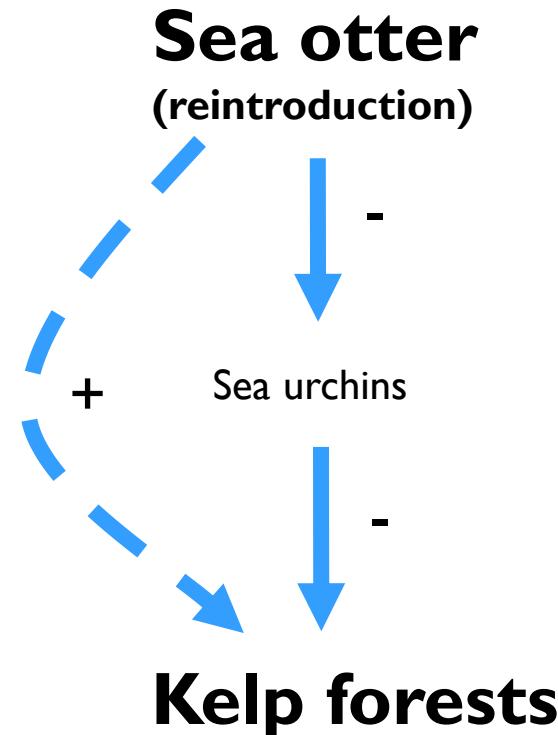




Sea otters, kelp forests, and ecosystem services

Kai Chan, Edward Gregr, and John Driscoll

*Institute for Resources, Environment and Sustainability,
University of British Columbia*





Sea otters, kelp forests, and ecosystem services

Kai Chan, Edward Gregr, and John Driscoll

*Institute for Resources, Environment and Sustainability,
University of British Columbia*

Four ecosystem service benefits

- Commercial catch
- Supplemented catch
- Tourism
- Carbon sequestration

10 Ecosystem service providers

- E.g., sea otters, red sea urchins

Four management scenarios for sea otters

- Extirpation, carrying capacity, regional and local management

Effects on benefits presented in aggregate, and broken out into regional and local scales

- To explore how access influences benefit realization



Sea otters, kelp forests, and ecosystem services

Kai Chan, Edward Gregr, and John Driscoll

*Institute for Resources, Environment and Sustainability,
University of British Columbia*

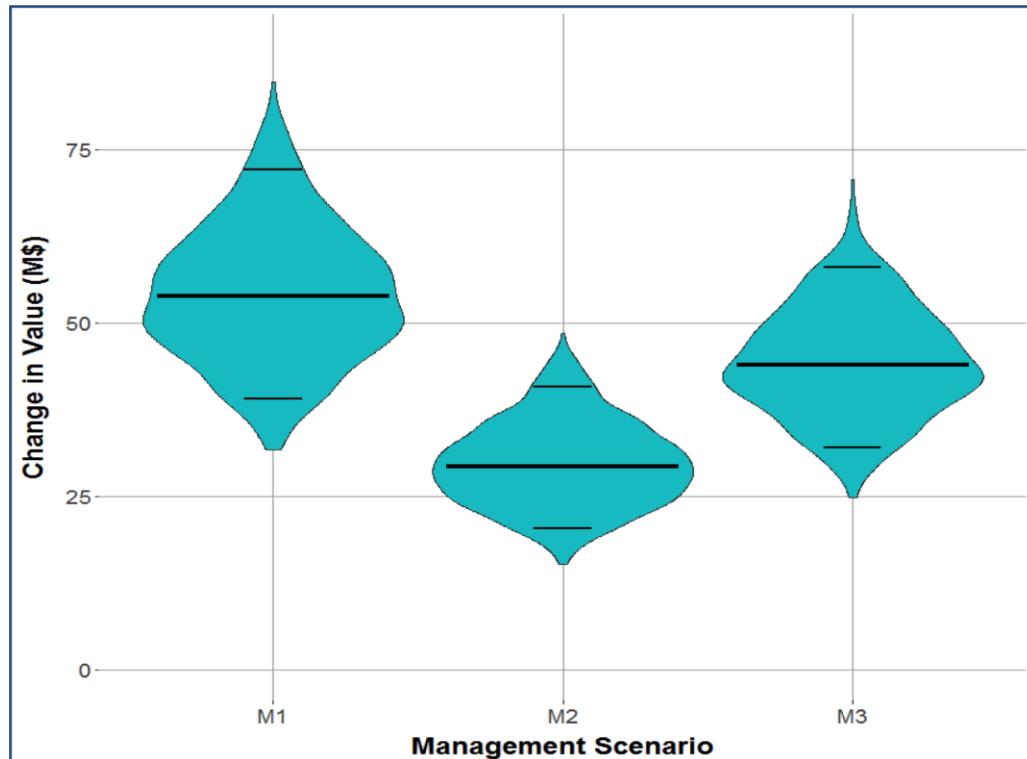


Fig. 1. Total aggregate change in value (M\$) from baseline (no otters) for the three management scenarios considered



Sea otters, kelp forests, and ecosystem services

Kai Chan, Edward Gregr, and John Driscoll
Institute for Resources, Environment and Sustainability,
University of British Columbia

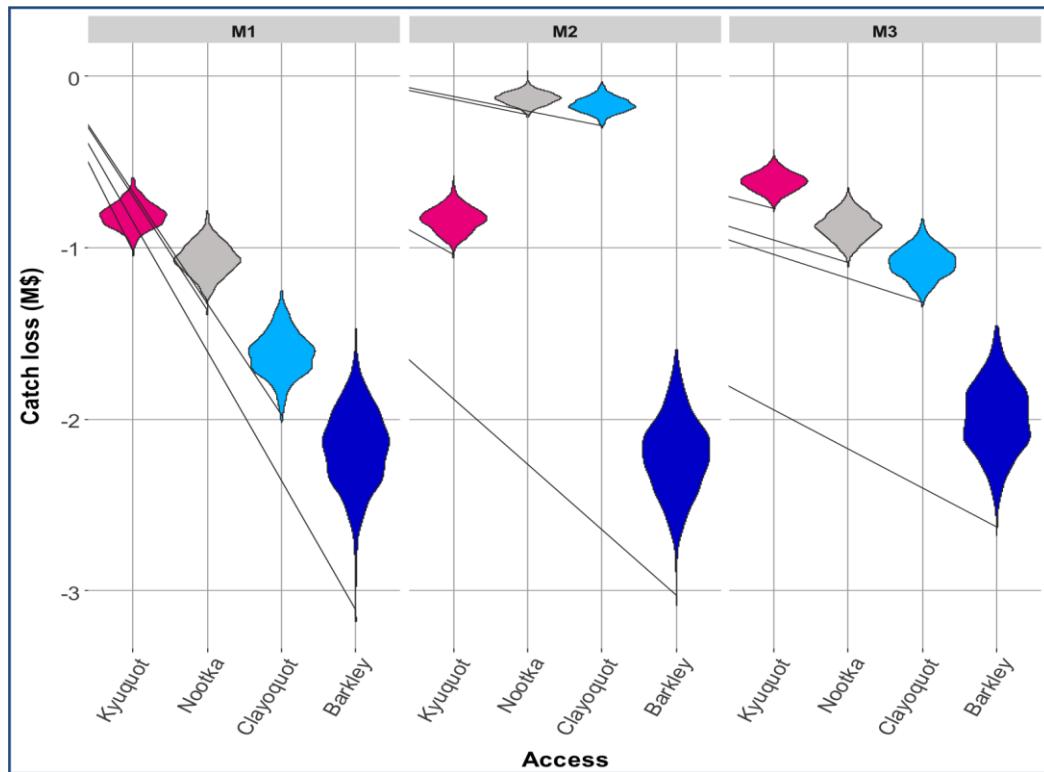


Fig. 2. Regional cost (M\$) to fishery for each management scenario