Mason County Hearing Examiner

Taylor Shellfish Oakland Bay Floating Culture

Follow up Presentation

August 16, 2023



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Follow Up Presentation Overview

- Scale of proposed culture
- Environmental concerns
- Marine Mammals
- Monitoring



Scale of Proposed Project

- Project is not a "large" or of "unprecedented" scale when considering oyster culture.
 - 45,000 acres of shellfish cultured in Washington State
 - 5,000 acres of shellfish cultured in south Puget Sound
 - A floating culture operation on 161.3 acres is approved for Willapa Bay, WA.
 - 15 foot versus 30 foot spacing
 - Maximum of 452,000 cages versus 33,000 cages



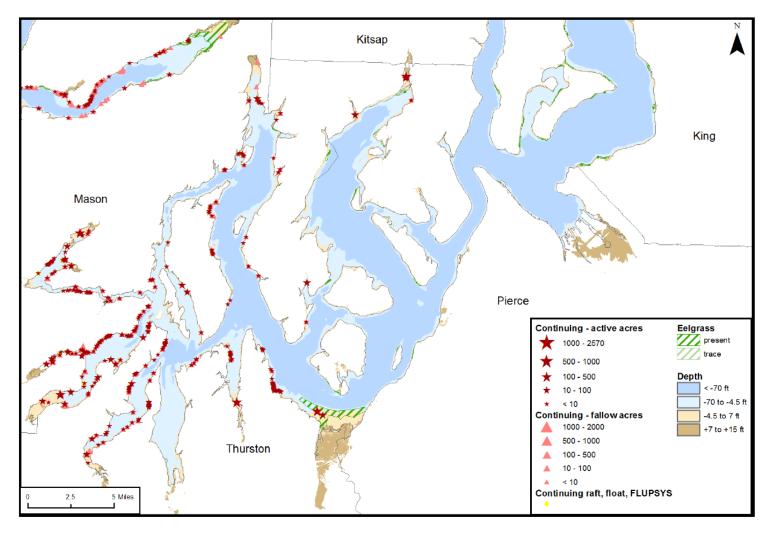
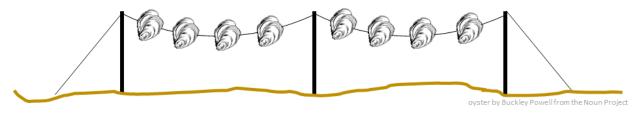


Figure D-5. South Puget Sound (south section) continuing acres and eelgrass

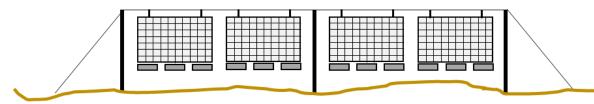
Scale of Proposed Project

- Proposed "floating bags" are a subset of common culture methods
 - Oysters on longlines
 - Flip bags on lines
 - SEAPA baskets on lines
 - Suspended or floating bags on lines

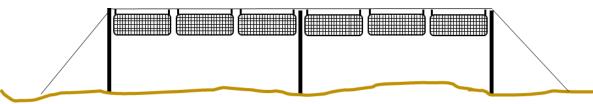




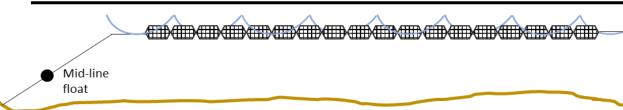
Representative Side-View Schematic of Long-line Oyster Culture



Representative Side-View Schematic of Flip-bag Oyster Culture



Representative Side-View Schematic of SEAPA Basket Oyster Culture



Representative Side-View Schematic of Suspended Oyster Culture Row of baskets or bags may rest on substrate at certain low tides

Culture Methods





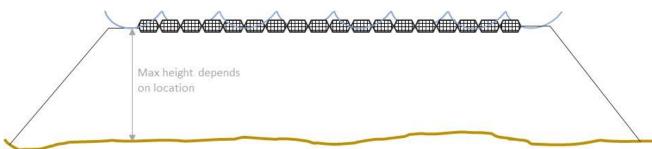


Floating Bag Culture

Several environmental benefits

- No grounding
- Reduced shading
- Increased spacing





Representative Side-View Schematic of Floating Oyster Culture Row of baskets or bags floats at water surface throughout tide cycle



Environmental Interactions

- Shading
 - Sited in an area without eelgrass or macroalgae
 - 30 foot spacing and movement
- Circulation/Erosion / Accretion
 - 6-inch profile versus 10-30 foot water depth
 - 30 foot spacing
- Water Quality
 - Relatively low stocking density
 - Bioextraction



Potential Impacts and Benefits:

Marine Mammals

- Potential Presence is Low:
 - No occurrence of most whale species the project area is too restricted
 - Highly unlikely occurrence of humpback, gray, Southern Resident Killer Whale
 - Uncommon occurrence of transient Killer Whale
 - More common species include harbor seals, sea lions, porpoises (harbor and Dall's)
- Potential Use of the Culture Area:
 - Most cetaceans will navigate through the project area and avoid floating culture
 - Forage opportunities exist for smaller species such as harbor seals, otters, and sea lions



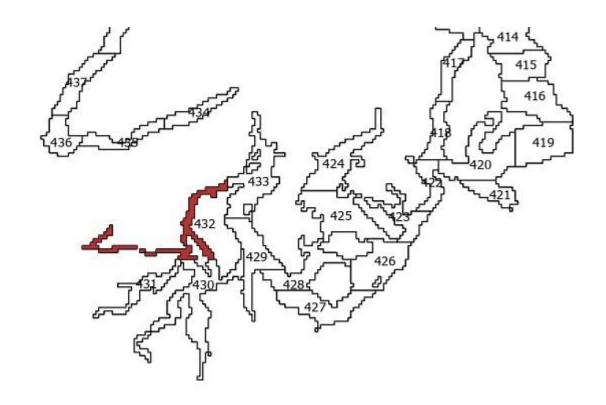
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Whale Museum Data Set





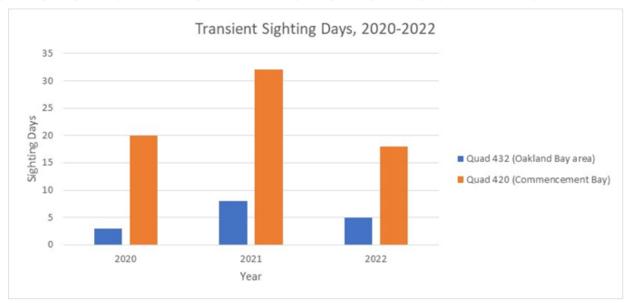
Whale Museum Quadrants





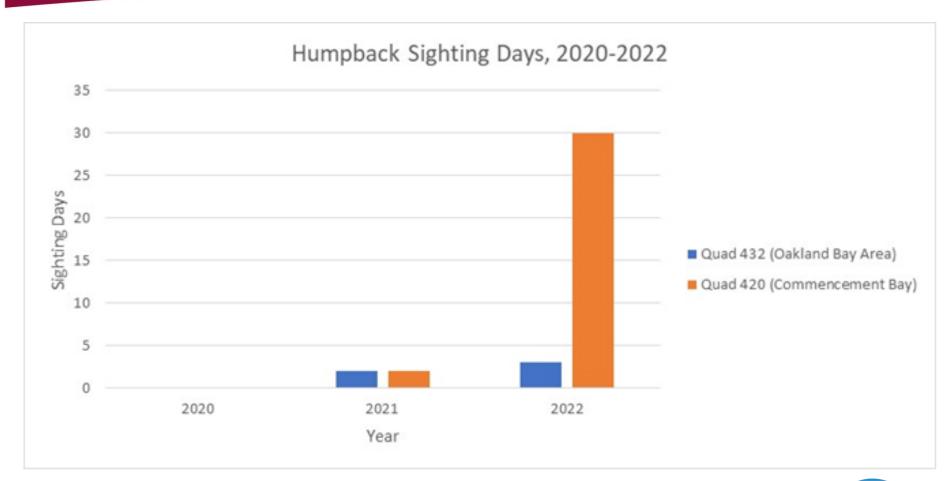
Marine Mammals

- Southern Resident Killer Whale (ESA listed):
 No documented occurrence
- Transient Killer Whale: Uncommon





Marine Mammals



Monitoring

- Taylor Shellfish completed a Habitat Management Plan which includes a comprehensive analysis of environmental interaction concluding "no net loss of ecological functions".
- Taylor Shellfish will conduct a robust set of monitoring including:
 - All measures identified in the Programmatic Consultation
 - Herring spawning
 - Debris patrols
 - Fish or wildlife inspections
 - Anchor placement



Questions



