

The Washington Shellfish Initiative

Implementing the NOAA National Aquaculture Policy in Washington

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Washington Department
of Ecology

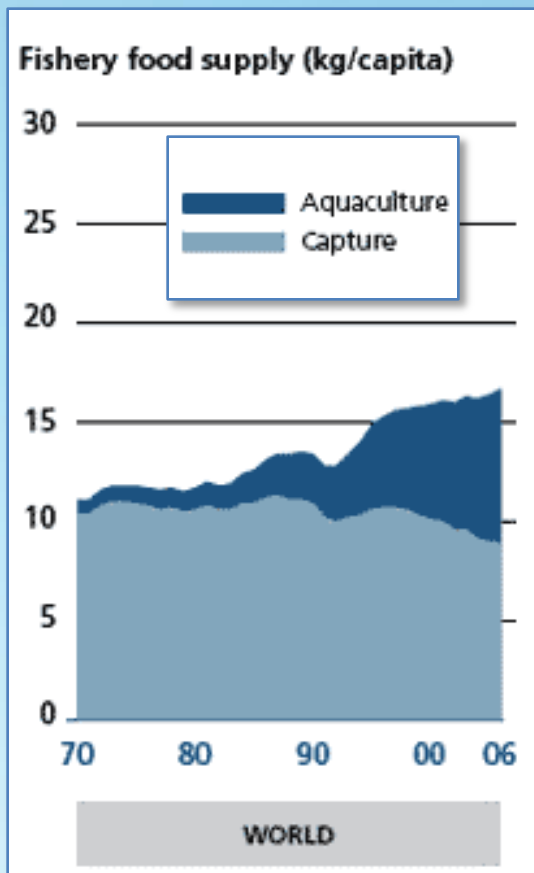
March 27, 2013



Farmed Geoduck (*Panopea generosa*)

NOAA Aquaculture Policy

- Enable domestic production of seafood
- Maintain healthy marine ecosystems
- Create employment and business opportunities
- Support working waterfronts
- Restore and conserve marine habitat



Olympia Oyster (*Ostrea lurida*)

National Shellfish Initiative

- Spatial planning and efficient permitting
- Research on environmental effects
- Technologies for restoration and farming
- Coordinated and innovative financing



Oyster/Eelgrass Habitat Study



Shellfish Seed Sorter

Washington Shellfish Initiative

Why Shellfish?

- It's about jobs and economic opportunity
- It's about clean water
- It's about culture and heritage
- And good government can help



Native Americans Harvesting Shellfish (NWIFC)

6/17/01

FIRST AMENDMENT: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof, or abridging the freedom of speech, or of the press, or the right of the people peaceably to assemble, and to petition the government for a redress of grievances."

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The Olympian

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OUR VIEWS

Shellfish are worth saving

Do Thurston County commissioners have the political courage to save the shellfish industry in South Puget Sound?

Will South Sound residents support commissioners in their attempts to clean up the water—even if it means a new tax?

As with many of today's pressing problems, the issue boils down to two things — leadership and money. Will commissioners provide the leadership and will taxpayers provide the money?

Do we value clean water, clams, mussels and oysters enough to invest our hard-earned tax dollars to save them?

By John Dodge, reporter, environmental and public affairs

Pollution eats away at area shellfish beds

BY JOHN DODGE
THE OLYMPIAN

chairwoman of the Puget Sound Action Team, which spearheaded the conference.

BELLEVIEW — Some 60 percent of Puget Sound's prime commercial shellfish growing areas are showing signs of bacterial contamination, according to data presented Monday at the 2001 Puget Sound Research Conference.

The sound's problems are many and obvious, said Elliott Norse, a marine ecologist who founded the Redmond-based Marine Conservation Biology Institute. "There's too many of us, we consume too much and we don't value nature

Washington Shellfish Initiative

Actions

- Establish a public/private partnership to improve shellfish aquaculture
- Promote native shellfish restoration and recreational shellfish harvest
- Ensure clean water to protect and enhance shellfish beds



Razor Clam Harvest



Samish Bay Bivalve Bash

Washington Shellfish Initiative Partnership

- Northwest Indian Fisheries Commission
- Washington Sea Grant
- National Oceanic and Atmospheric Administration
- Environmental Protection Agency
- US Army Corp of Engineers
- US Geological Survey
- Northwest Straits Commission
- Whatcom County Conservation District
- The Nature Conservancy
- Puget Sound Restoration Fund
- Pacific Coast Shellfish Growers Association
- Puget Sound Partnership
- Office of Regulatory Assistance
- Department of Natural Resources
- Department of Health
- Department of Fish and Wildlife
- State Parks Commission
- Department of Ecology

Create Public/Private Partnership for Shellfish Aquaculture

Form Shellfish Interagency Permitting Team

- State: WDOH, WDFW, Ecology, DNR, ORA
- Federal: USACOE, EPA, NOAA, USFWS
- Tribal Governments
- Counties

Implement pilot projects through Model Permitting Program

Provide Technical Assistance for Local Shoreline Master Programs

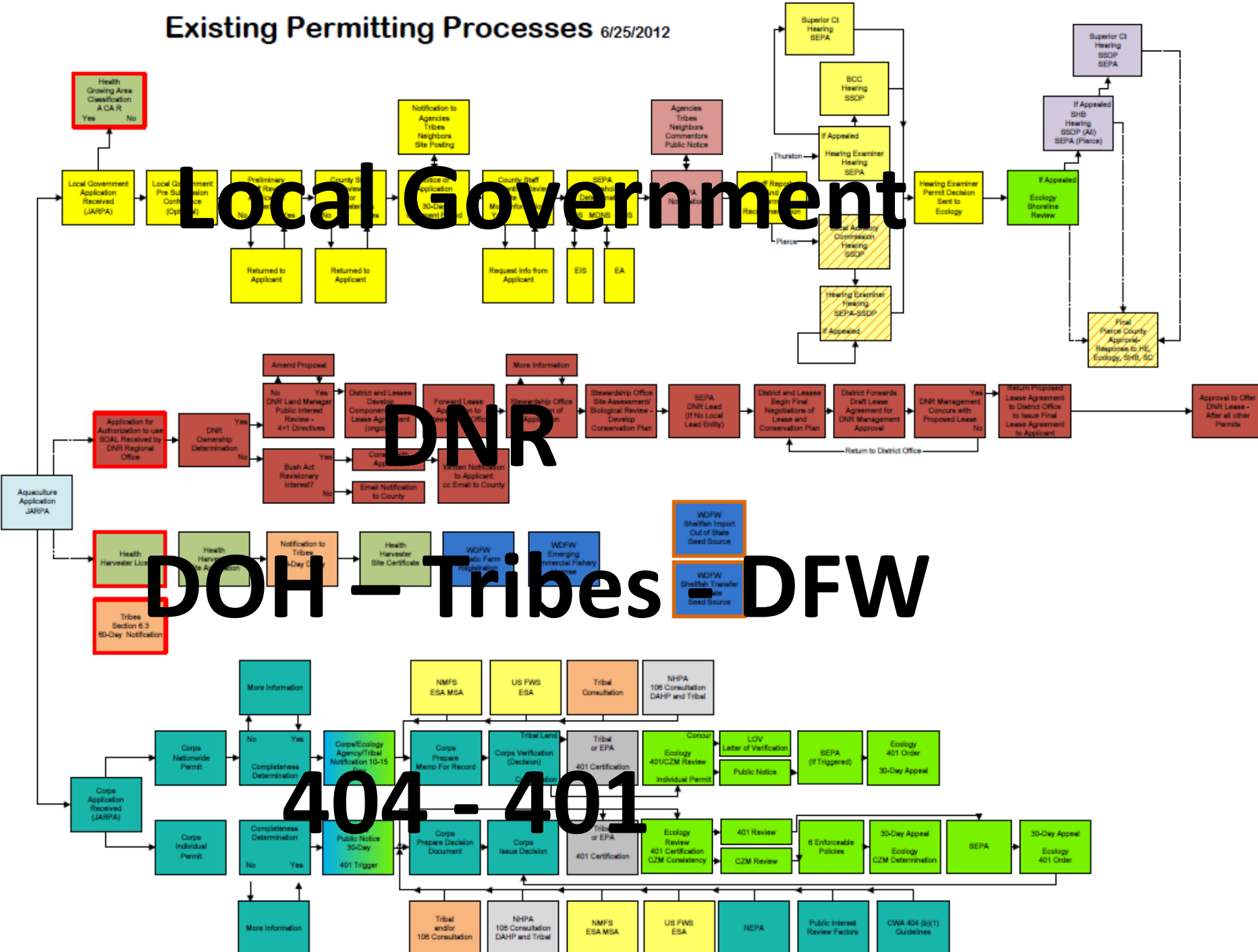


Geoduck Nursery Tubes



Flipping Bag Oyster Culture

Existing Permitting Processes 6/25/2012



Local Government

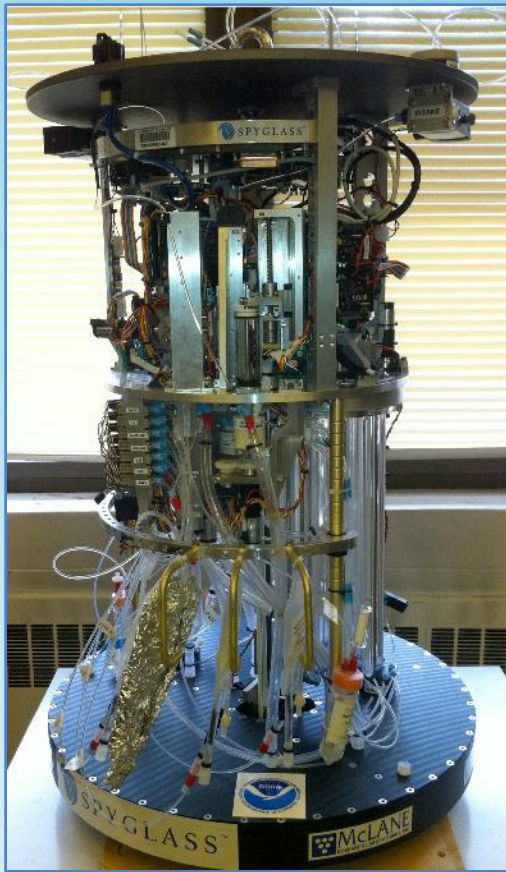
DNR

DOH - Tribes

DFW

404 - 401

Continue Vital Shellfish Aquaculture Research



Environmental Sample Processor

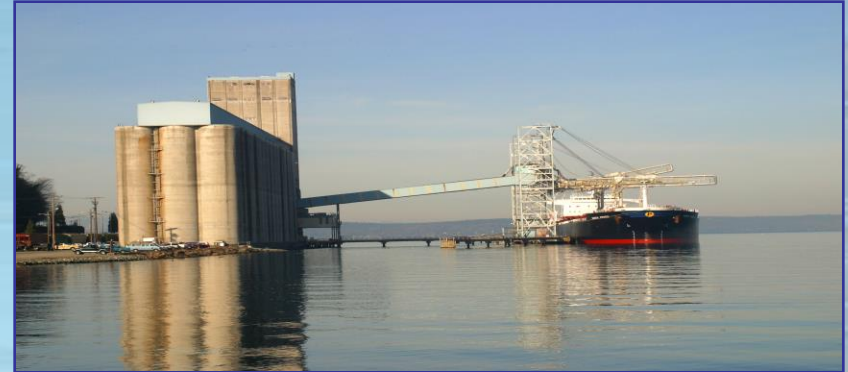
- Eelgrass Monitoring
- HABs
- Ecosystem Services
- Ecological Impacts
- Public Symposia
- Current RFPs



Nutrient Bioextraction Study

Improve Guidance for Local Shoreline Master Programs

- Protect shoreline natural resources



- Encourage water-dependent uses

- Promote public access



Water-Dependent Use

- Cannot exist in a location not adjacent to the water.
- Dependent on the water due to intrinsic nature of operations.



SMA Preferred Uses

- Control of pollution
- Prevention of damage to natural environment
- Unique to or dependent upon use of the State's shorelines



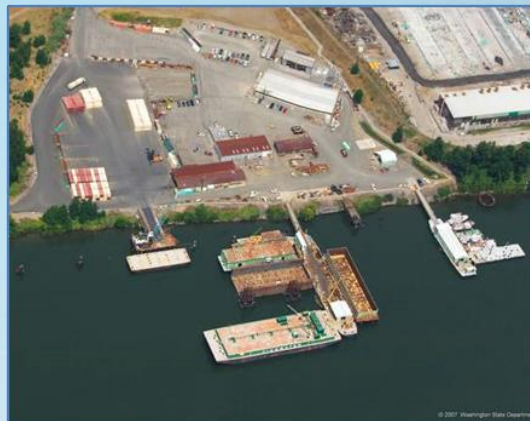
SMA Priority Uses

When alterations to the natural condition of the shoreline are authorized, priority shall be given to:

- Single family residences
- Ports
- Recreational uses and other opportunities to increase public access
- Industrial and commercial development dependent on their location on or use of shorelines of state
- Other opportunities for substantial numbers of people to enjoy shorelines



Oyster Harvest Willapa Bay



Washington Coastal Atlas



Cape Horn, Mason Co, WA

Promote Native Shellfish Restoration and Recreational Shellfish Harvest

- Olympia oyster and Pinto abalone restoration
- Improve public access for recreational harvest
- Create public awareness and support for shellfish



Volunteers Planting Olympia Oysters



Pinto Abalone



Informational Signage



Recreational Harvest

Ensure Clean Water to Protect and Enhance Shellfish Beds

- Direct \$4.5 million in EPA funding to protect and improve water quality
 - Help local governments create pollution identification and correction programs.
 - Help Local Health Jurisdictions implement onsite sewage system management plans.
 - Pay for clean water best management practices on agricultural lands.
- Form an EPA and state Pollution Action Team
- Strategically Administer the Clean Vessel Program
- Complete No Discharge Zone Assessment

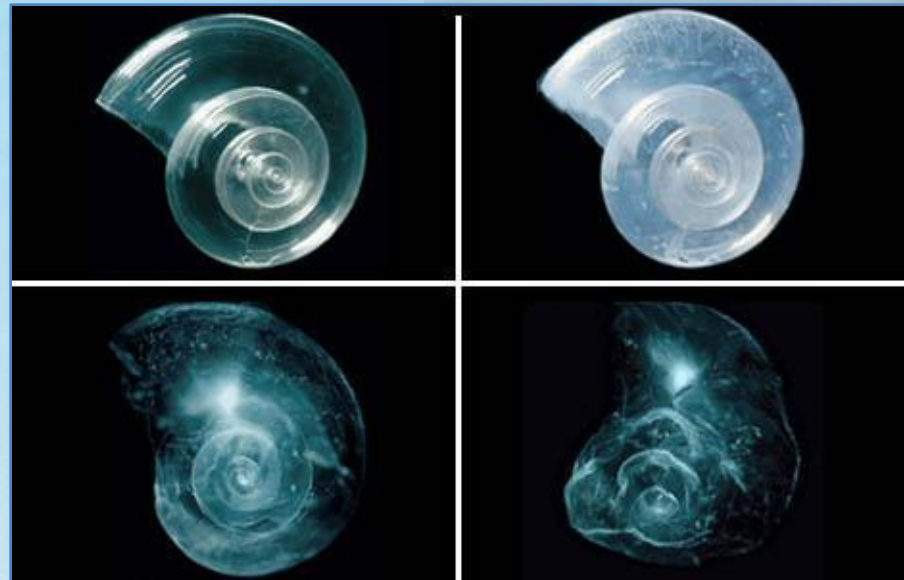


Take Steps to Address Ocean Acidification

- Convene Blue Ribbon Panel
 - Summary of science
 - Actionable recommendations
- WA Sea Grant research on Pacific oysters



Seawater Monitoring Buoy



Pteropod Shells Eroded by Corrosive Seawater

Shellfish are Part of the Fabric of our State

- Integral to Washington's history, culture & heritage
- Draw for regional tourism



Oyster Run Motorcycle Rally



"Speedy" the Geoduck
The Evergreen State College



Tour buses at Blau Oyster

Washington Shellfish Initiative

<http://www.nmfs.noaa.gov/aquaculture/>

<http://www.ecy.wa.gov/programs/sea/aquaculture/index.html>