

MPAs in the Salish Sea

Marine Protected Areas Federal Advisory Committee

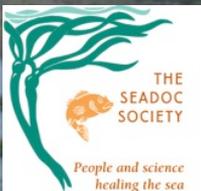
Regional Panel, Tacoma, WA

June 3, 2015

Dr. Leslie Dierauf

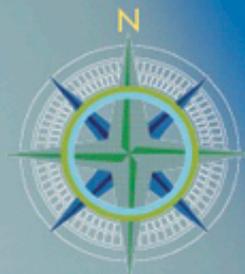
Board Chair, SeaDoc Society

Karen C. Drayer Wildlife Health Center, UC Davis



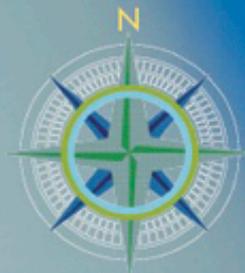
THE SALISH SEA

- Coastline length (including islands): 4,642 miles (7,470km)
- Total number of islands: 419, with a combined total land area of 1,413 square miles (3,660sq. km)
- Sea surface area: 6,535 square miles (16,925sq. km)
- Maximum depth: 2,133 feet (650m) at Bute Inlet, B.C.
- Population: approximately 8 million
- Number of species: mammals: 38; birds: 172; fish: 253; reptiles: 2; and more than 3,000 macro-invertebrates (ones you can see without a microscope)



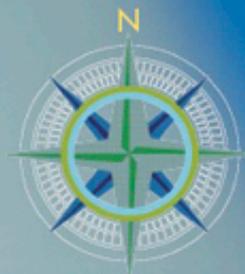
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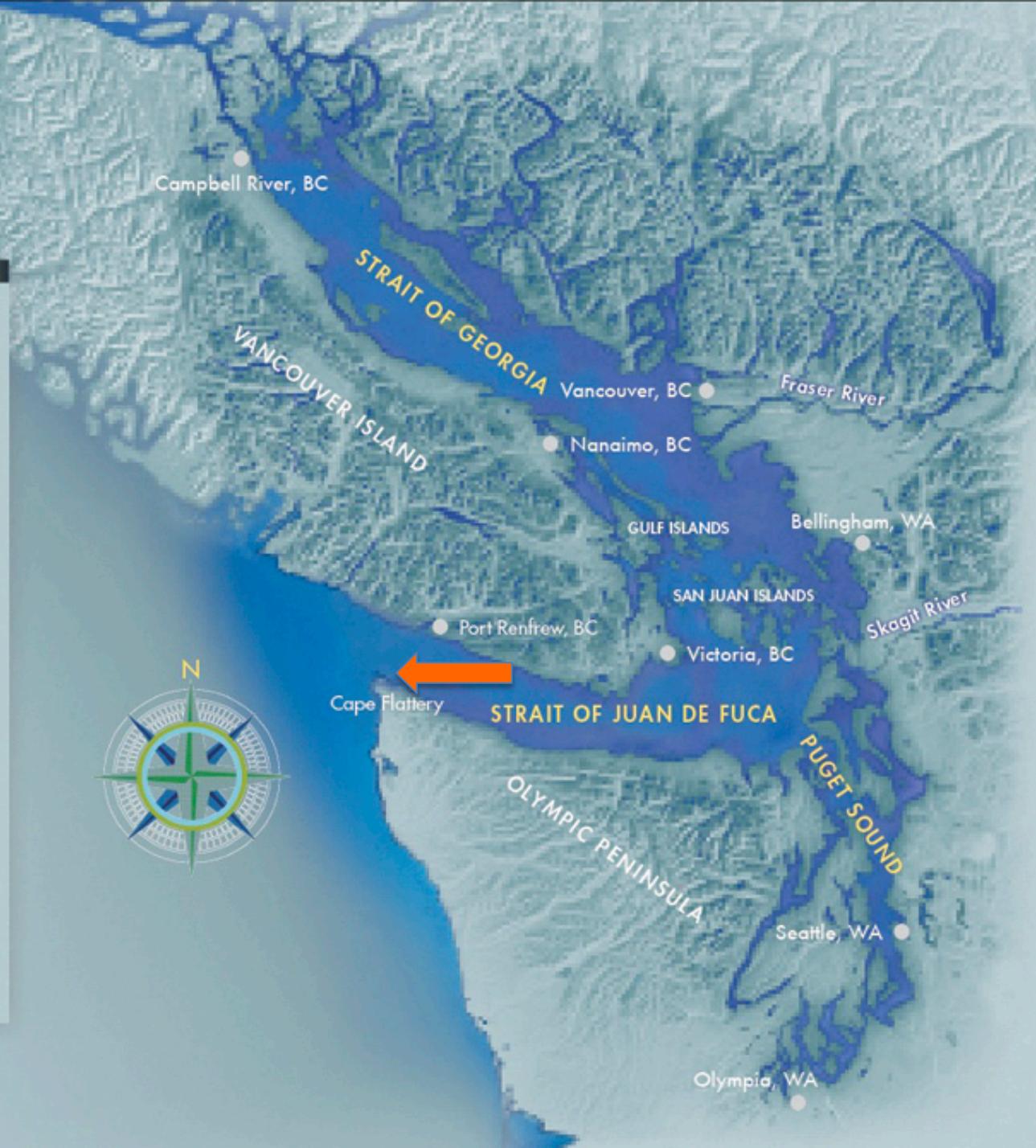
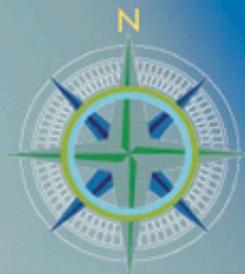
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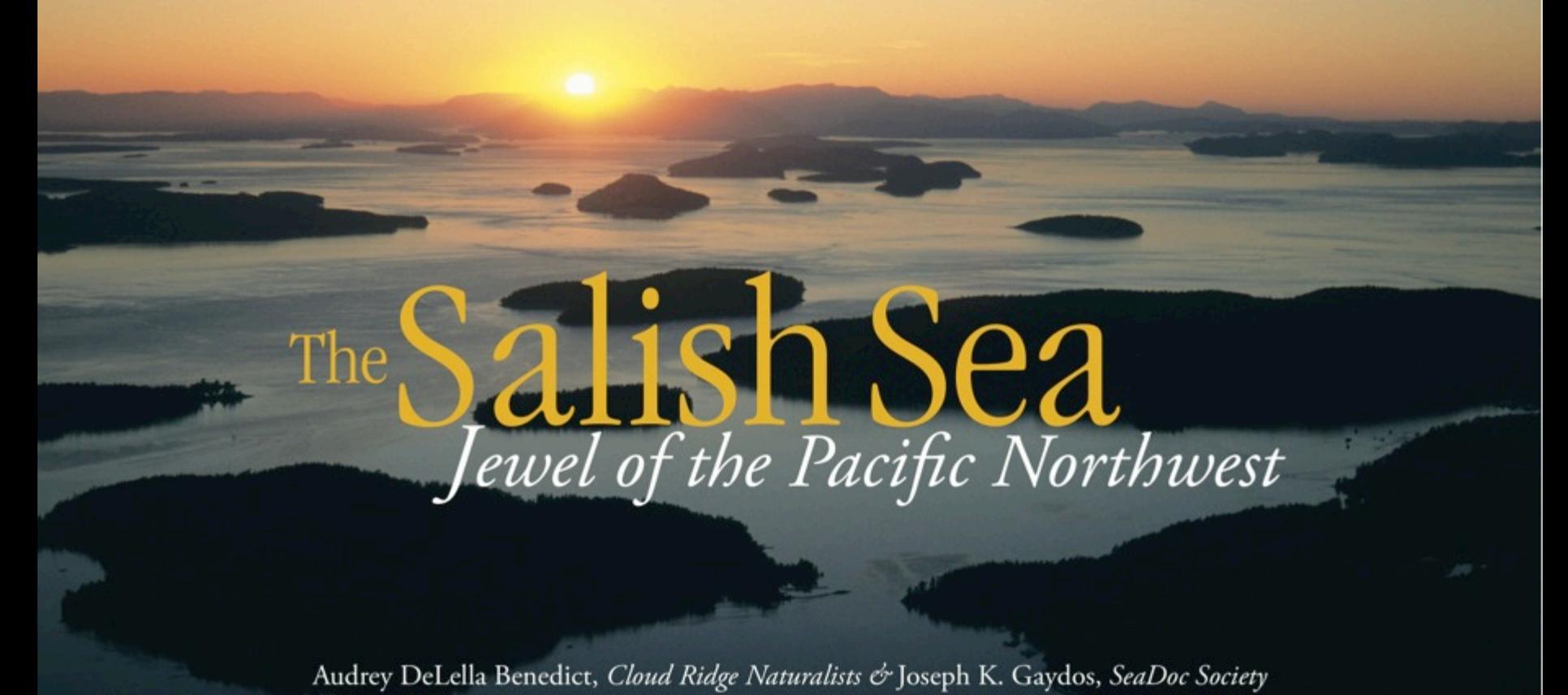
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A wide-angle photograph of a sunset over a vast body of water, likely the Salish Sea. The sun is a bright, glowing orb in the upper center, casting a warm orange and yellow light across the sky and reflecting on the water. The horizon is marked by a range of low mountains. In the foreground, several dark, forested islands and peninsulas are scattered across the water, their silhouettes softened by the distance and light.

The Salish Sea

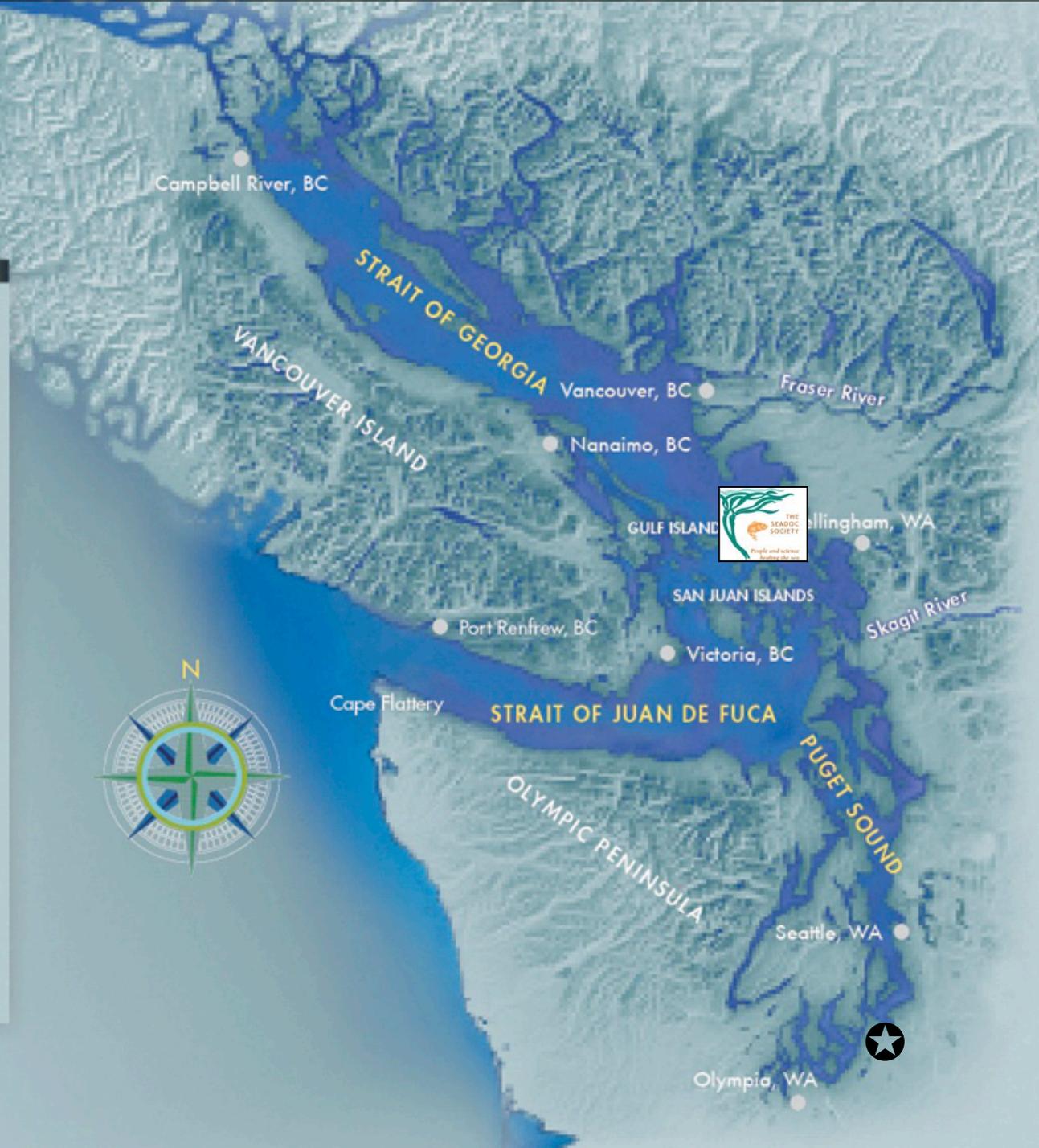
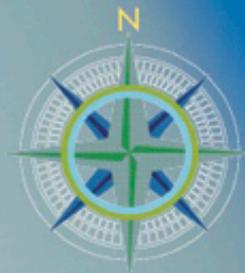
Jewel of the Pacific Northwest

Audrey DeLella Benedict, *Cloud Ridge Naturalists* & Joseph K. Gaydos, *SeaDoc Society*



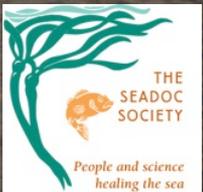
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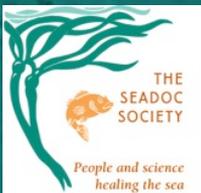
The SeaDoc Society

- Science-based marine conservation organization
- Since 2000, working to “Ensure the health of marine wildlife and their ecosystems through science and education”
- Use science to improve management, policy and personal decisions about marine resources
- NOT an advocacy group



A Sampling of MPA-Related Science

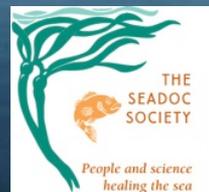
- SeaDoc has annual science RFPs/targeted requests
- Types of MPA Topics
 - MPA's ability to safeguard native species from invasives
 - Rockfish larval dispersion
 - Evaluation of nearshore buffer zones as MPAs
 - Seafloor habitat mapping for marine spatial planning
 - Tribal perspectives on MPAs
 - MPAs and top predator impacts on fish populations
 - Evaluating Northern abalone adult aggregation for recovery
 - Efficacy of voluntary recovery zones and British Columbia's Rockfish Conservation Areas (RCAs)



MPA-Related Science Translation

- **Science and Information to improve Decision-Making**
- **Science Translation for—**
 - **Washington Fish & Wildlife Commission**
 - **Northwest Indian Fisheries Commission**
 - **Governor's Office**
 - **Regional Marine Resource Committees**
 - **Others**

© J. Gaydos



2010 US Federal Listing of 3 rockfish species

- Yelloweye (T)
- Canary (T)
- Bocaccio (E)

All Puget Sound /
Georgia Basin DPS



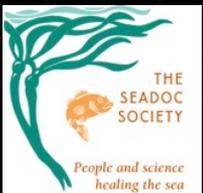
2011 Transboundary Rockfish Recovery Workshop, Seattle, WA

- Tribal perspective
- Social science
- Efficacy of British Columbia's RCAs
- Science known
- Science still needed

Economic Valuation of Recreational SCUBA



© Brandon Cole, *The Salish Sea*
(Sasquatch Books)

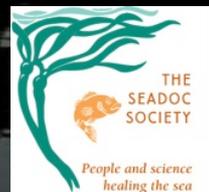


Parting Thoughts on PNW MPAs

- Tribal perspective, involvement, and support is critical
- Social science knowledge is not as far advanced as natural resource science
- Rockfish and Abalone recovery present a pressing opportunity to consider a network of rocky-habitat MPAs in the region

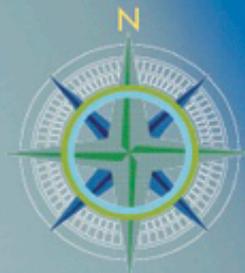
And...remember...

- There's a lot more here in the PNW beyond Puget Sound



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An underwater photograph of a vibrant coral reef. In the upper left, a dark fish swims towards the right. The reef is covered in various corals, including a prominent pink branching coral. A large, brown starfish is visible on the left side of the reef. The water is clear and blue, with sunlight filtering through from above. The entire image is framed by a dark blue border with a repeating geometric pattern.

**individually, we are one drop.
together, we are an ocean.**

-ryunosuke satoro



Thank you!





Marine Protected Areas
Managed by the
Washington State
Department of
Fish and Wildlife



-  Conservation Area (no takes allowed)
-  Marine Preserve (limited takes allowed)
-  Cucumber and Urchin Exclusion Zone (EZ)

Conservation Areas

-  Brackett's Landing Shoreline Sanctuary
-  City of Des Moines Park
-  Keystone
-  Orchard Rocks
-  Octopus Hole
-  Salter's Point Beach
-  South 239th Street Park
-  Sund Rock
-  Waketickeh Creek

Marine Preserves

-  Admiralty Head
-  Argyle Lagoon
-  Carkeek Park
-  Colvos Passage
-  Discovery Park
-  Emma Schmitz Memorial
-  False Bay
-  Friday Harbor
-  Golden Gardens Park
-  Lincoln Park
-  Richey Viewpoint
-  Saltwater State Park
-  Shaw Island
-  Titlow Beach
-  Yellow and Low Islands
-  Z's Reef

Sea Cucumber and Sea Urchin Commercial Harvest Exclusion Zones

-  Haro Strait