola, BC) (2015/2017)

AND tons of great work by partners, esp. Ecotrust Canada



Innovative solutions

John Discoll and Ed Gregr, PhD students, The effects of sea otter reestablishment on ecosystem service benefits derived by coastal communities on west coast Vancouver Island (2015/2016)

Paige Olmsted, PhD student, Marine Community support for Conservation: A test case in Howe Sound, BC (2015/2016)

Allison Witter, PhD student, Improving local benefits from seafood value chains in BC coastal communities: From Taking Stock to Scenario Development (2016/2017)

Plus – not a student but doing relevant work

Tom Okey, collaborator, Ecological Indicators, expert surveys, and the Local Environmental Observer (LEO) Network



Adaptive capacity

Charlotte Whitney, PhD student, and Nathan Bennett, postdoctoral fellow, Working Group on Adaptive Capacity of Coastal Communities to Social-Ecological Change (2015/2016)

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Whitney, C. K., N. J. Bennett, N. C. Ban, E. H. Allison, D. Armitage, J. L. Blythe, J. M. Burl, W. Cheung, E. M. Finkbeiner, M. Kaplan-Hallam, I. Perry, N. J. Turner, and L. Yumagulova. 2017. Adaptive capacity: from assessment to action in coastal social-ecological systems. *Ecology and Society* 22(2):22. <https://doi.org/10.5751/ES-09325-220222>

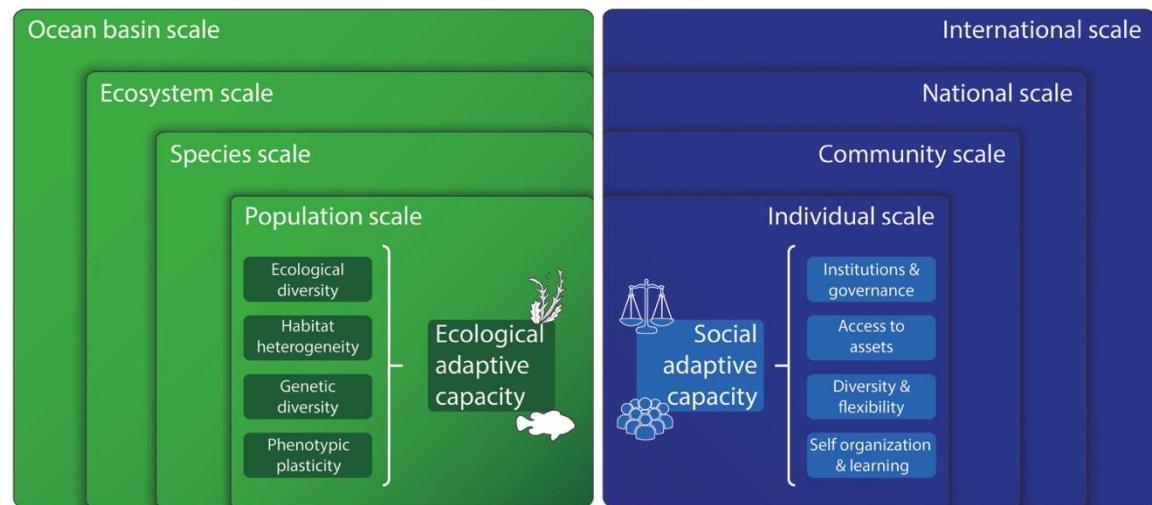


Synthesis

Adaptive capacity: from assessment to action in coastal social-ecological systems

Charlotte K. Whitney¹, Nathan J. Bennett^{2,3,4}, Natalia C. Ban¹, Edward H. Allison², Derek Armitage⁵, Jessica L. Blythe^{6,7}, Jenn M. Burl^{8,9}, William Cheung¹⁰, Elena M. Finkbeiner^{4,11}, Maery Kaplan-Hallam³, Ian Perry¹², Nancy J. Turner¹ and Lilia Yumagulova¹³

Fig. 2. Example measures of adaptive capacity in ecological or social systems across spatial scales. Measures are examples only and are not meant to be prescriptive or specific to a given scale as shown here.





Approach from 2017-2020

Based on feedback from OCP Management Committee, and the need for funds to support the OCP CCTs, we have focused available funds on supporting:

- a) Work of the Access Cross-Cutting Theme – via partial salary and research support for Nathan Bennett**
- b) Fieldwork on Coastal Community Vulnerability and Adaptation to Climate Change – Charlotte Whitney**
- c) Workshop on the Social Impacts of MPAs – Natalie Ban**



Activities and Updates from OCP Pacific Members

Natalie Ban

Nathan Bennett

Rachelle Beveridge

Allison Witter

Charlotte Whitney

Edward Gregr

Devlin Fernandes – Ecotrust Canada

Tom Okey

Evelyn Pinkerton

Social Outcomes of MPAs (Natalie)



Summary of social effects of MPAs

Unpublished material - Slide excluded



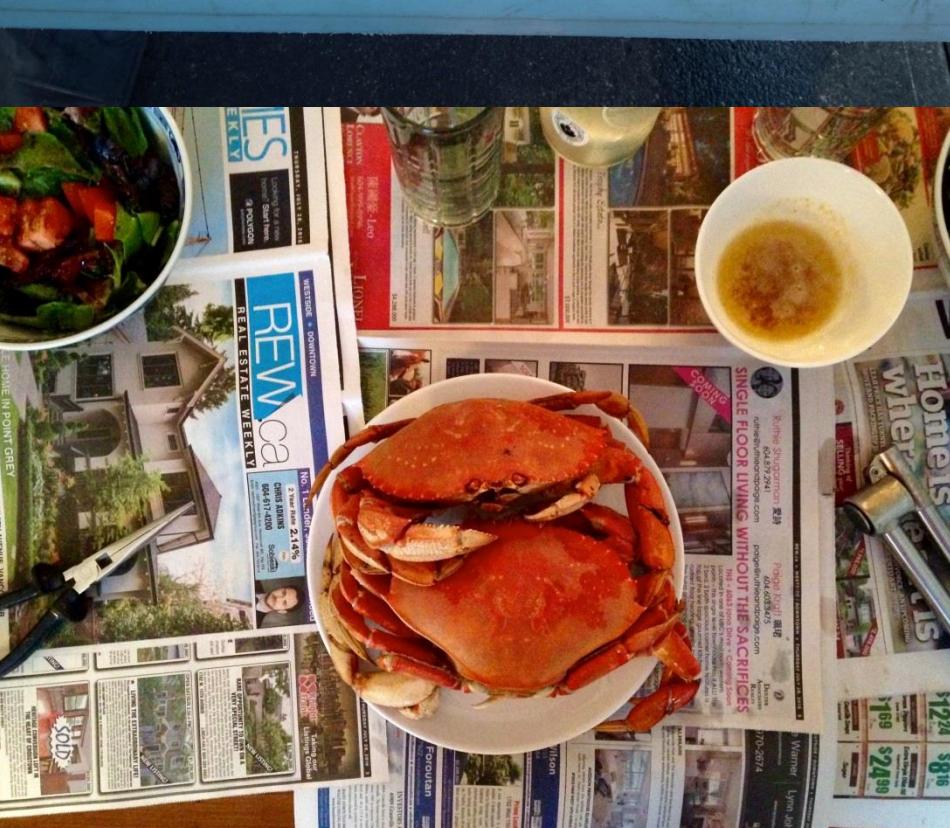
Access Cross-Cutting Theme (Nathan)

- 1) Working Group Workshop and Collaborative Paper (w/ 27 members of OCP)
 - Status: Complete. Published.
- 2) Scoping Interviews with Stakeholders Across the Country (w/ Megan Bailey)
 - Status: Interviews Complete, Analysis Underway.
- 3) Designing a Survey on Access in BC Fisheries (w/ T.Buck Suzuki Foundation)
 - Status: Design Phase.

Allison Witter



Project: Online survey on consumer preferences and willingness to pay for certain seafood product features.



The goal is to better understand the potential market demand for BC seafood products supplied through alternative marketing enterprises.

Rachelle Beveridge

Four papers and dissertation drafted:

- (1) Local eulachon stewardship and Nuxalk well-being
- (2) Application of community-engaged vs Indigenous methodologies in the Nuxalk Sputc Project
- (3) Representing Indigenous knowledges for coastal management
- (4) Supporting Indigenous management authority through the Nuxalk Sputc Project



Adaptive capacity and changing access to marine resources in BC's coastal communities



Charlotte K. Whitney with Natalie Ban
OceanCanada Partnership Meeting 2018



University
of Victoria

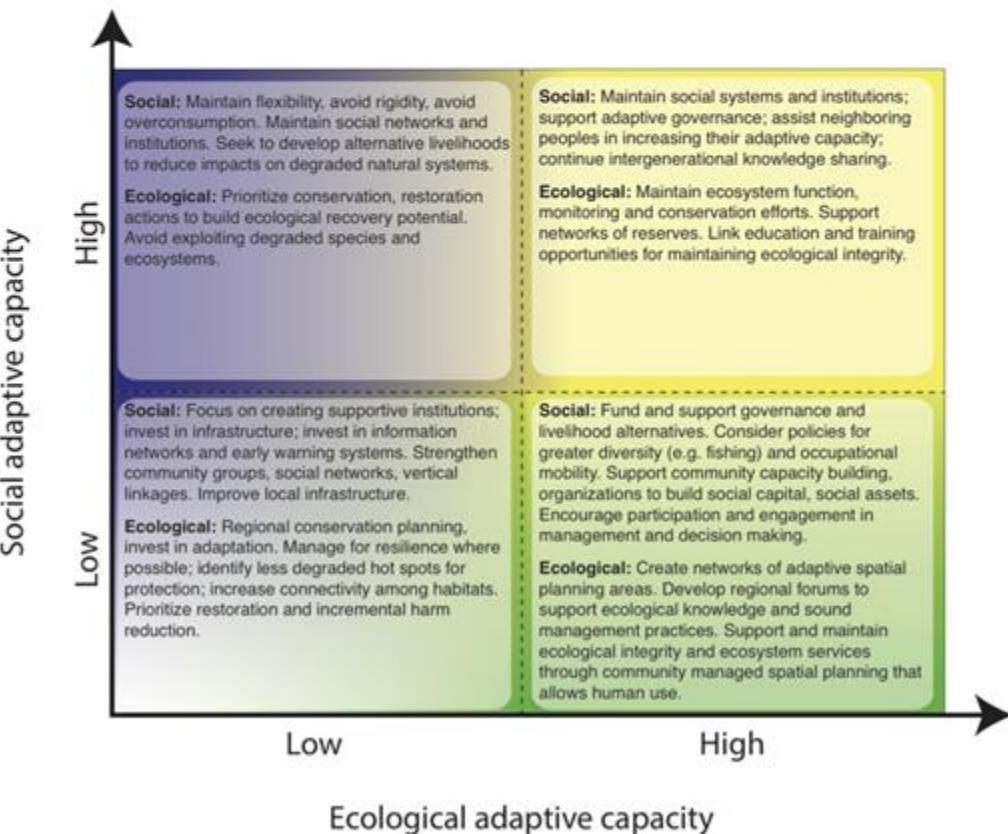
Previous work: Adaptive capacity review with OCP



Adaptive capacity: from assessment to action in coastal social-ecological systems

Charlotte K. Whitney¹, Nathan J. Bennett^{2,3,4}, Natalie C. Ban¹, Edward H. Allison², Derek Armitage⁵, Jessica L. Blythe^{6,7}, Jenn M. Burt^{8,9}, William Cheung¹⁰, Elena M. Finkbeiner^{4,11}, Maery Kaplan-Hallam³, Ian Perry¹², Nancy J. Turner¹ and Lilia Yumagulova¹³

Ecology and Society 22(2):22



Climate change and shifting species ranges present diverse social and ecological adaptation challenges



Edward Gregr, PhD

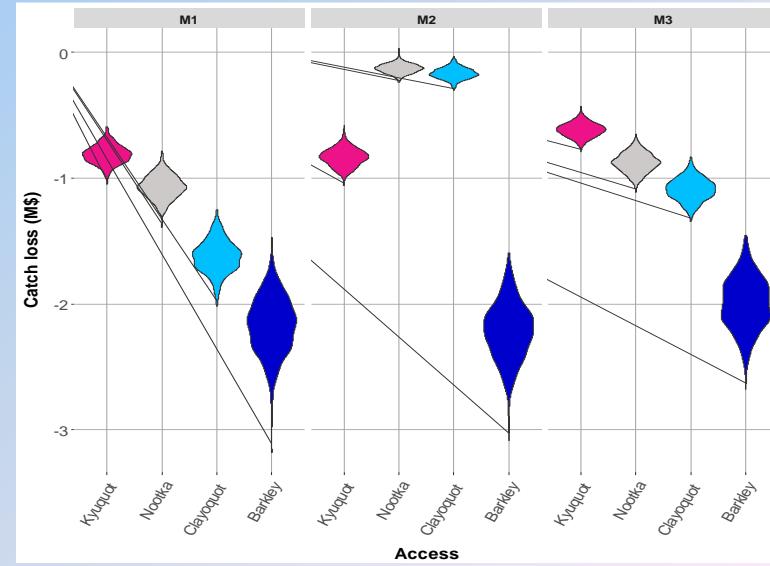
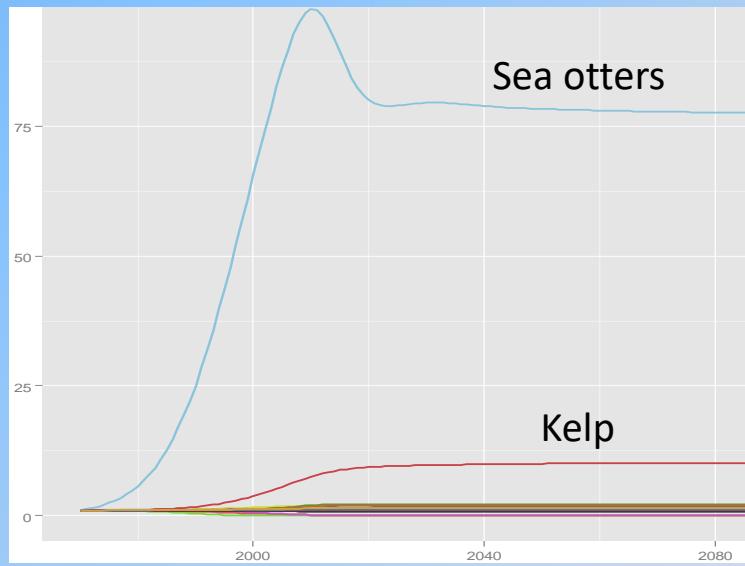
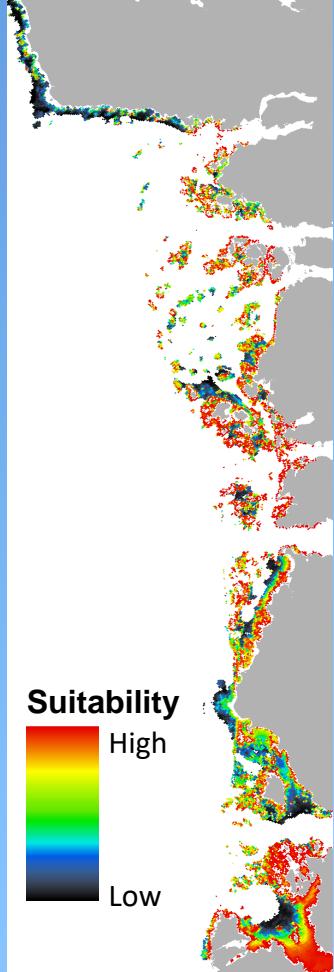
Systems Ecologist

Institute of Resources, Environment, and Sustainability, UBC

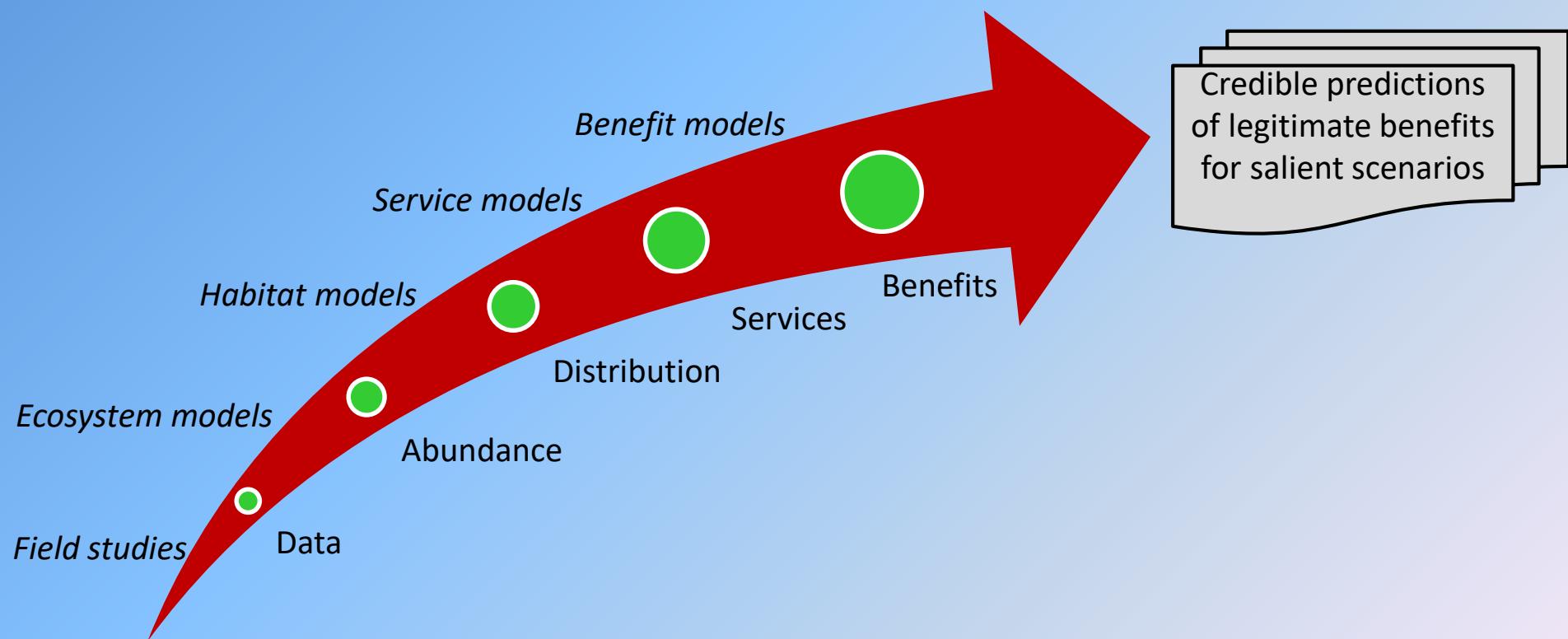


Mapping ecosystem services to inform equitable resource management: Sea otters on the west coast of Vancouver Island

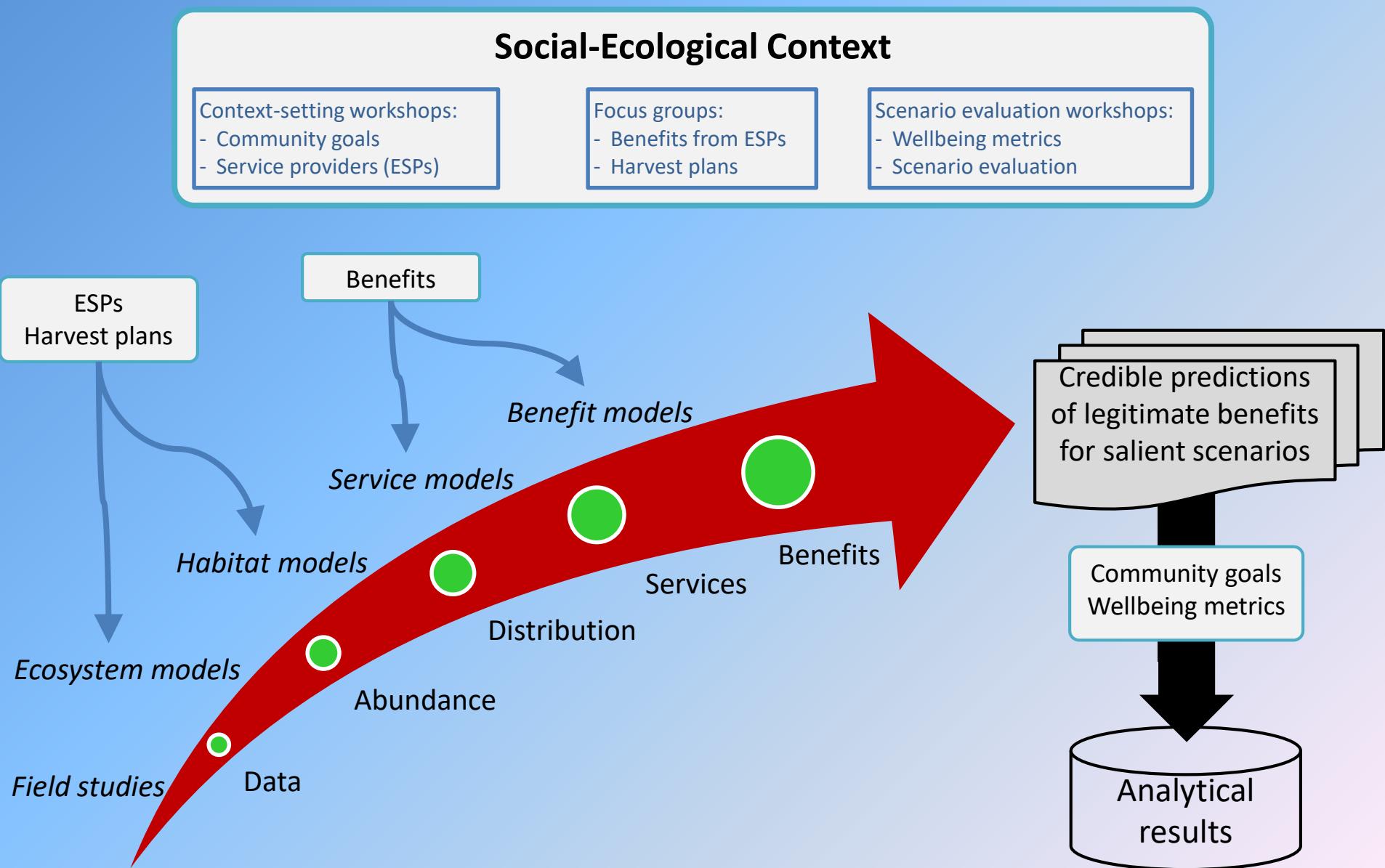
Edward Gregr, John Driscoll, and Kai Chan



Biology-to-benefits model



Ensuring relevance and salience



Moving forward ...

- Continue to monitor/model how sea otters effect resource distribution, and the social-ecological system
- Design studies to explore effective, non-lethal (mostly) sea otter management options
- Explore strategies for resource use, including spatial management, to ensure fair access to all communities



ejgreg@gmail.com



@EcoRational



Ecotrust Canada



- Non-student research assistants
- Linking coastal communities and industry stakeholders
- Our vision is for fisheries, where fisheries and marine resource use meets the social and economic needs of adjacent communities without compromising ecological integrity or the ability of future generations to meet their needs.
- Tasha Sutcliffe, Dyhia Belhabib, Devlin Fernandes

Fisheries for Communities Gathering



- Consensus on the need for fisheries policy reform
- Consensus on the request to the Fisheries Minister for a review
- Agreement on the need for guiding principles



Just Transactions, Just Transitions



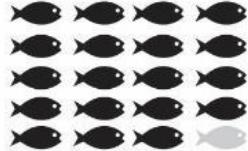
In partnership with T. Buck Suzuki

Between 2000 & 2013...

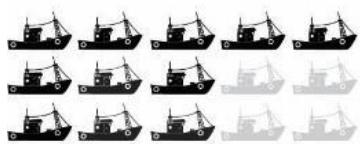
Landed value decreased by **31%**
from \$368,796,556 to \$256,148,000



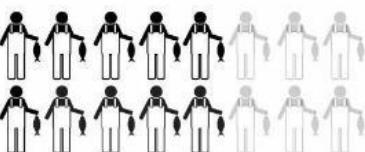
Landed volume decreased by **5%**
from 148,195 tonnes to 140,415



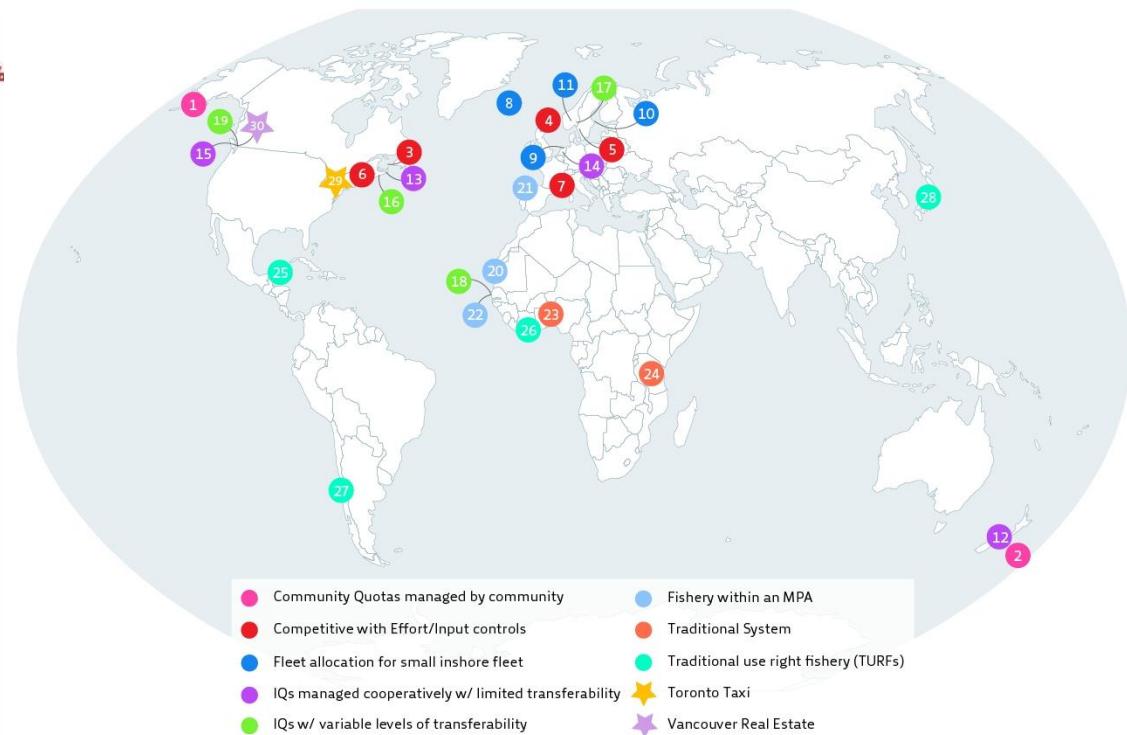
Vessels decreased by **26%**
from 3446 to 2538



38% of fishing jobs were lost
from 8760 to 5402



Fish harvester income decreased by **16%**
from \$22,091 to \$18,456



Rapid expert evaluation of ecosystem health and pressures for prioritising management on the West Coast of Vancouver Island

Thomas A. Okey^{a,b}, Mitra L. Nikoo^{a,c}, and Kathryn Wallace^d

^a School of Environmental Studies, University of Victoria; ^b Ocean Integrity Research; ^c Royal British Columbia Museum; ^d Parks Canada, Pacific Rim National Park Reserve



The slides that contained unpublished materials have been removed.



Contents lists available at ScienceDirect

Science of the Total Environment

journal homepage: www.elsevier.com/locate/scitotenv



Indicators of marine ecosystem integrity for Canada's Pacific: An expert-based hierarchical approach



Thomas A. Okey *

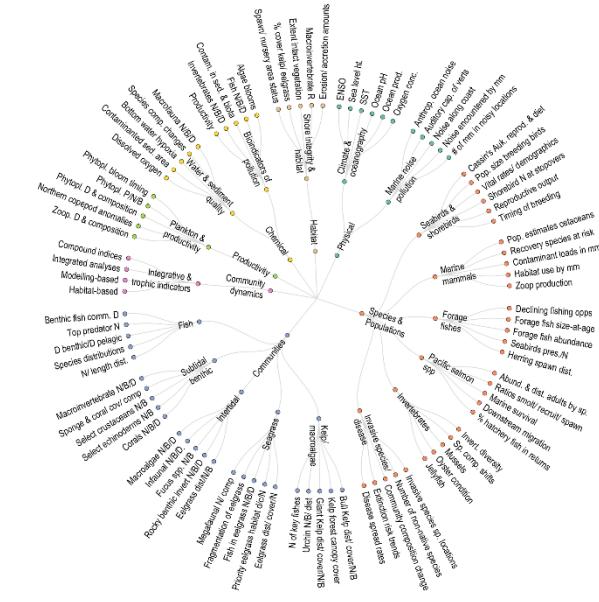
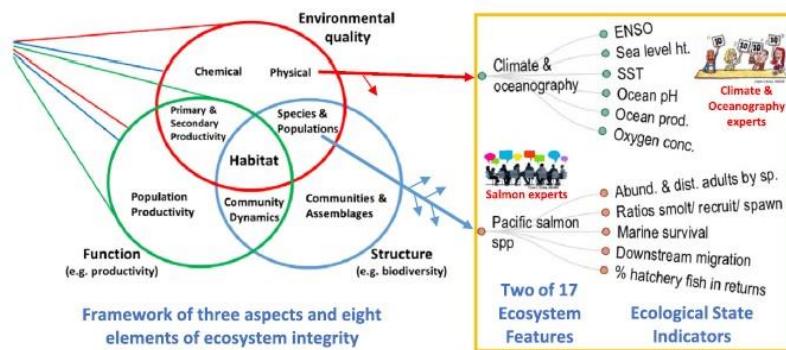
Ocean Integrity Research, 200-825 Broughton Street, Victoria, BC V8W 1E5, Canada

University of Victoria, School of Environmental Studies, PO Box 1700 STN CSC, Victoria, BC V8W 2Y2, Canada

HIGHLIGHTS

GRAPHICAL ABSTRACT

- A toolkit was developed to guide ecological indicator selection for any context.
- A framework of aspects, elements, and features represented ecosystem integrity.
- Over 200 experts helped rate indicator selection criteria and rank indicators.
- Seventeen expert panels ranked >1000 candidate indicators for 17 ecosystem features.
- Ranked lists of indicators with regional relevance guide local indicator selection.



Research Challenge: how could BC fisheries transition to owner- operator/fleet separation?

Evelyn Pinkerton

School of Resource & Environmental Management

Simon Fraser University

Challenge and opportunity

- announcement February 2018 by Dominic LeBlanc, Minister of Fisheries and Oceans
- proposed amendments to the *Fisheries Act* that would affect all Canadian fishermen
- entrench owner-operator/fleet separation on inshore east coast
- licensing policy review on the west coast?



Future Directions

- Continued commitment to support Access CCT
- Interested in possibilities of linking with other CCTs
- Open to new ideas that might emerge from this meeting