

#### What is an NMCA Reserve?

A National Marine Conservation Area is a marine protected area developed by Parks Canada to be managed for ecologically sustainable use, including commercial, recreational, and cultural uses. Oil and gas exploration/development, mining and unsanctioned dumping are prohibited in NMCAs. NMCA Reserves are a special type of NMCA specifically intended to protect the harvesting rights of Aboriginal peoples with unresolved land claims.

### The Proposed Boundary



Erin Pippus UBC Environmental Sciences Twitter: @PippusE

### **Protecting the Strait**

The southern region of the Strait of Georgia is an immensely diverse region, home to more than 3000 aquatic species, including 22 species listed under the Species at Risk Act. In 2003, British Columbia and Parks Canada declared intent to establish the southern Strait of Georgia as a National Marine Conservation Area (NMCA) Reserve. Parks Canada released a feasibility report and the proposed boundary in 2012, but as of 2017 the NMCA has not been established. Now that the Trans Mountain Pipeline has been approved and oil tanker traffic in the area is expected to increase drastically, it is necessary to properly assess and implement the proposed Southern Strait of Georgia NMCA Reserve.

### **Species in the Southern Strait of Georgia**



An Orca pod with an endangered classification status



Economically important salmon and herring stocks



Giant Pacific octopus, the world's largest octopus species





Millions of birds, from water fowl to birds of prey

Photo Courtesy of the Canadian Parks and Wildlife Society

100-year old rockfish

Seals, sea lions, and other aquatic mammals

# A Place on the Precipice: The Southern Strait of Georgia

# **Recommendations and Implications**

### Fully implement NMCA Reserve before the development of the Trans Mountain Pipeline

Implications: New regulations and requirements for commercial vessels are in place prior to increased tanker traffic

# Create no-take zones in areas of high ecological importance

Implications: Provide refuge for species of environmental and economic importance

# Introduce noise limits and specific traffic lanes for commercial vessels

Implications: Manage noise from shipping vessels, which decreases the ability of orcas to communicate (Veirs *et al.* 2016)

### **Create NMCA Reserve all-at-once instead of in phases**

Implication: Protection provided for all vulnerable areas of the NMCA Reserve from its inception

Photo Courtesy of the Canadian Parks and Wildlife Society

### Update all Action Plans for SARA listed species in conjunction with the NMCA Reserve development

Implication: Allows for the integration of federally managed species plans into NMCA Reserve regulations and management capabilities

# Increase public engagement and transparency

Implications: Continuous engagement with stakeholders increases compliance with final product

## Conclusions

The southern Strait of Georgia is extremely ecologically and culturally important. It requires proper protection if it is to stay that way. The proposed NMCA Reserve site needs to be established before the expected increase in tanker traffic associated with the Trans Mountain Pipeline in order to provide a wide range of protections and management protocols for its vulnerable native species.

#### References

- Canada, Parks Canada. (2012). *The proposed Southern Strait of Georgia National Marine Conservation Area Reserve: a feasibility study*. Vancouver: Parks Canada.
- Veirs, S., Veirs, V., & Wood, J. D. (2016). Ship noise extends to frequencies used for echolocation by endangered killer whales. *PeerJ*, 4. doi:10.7717/peerj.1657