Cape Perpetua Site management plan

Workshop: Community projects and ideas Held April 17th Siuslaw Public Library Florence, OR.

This is a summary of the community's ideas captured in a brainstorming session from the third workshop held as part of the development of the Cascade Head Marine Reserve Site Management Plan. Specifically this workshop was designed to listen and learn about the community's ideas on what projects or research is important to them. We are particularly interested in learning about potential projects that could be led by the community. By highlighting the community's interests and priorities in the site management plans we hope to attract additional research and resources, and to foster community led projects. Community led projects can be focused on any aspect of marine reserves implementation including research, monitoring, economic development, outreach, or education.

Suggestions for types of projects are broken into two categories :

<u>Community Suggested Research</u>: Ideas for research done by non-ODFW scientists that the community supports and is documented in site management plan.

<u>Community Led Projects</u>: Community individual, group, or outside expert lead project. Community provides all support, personnel and resources needed to perform project.

Ideas from the Public

*= number of votes from informal dot poll performed by workshop participants

Ecology - Community Suggested Research

- Study signs of bottom habitat damage
- Document fish and plankton species composition in the water column
- Size and movements of crab
 - Do crab move outside of the reserve? Could use mark/recapture study. Are there resident crabs?
 - o Does tagging survive molting process? (e.g., Nolle's tagging project)
- Determine edge effect of reserve: are more crab caught closer to the reserve than farther away?
- Study age and what is the natural mortality of crab between ages 4-5
 - *Are older crabs more productive? Could have implications for minimum size for harvest.
- **Land-sea connections Yachats River, Cummins Creek and Ten Mile Creek
 - What is the effect of marine reserves on fish and wildlife in the Yachats River north and south forks?
 - Differences in paired watershed study (Cummins and Ten-mile) and effects on forage fish food source and juvenile salmonid abundance
 - Tie to similar studies by Forestry/Wilderness areas
- *Larval dispersal and juvenile recruitment
- Invasive species monitoring Heceta Head area Dr. John Chapman
- Impacts of climate change
- **Forage fish spawning smelt surveys
 - o Could have citizen science component

- Halibut study
- Hook and line study add ons
 - o Genetic work on fish compare inside and outside reserve
 - *Rockfish tagging and movement
- Food web studies; predator –prey interactions (could use Sea Lion Caves)
- ***Human disturbance on marine mammals and intertidal areas
 - o Is disturbance/trampling occurring?
 - o How to promote good stewardship?
- Local effects of El Nino on species and oceanography
- Land mammal use of intertidal (not marine mammals)
- Water quality testing in reserve beyond bacteria (like University of Washington citizen science study)
 - o Trace back to sources (e.g., pharmaceuticals, etc.)
 - o Could be community led project
- Study algae in intertidal

Ecology - Community Led Projects:

- Run-off from road work and herbicide use
- Steller sea lion and/or harbor seal haul-out monitoring with Marine Mammal Institute
- What information can observers collect that might be useful for monitoring
 - o Couple with Coast Watch
- Human disturbance effects on bird colonies at Heceta Head
- Water quality monitoring at mouth of Cummins Creek and Ten-mile Creek
- Citizen Science
 - o *** Unusual events tracking/monitoring
 - Other survey based observations
 - Forage fish surveys
 - **Ocean acidification monitoring
 - ***Seabird monitoring (beach and nearshore; Sea Lion Caves)
 - Marine mammal observations tie in with whale watch week
 - o *Intertidal monitoring can citizens do PISCO like surveys?

Human Dimensions

- Certified marine reserves best practices vessel operators
- Research/visitor center
- *Business supported fundraiser

Outreach & Compliance - Community Led Projects

- *Community group "Friends of..."
- *Help inform Oregon State Police (OSP) of enforcement violations monitor effectiveness of intertidal harvest restrictions (both invertebrates and seaweeds)
 - "MPA watch" volunteer group
 - o Invite OSP to speak to land owners
- Report non-point source spills public outreach on chemical awareness
- Bird observations local clearing house of data and species occurrences
 - Tie together both coast and wilderness data

- When boats are in the reserve, how to communicate what research they are doing
- Geology information explain how were the rocky reefs formed
- Education
 - *How to incorporate in schools education and ocean literacy?
 - o Focus on birds and environment
 - o Educational video

Products:

- **Signs that note entering the marine reserve like tsunami zone signs
- Comic books
- Theater a play or skit
- Commission a Ray Troll t-shirt design for the marine reserve
- Video clips that identify species
 - o Better links to videos on internet
- ***Maps always have maps showing area
- Boundary visualizations
 - o Buoys marking 3 mile boundary
 - o Visual marker of boundaries on land
 - o *Area boundaries on phone application with map
 - Written directions on how to tell where 3 miles out is for volunteers

Information events:

- A children's event around the marine reserve
- Door –to- door information spreading for businesses, homeowners, vacation homes
- *Marine Reserves Day event
 - Like the Haystack Rock Awareness Program conducts
 - Training for docents and greeters with education information and rules
- Marine Reserves Parade
 - o Or add to La De Da event in Yachats
- Outward bound field trip have/give interpretive information
- Virtual tour of marine reserve

Information Pathways:

- **Docent training workshop
 - Target campground hosts
 - Lighthouse interpretive volunteer group
- *Art show
- **Community radio programming
 - Weekly fun facts
- Radio –weekly program or like KLCC "natural world" program focus on where good places to see birds and which species around area
- City club program
- Community written article in press
 - o Letter to editor news coverage
 - Story in magazine

Things to keep in mind when developing products:

- Use pictures to tell a story before, after
- Promote any activity that brings together diverse groups
- Balance messaging how to reach "non-believers"
 - o Identify groups and information known and perceptions
- Want information in digestible forms

Outreach & Compliance - Community Suggested Research

- Exhibits at Oregon Coast Aquarium and HMSC Visitors Center
- *Tribe cultural interpretation shell middens on shore adjacent to marine reserve; historical relevance of area
- World marine reserve map % of ocean protected
- Seafloor mapping information out to public
- Research from Oregon State University what are they studying

Additional Ideas Captured: Communication Pathways:

Oregon Coast magazine

VIA – AAA magazine

Heceta Head Conference - tabling event (Sea Grant conference organizer)

Watershed councils

Register Guard

Publish research as full articles or as notes in journals to get information out