

Mainstreaming the impacts of climate change on biodiversity: A Canadian perspective

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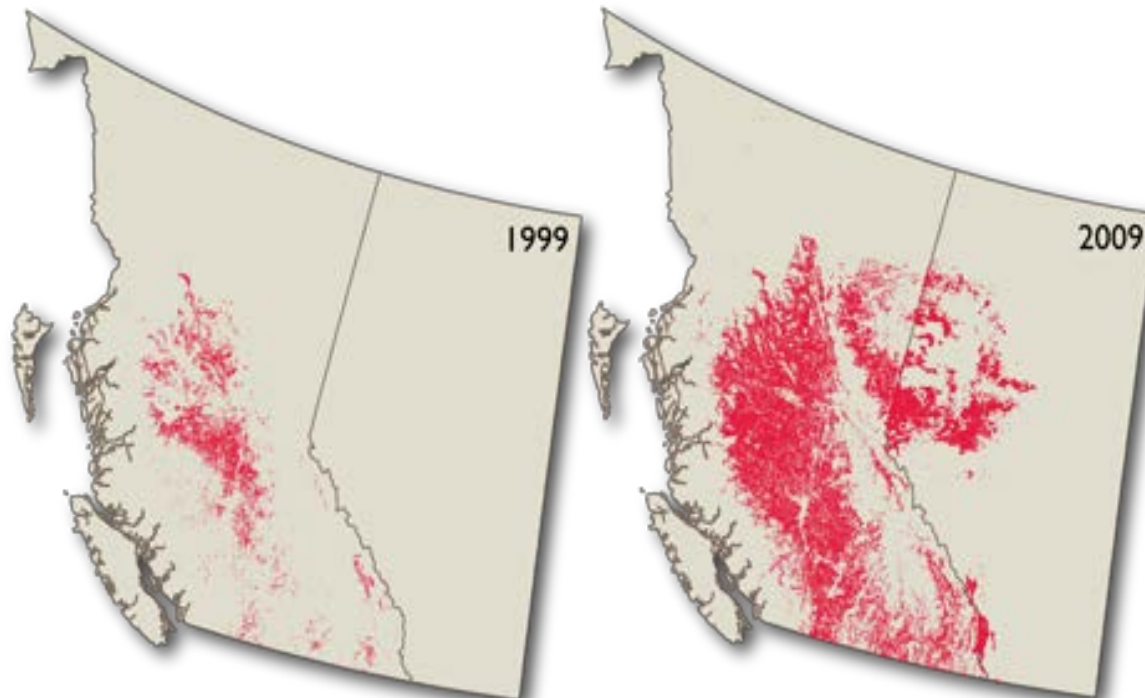
@Aerin_J
#CECMerida



Mountain pine beetle



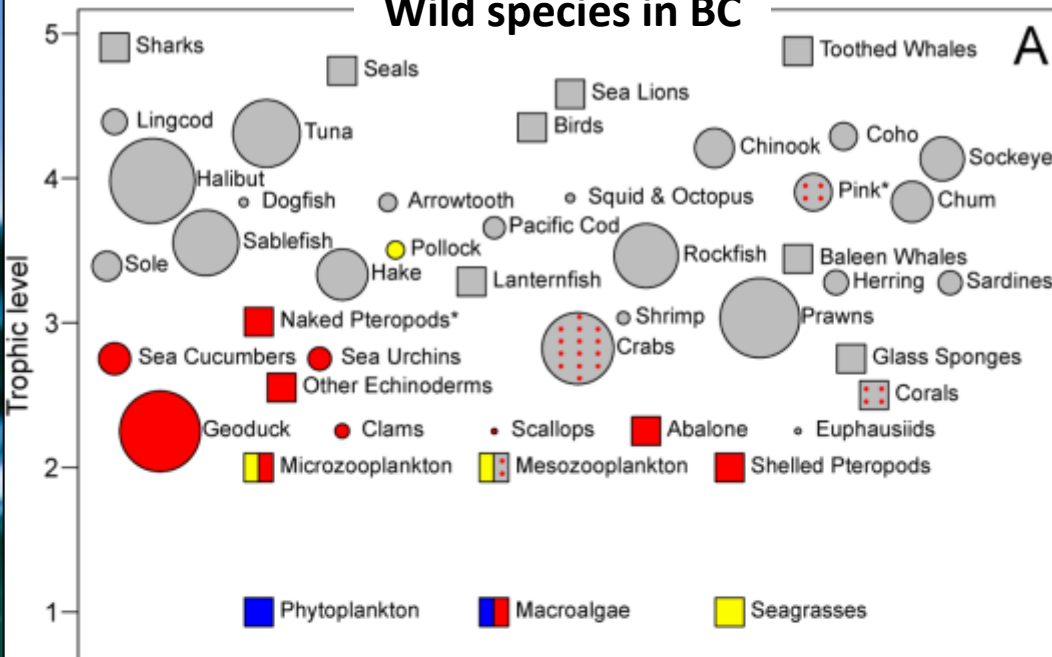
- Affected 20% of BC's land area
- Killed 53% commercial lodgepole pine
- **Projected economic impact = \$57B (2009-54)**



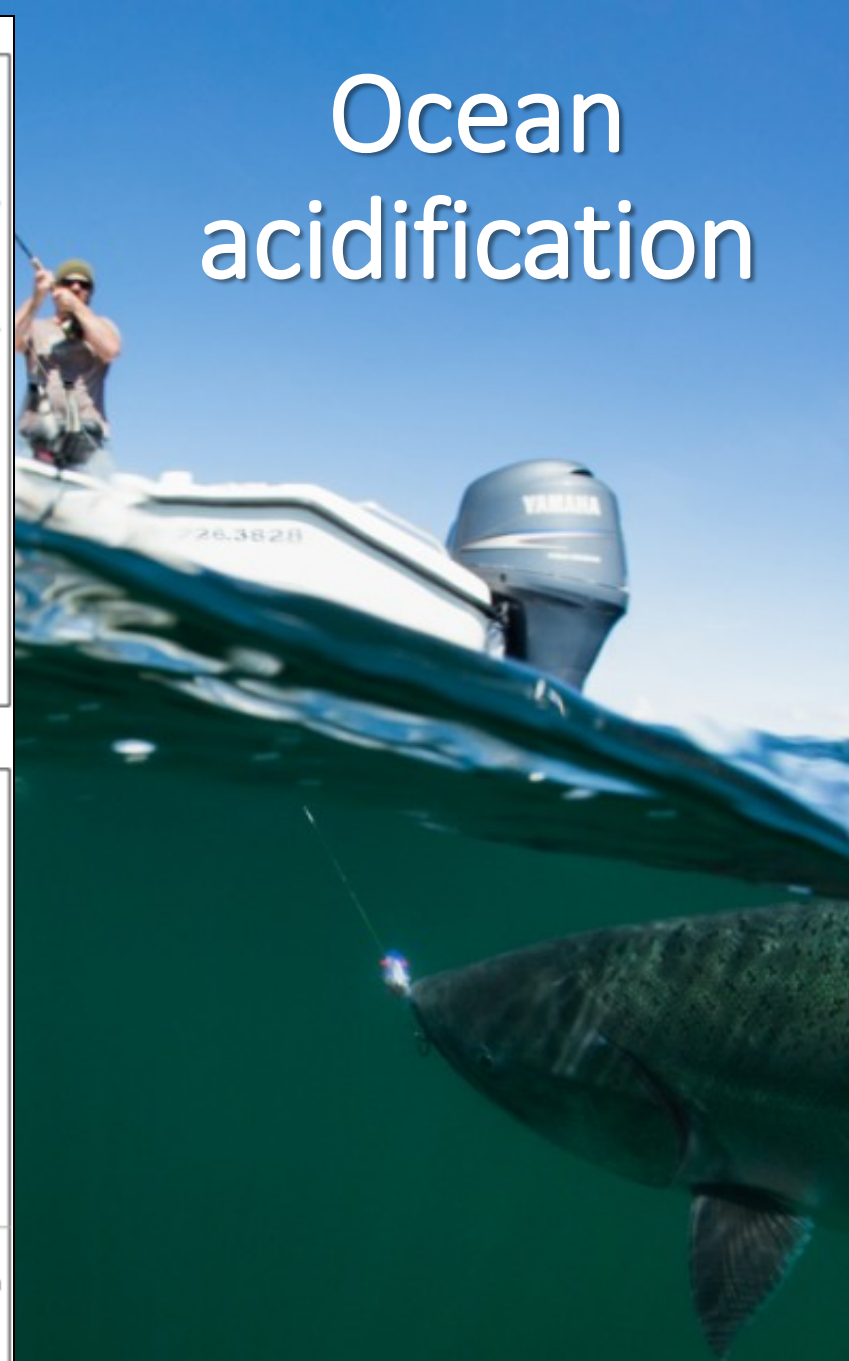
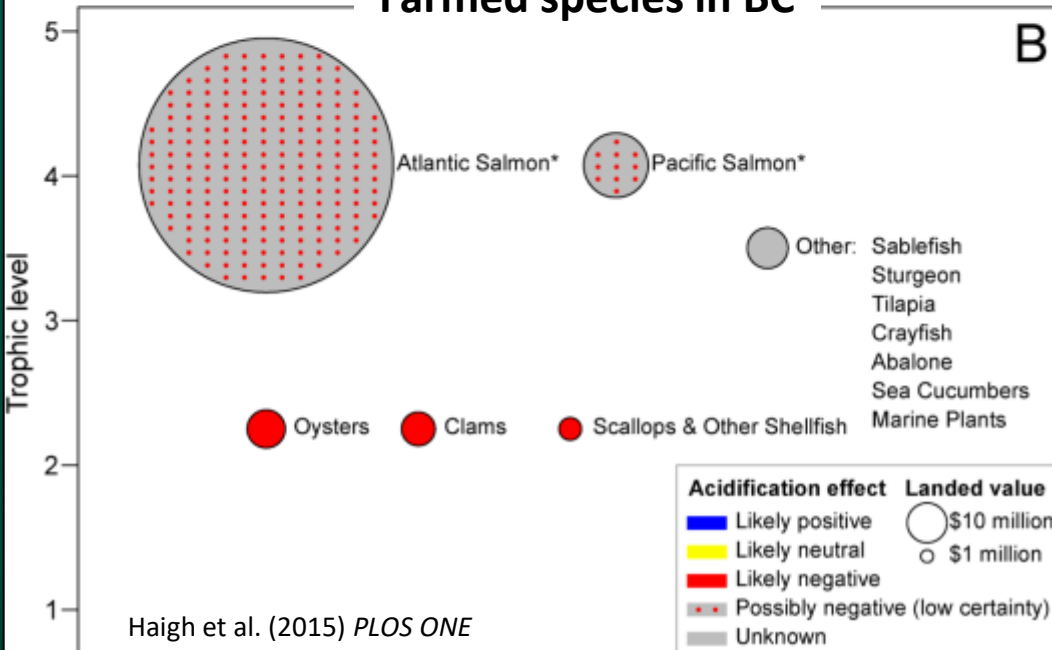
Corbett et al. (2015) *Forestry*

Ocean acidification

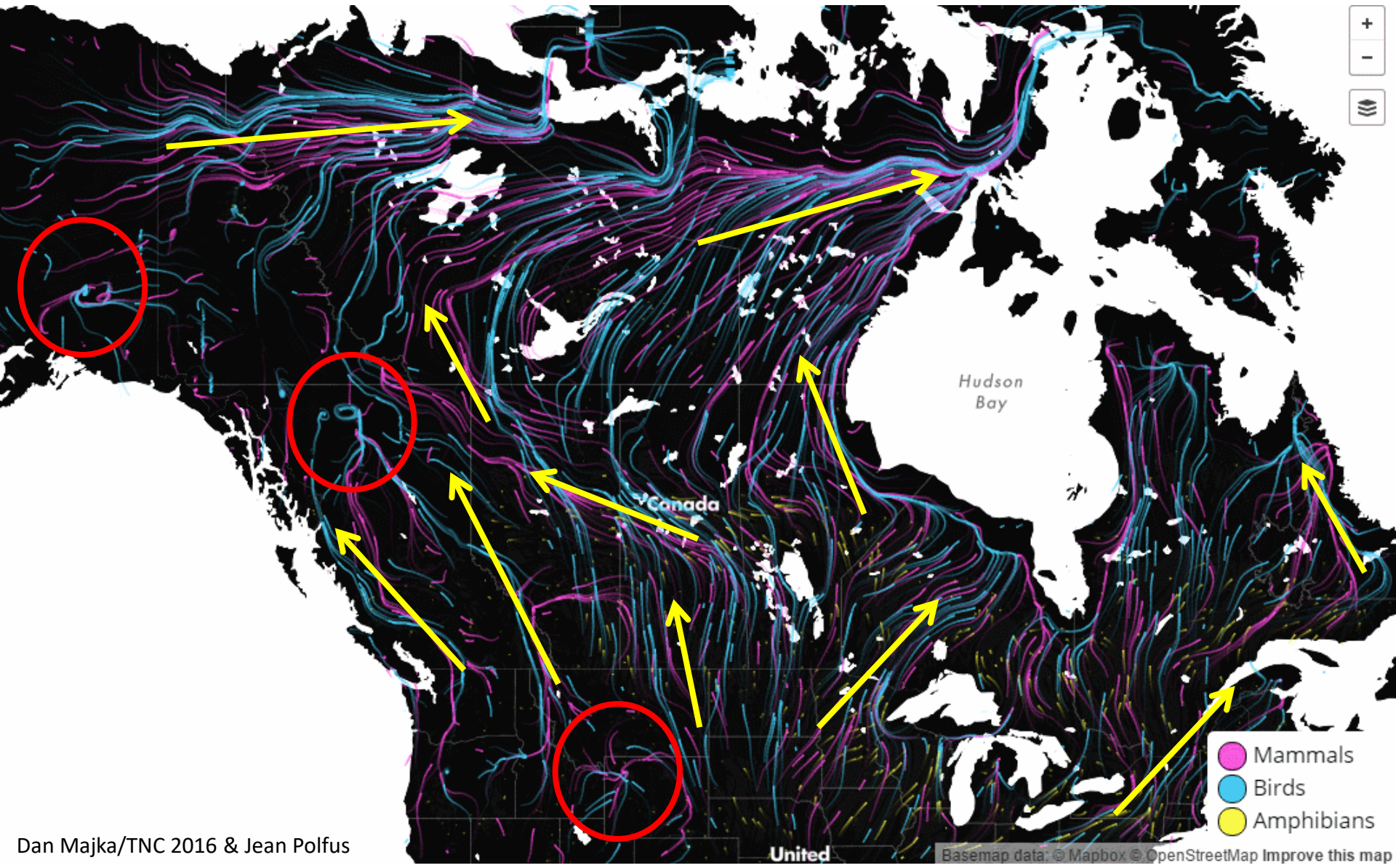
Wild species in BC



Farmed species in BC



(Some) Species are moving north



GOAL



Yellowstone to Yukon
Conservation Initiative

VISION: Habitat connected
from Yellowstone to Yukon

WHY: Critical for species with
big ranges; even more so
under climate change

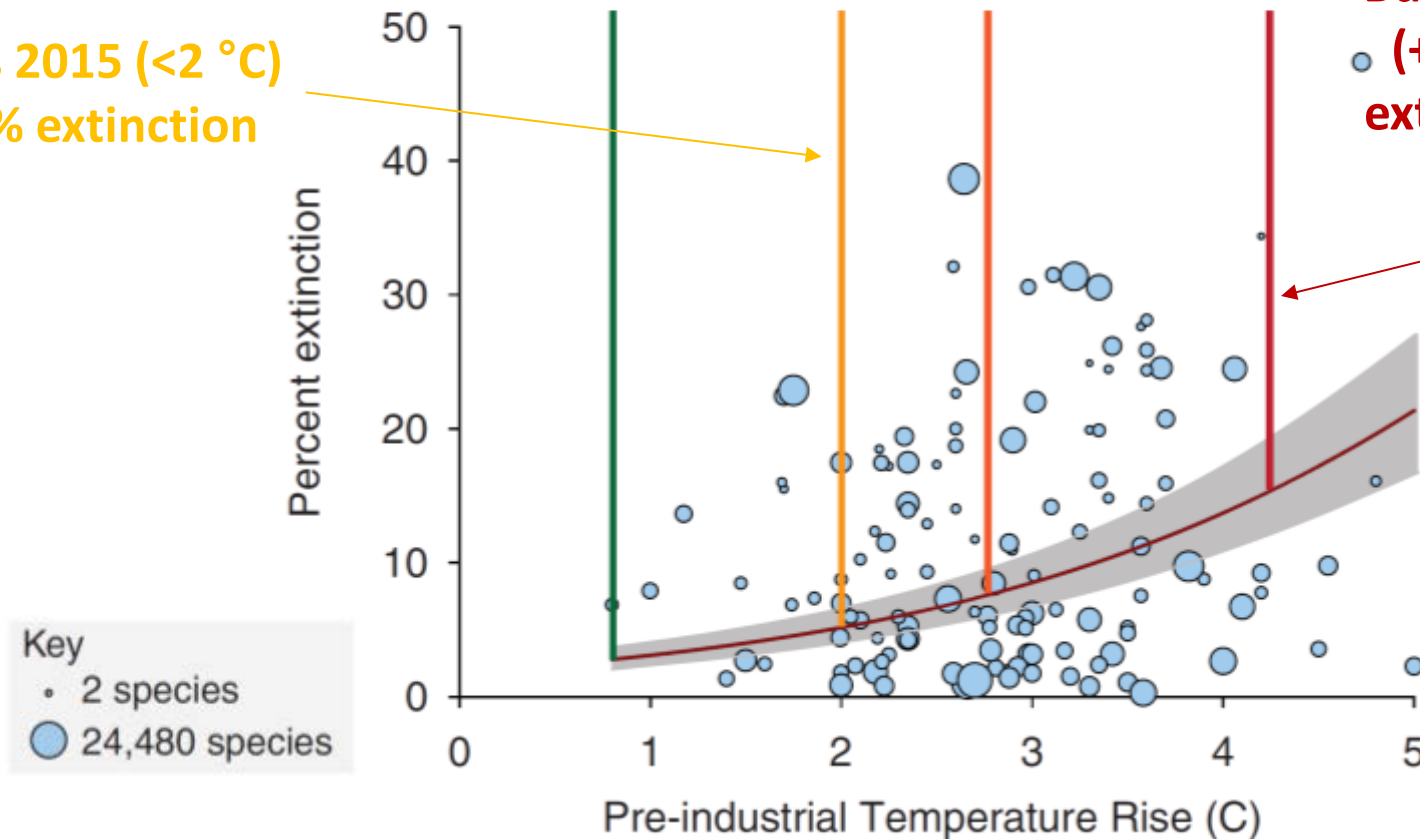



Extinction risk rises with temperature

| Scenario | Current | Target | RCP 6.0 | RCP 8.5 |
|------------------------|---------|--------|---------|---------|
| Predicted extinction % | 2.8 | 5.2 | 7.7 | 15.7 |

Paris 2015 (<2 °C)
= 5% extinction

Business-as-usual
(+4.3 °C) = 16%
extinction, or 1 in
6 species





Progress comes from
sticking your neck out

Be **bold**

Be **creative**

Be **strategic**

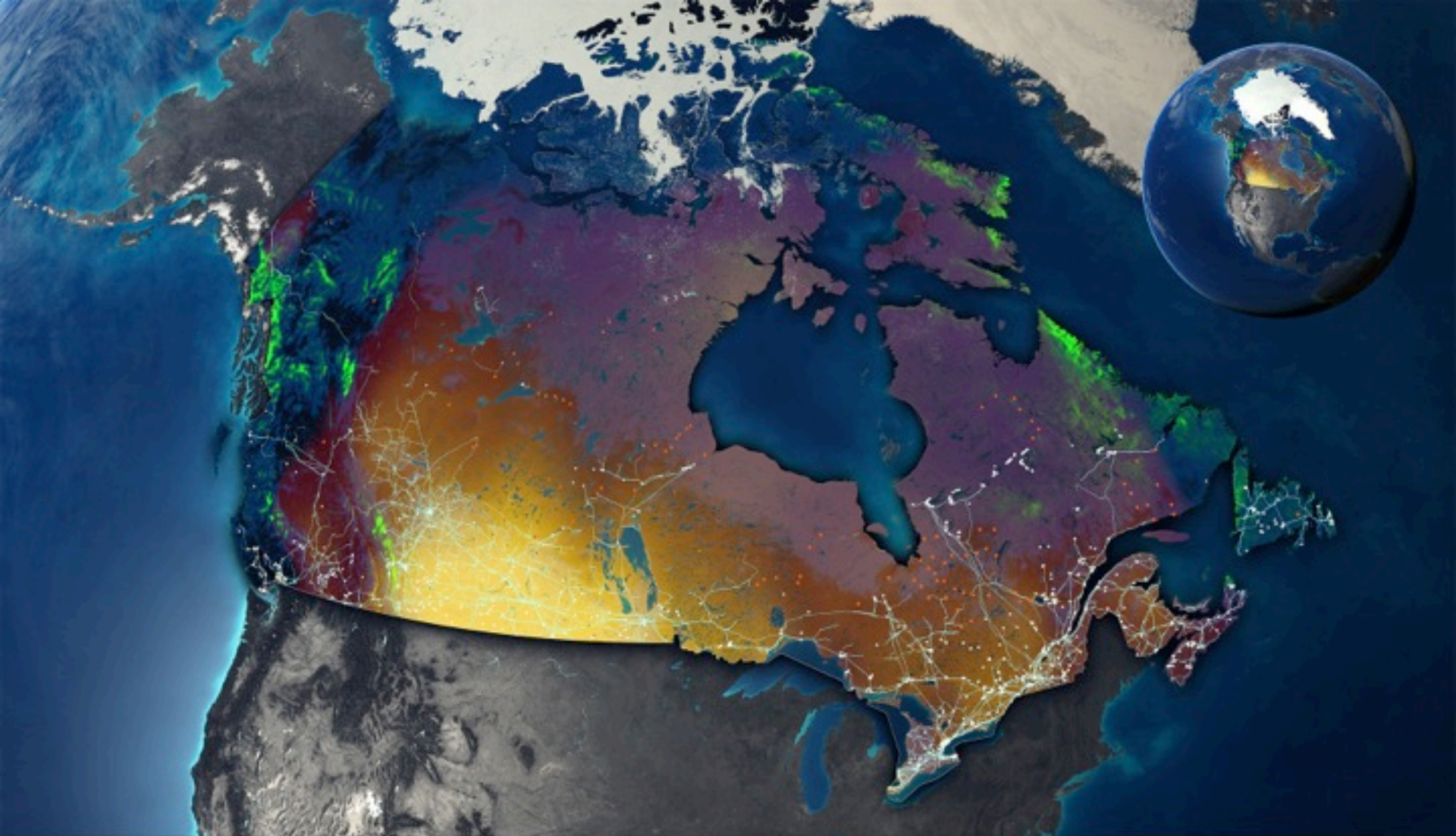
Nations Unies

Conférence sur les Changements Climatiques 2015

COP21/CMP11

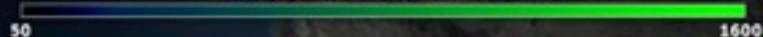
Paris France



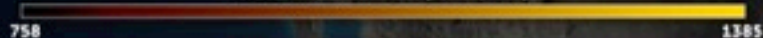


Canada's vast renewable energy potential

WIND ENERGY (W/m^2) AT 50M



SOLAR ENERGY (kWh/kW)



Existing Dams

Potential Dams



Transmission Lines



GLOBAlIA

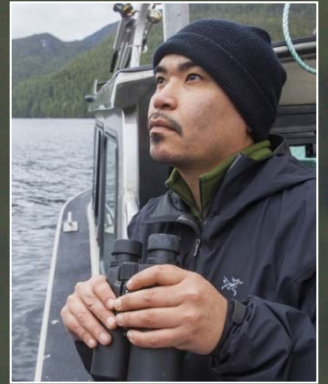
Great Bear Rainforest & Great Bear Sea

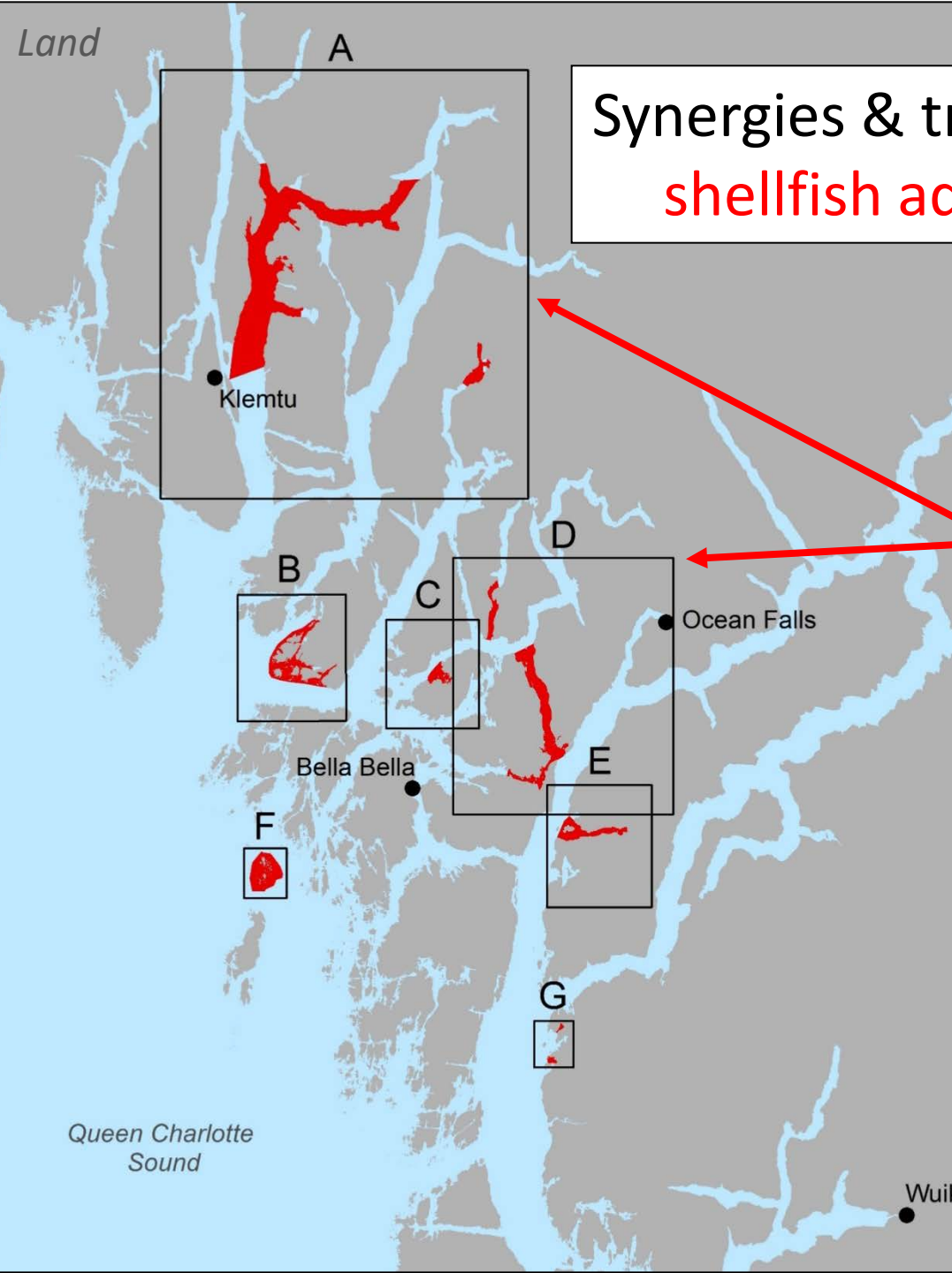


“We’re looking at science in a new way.
We take traditional ecological knowledge and
local knowledge and merge that with the best
available western science.”

Douglas Neasloss

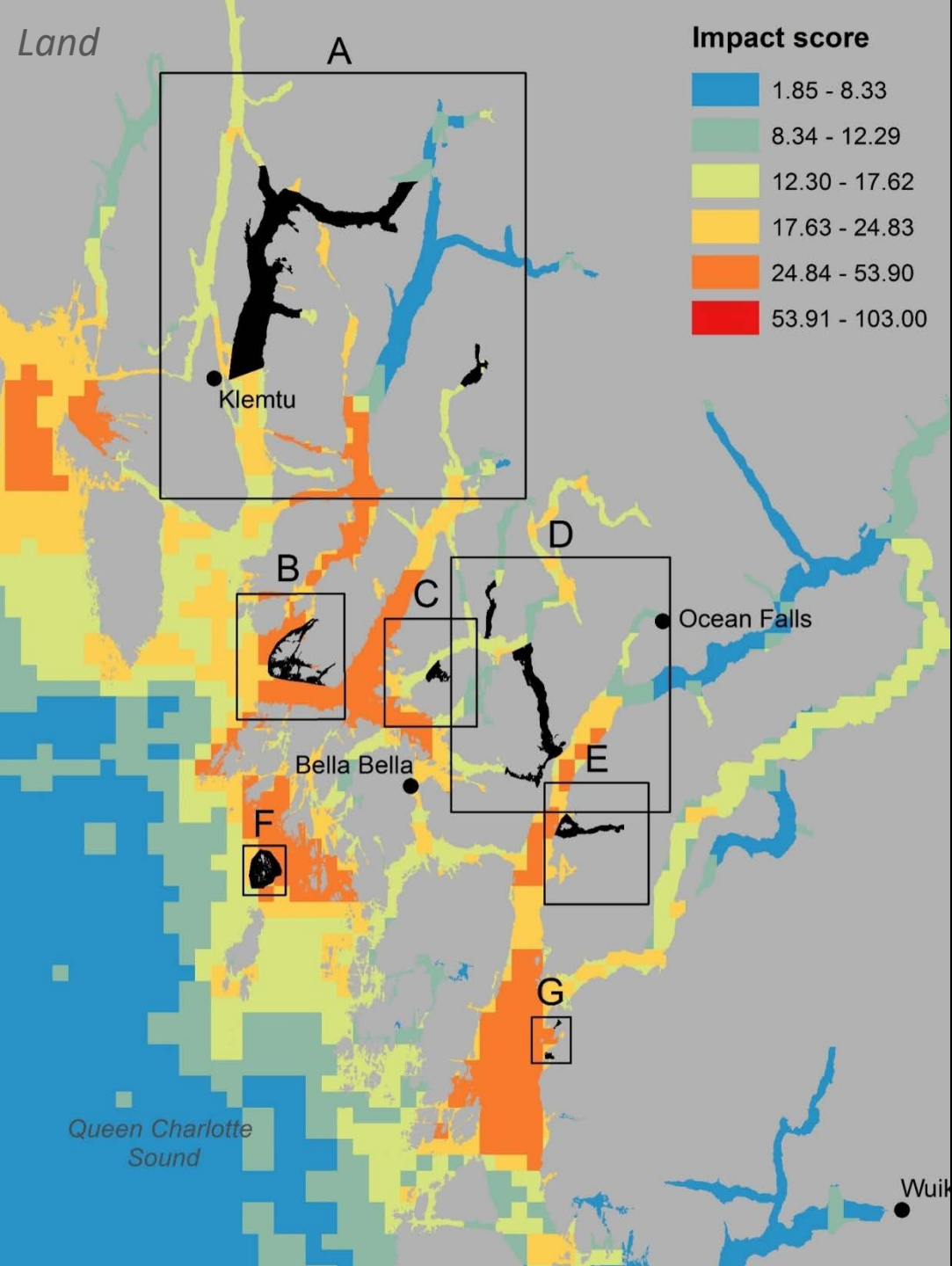
Kitasoo/Xai'Xais Chief Councilor





Synergies & trade-offs in conservation, shellfish aquaculture, ecotourism





Synergies & trade-offs in conservation, shellfish aquaculture, ecotourism



My generation grew up in a world
with **climate change** and
biodiversity loss.



Our choices affect the world
future generations will inherit.

Thank you – Merci – Gracias



University
of Victoria

LIBER
ERO



CCIRA

natural
capital
PROJECT



MaPP



MEOPAR



TURNER
FOUNDATION
INC.

Wilburforce
Foundation
Mitacs
Elevate