

**Background Documents
Oregon Fish and Wildlife Commission
Marine Reserves Briefing**

(Revised 1/31/2008)

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Oregon Fish and Wildlife Commission Marine Reserves Workshop Staff Briefing Paper

I. INTRODUCTION

The State of Oregon is engaged in an ongoing process to make recommendations to the Governor for designating a system of marine reserves in Oregon's Territorial Sea. This Oregon Fish and Wildlife Commission (OFWC) Marine Reserves Briefing is intended to provide an introductory overview of marine reserves and the current process, as well as clarify the role of OFWC in the designation and implementation of marine reserves in the territorial sea (shore to 3 miles).

Briefing objectives

- Describe marine reserves
- Provide brief overview of the science of marine reserves and highlight some of what is known today
- Highlight some lessons learned from other marine reserve processes that have occurred elsewhere
- Provide an update on Oregon's marine reserves process, including objectives, current timeline and roles of state agencies.

II. WHAT ARE MARINE RESERVES AND WHERE HAVE THEY BEEN ESTABLISHED?

Difference between a marine protected area (MPA), marine reserve, and national marine sanctuary:

Marine protected area (MPA) - The official federal definition of a MPA is: "any area of the marine environment that has been reserved by federal, state, tribal, territorial, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." -- Executive Order 13158 (May 2000).

In practice, MPAs are defined as areas where natural and/or cultural resources are given greater protection than the surrounding waters. In the U.S., existing MPAs span a range of habitats including the open ocean, coastal areas, intertidal zones, estuaries, and the Great Lakes. They also vary widely in purpose, legal authorities, agencies, management approaches, level of protection, and restrictions on human uses.

Marine reserve - The generally accepted definition of a marine reserve is an MPA that is closed to all extractive activities.

National marine sanctuary - National marine sanctuaries are part of a federal program created under the National Marine Sanctuaries Act. The Act authorizes the U.S. Secretary of Commerce to designate national marine sanctuaries for the purpose of "preserving or restoring such areas for their conservation, recreational, ecological, or esthetic values." The U.S. Congress may also designate sanctuaries. Sanctuaries are intended to provide comprehensive and coordinated conservation and management of these special areas, and the activities affecting them, and are typically managed as multiple-use areas. Sanctuaries are administered

by NOAA's National Ocean Service. The National Marine Sanctuary System currently consists of 14 marine protected areas located within marine and Great Lakes waters of the U.S. and U.S. territories.

The ongoing marine reserves process in Oregon is **not** part of this federal program. Marine reserves in state waters are **not** being considered for designation as a national marine sanctuary.

Definition of marine reserve as used in Oregon's current OPAC discussions:

The current *draft* definition of marine reserve being used in the Oregon Ocean Policy Advisory Committee (OPAC) discussions is:

“A marine reserve is an area within Oregon's Territorial Sea or adjacent rocky intertidal area that is protected from all extractive activities, including the removal or disturbance of living and non-living marine resources, except as necessary for monitoring or research to evaluate reserve condition, effectiveness, or impact of stressors such as climate change.

Marine reserves are intended to provide lasting protection. However, based on monitoring and evaluation, individual sites may later be altered, moved, or removed from the limited system in order to meet prescribed goals and objectives.”

This definition is still draft and is out for public comment.

Where are Marine Reserves/Marine Protected Areas now?

Worldwide – As of 2006, at least 4,500 marine protected areas (MPAs) were established in at least 29 nations, and of these more than 250 were no-take marine reserves. There are 124 fully protected marine reserves that have been studied by scientists. Findings from these studies provide information about the effects of marine reserves. Approximately 40 percent of these reserves are in temperate waters, while the others are in tropical waters.

West Coast – Marine reserves have been established in state waters off of California, Washington, Alaska and British Columbia. Most of these sites were established within the context of a larger agenda to use marine protected areas (MPAs) as a tool for conservation and/or management. Some examples follow:

- a. **Washington State** – Two state agencies, Washington Department of Fish and Wildlife (WDFW) and Washington State Department of Natural Resources (DNR), have programs for establishing MPAs in Washington state waters.

WDFW: To date, WDFW has established 26 MPAs in Puget Sound, nine of which are closed to all harvest or taking. In 1998, the Washington Fish and Wildlife Commission adopted a policy establishing the use of MPAs as one of WDFW's working tools for resource protection and management. The Commission and WDFW are establishing a network of MPAs, including some areas closed to all harvest or taking of organisms, in Puget Sound as part of the management of long-lived fish species that have high site fidelity

WDNR - The Washington Department of Natural Resources (DNR) is responsible for managing and leasing aquatic, including marine, state lands. In September of 2002, WDNR established the Aquatic Reserves Program, created to establish aquatic reserves on selected state-owned aquatic lands to protect important native aquatic ecosystems. Aquatic reserves are defined as lands of special educational or scientific interest, or of special environmental importance. The process of evaluating a site for aquatic reserve status includes the development of an initial proposal by the proponent, varying levels of review by DNR, management plan development, review under the State Environmental Policy Act, and ultimately final approval for designation of the site by the Commissioner of Public Lands. Some of these designations may include no-take reserves.

- b. **California** – Of the MPAs implemented in the recent South Central Coast Region designation process, 13 of 29 are no-take reserves.

MPAs and marine reserves have been established in California for various purposes since 1929. In recent years, California began a comprehensive coast-wide MPA and marine reserve planning process, as part of implementation of the Marine Life Protection Act (MLPA) passed by the state legislature in 1999. The 1999 MLPA directed the state to design and manage a network of marine protected areas in order to, among other things, protect marine life and habitats, marine ecosystems, and marine natural heritage, as well as improve recreational, educational and study opportunities provided by marine ecosystems. This planning incorporates existing and establishes new areas as MPAs and marine reserves. The first phase of MPA designations was recently completed for California's South Central Coast Region. The second phase is now underway, focusing on designating MPAs within the North Central Coast Region. In December 2007, it was announced that the site selection process for the MLPA South Coast Study Region will begin in 2008, followed by the MLPA North Coast Study Region, and then the MLPA San Francisco Bay Study Region.

- c. **Alaska** - Sitka Pinnacles Marine Reserve is a no take reserve in Alaska. Established in 1999, the Sitka Pinnacles Marine Reserve covers three square miles and includes two important volcanic pinnacles, one measuring 40 meters and the other 70 meters. The pinnacles provide groundfish like rockfish and lingcod, as well as other marine life, with essential habitats at varying depths. There are hundreds of thousands of square miles off Alaska in which commercial fishing or certain gears are not allowed, but full no-take (sport, commercial, other) reserves are few.

NOTE: National Marine Sanctuaries (administered by the federal government) designated off of California and Washington include state waters and have a mixture of marine protected areas and marine reserves.

Where are marine reserves/MPAs in Oregon's state waters now?

Area of focus: Oregon's Territorial Sea - Oregon's Territorial Sea (i.e., state waters) extends three nautical miles from shore, and where offshore islands occur within that three miles, the Territorial Sea extends another three miles beyond. The Territorial Sea is 950 square nautical miles.

Special Management Designations (Figure 1) – Fourteen sites within the Territorial Sea are in OAR as *Special Management Designations*. These sites could be considered MPA's, though MPA was not the classification given at the time they were designated (beginning in the 1960s). These sites were designated to protect especially rich and vulnerable areas from over-harvest of marine invertebrates, therefore the regulations for these sites primarily place prohibitions on the take of marine invertebrates and shellfish. Commercial harvest of finfish is allowed in two of the three subtidal sites, scientific/educational collecting of marine invertebrates and shellfish is allowed in six sites, and some form of recreational harvest is allowed in all fourteen sites.

There are no complete no-take marine reserves in Oregon waters at present. One area (Whale Cove, see below) is regulated to prohibit commercial and sport fishing but allows recreational harvest of kelp and intertidal algae. This is the most restrictive designation in Oregon waters.

Oregon's Special Management Designations are as follows:

- 7 *intertidal* Marine Gardens
No commercial harvest of any species. No collection of marine invertebrates or shellfish, except single mussels may be taken for bait, and razor clams may be taken at one site. No exceptions for scientific/educational collecting. Recreational fishing for finfish and algae harvest for personal consumption is allowed.
- 4 *intertidal* Research Reserves
No commercial harvest of any species. No collection of marine invertebrates or shellfish except abalone, clams, Dungeness crab, red rock crab, mussels, piddocks, scallops and shrimp, or any other species by scientific/educational permit. Recreational fishing for finfish and algae harvest for personal consumption is allowed.
- 2 *subtidal* Research Reserves
Some commercial harvest allowed. No collection of marine invertebrates or shellfish is allowed, except by scientific/educational permit. Commercial and recreational fishing for finfish is allowed, and kelp (a subgroup of algae) harvesting for personal consumption is allowed.
- 1 *subtidal* Habitat Refuge (Whale Cove)
Most similar to a marine reserve in that no commercial or recreational harvest of fish or marine invertebrates (including shellfish) is allowed, but recreational harvest of subtidal kelps and intertidal algae for personal consumption is allowed. No exceptions for scientific/educational collecting.

Also within state waters: The "Rocks and Islands National Wildlife Refuge System", administered by the US Fish and Wildlife Service, encompasses 1,400 offshore rocks and islands. There are no special state regulations affecting the ocean area around the rocks, with the exception of a boating closure area around "*Three Arch Rocks*".

Marine Mammal disturbance controls are mandated coast-wide through the federal Marine Mammal Protection Act.

III. OREGON'S OCEAN FISHERY MANAGEMENT

What do marine reserves provide that existing management and regulations do not?

A suite of management tools are needed to effectively manage Oregon's complex mixed stock marine resources. Ideally, traditional fisheries management techniques rely upon stock assessments and an understanding of behavior, physiology and life history as well as ecosystem interactions and habitat. This information is relatively sparse, so management must be conducted with the best available science and absent information, in a precautionary manner. For example, only 5 % of Oregon's territorial sea habitat has been mapped. Of the nearshore species targeted by fisheries (or affected by other human-induced impacts), only a few species have stock assessments that inform regulatory decisions. Of 43 species that may be encountered in the nearshore, only 8 assessments are available for management decision-making. A general principle of Oregon's Native Fish Conservation Policy is that, absent information to inform management, a precautionary management approach should be used. Setting aside no-take critical habitat types is a tool that could work in conjunction with the existing array of current precautionary fishery regulations. Reserves can also create control sites, or reference sites which among other useful purposes, can be studies to compare and understand the effectiveness of current regulations for some stocks.

Of course, marine reserves alone are inadequate to unilaterally enhance stocks or to manage all aspects our fisheries. No single management strategy can achieve sustainable fisheries. Habitat protection, understanding the ecosystem needs and life history of our fish species, as well as fully understanding the impact of ocean development and extraction is a significant undertaking. The lack of mapping and the need for more scientific understanding within our nearshore/state waters ecosystem today drives the need for more research and precautionary management.

The possible outcomes of establishing marine reserves off of Oregon will vary depending on the location, size and scope of the areas as well as the level of support for enforcement and analysis.

What we do and don't know about Oregon's Territorial Sea:

- a. *Nearshore oceanography* - OSU and others have devoted an extensive effort to study Oregon's nearshore oceanography over the past 10 years. Oregon's nearshore currents, upwelling patterns, water temperature patterns, wave climate, and other oceanographic parameters are well characterized compared to other coastal areas in the US.
- b. *Benthic habitat* - ODFW has conducted some mapping surveys of nearshore reefs in state waters, however only 5% of our state waters have been mapped in sufficient detail to clearly define and delineate seafloor habitats.

In many nearshore areas that are not mapped, we can only predict the general type of habitat. ODFW has conducted other kinds of surveys that add to our knowledge about seafloor habitat, for instance surveys in which we catch rockfish or map kelp beds also define rocky substrate (though it is important to note that the lack of kelp or rockfish does not necessarily mean a lack of rocky habitat).

The collective experiential knowledge of commercial and recreational fishers who spend much of their time in nearshore waters would provide a good general picture of types, locations, and extent of bottom habitat, if that knowledge could be tapped.

- c. *Kelp* – In 1990, ODFW conducted a state-wide aerial survey of surface canopy-forming kelps (*Nereocystis* and *Macrocystis*). This survey showed the location of kelp forests (which only grow on rocky seafloor) along the entire coast, although most kelp is concentrated on the south coast. ODFW also conducted five years of kelp canopy mapping and biomass estimation for the large kelp beds at Blanco Reef, Orford Reef, Redfish Rocks, and Rogue Reef from 1996-2000. These surveys demonstrated up to a 10-fold variation in canopy biomass from year to year. The fact that it is so variable makes it unclear how much species depend on it for foraging and cover. We know from our studies and others that kelp has a calming effect on the surface waves and currents, and that many species (e.g., juvenile fishes, sea urchins, some seabirds) utilize kelp beds.
- d. *Benthic invertebrates*
- Rocky intertidal areas are relatively well-studied and characterized.
 - ODFW conducted urchin surveys in the mid 1990's at Orford Reef and the reefs off of Depoe Bay examining urchin densities and habitat preferences, primarily.
 - Crab fishery – We know that the fishery is highly variable in terms of catch, and the past few years have had the highest catches in history. We know crabs reside in sandy bottom, but we have also found them on gravel. Estuaries are important to crabs for early life stages. New studies by the Oregon Institute of Marine Biology are characterizing the patterns of recruitment success of Dungeness crab. Larval success appears to be dependent primarily on ocean currents and is highest when the Spring transition is early.
 - No area-based catch information for the fishery has been collected until 2007
- e. *Fish* - Hundreds of species of fish are found within the waters of Oregon's Territorial Sea. There are 43 managed groundfish species (defined as species in the PFMC Groundfish Management Plan) that can be found or spend at least one portion of their life history in Oregon's Territorial Sea.
- 8 species have had formal stock assessments (6 healthy and 2 depleted: canary and yelloweye rockfish).
 - The recent black rockfish assessment, bolstered by the ODFW PIT- tagging study, has determined that the stock is healthy. Black rockfish are the most abundant rockfish in the nearshore, and provide the bulk of the recreational groundfish catch and an important component of the commercial nearshore catch.
 - 35 of the 43 managed groundfish species found in Territorial Sea waters are not assessed
 - Most of the rockfish and cartilaginous fish are vulnerable to excessive extraction because they are long-lived (especially in the case of rockfish), mature at a late age, or produce very few young (in the case of cartilaginous fish).
 - Highly mobile fish species/stocks are less likely to benefit from areas of refuge than more sedentary species.
 - The more sedentary rockfish (e.g., China, quillback, copper, grass) are not only vulnerable to extraction at a population scale, but are also very vulnerable to localized depletion because adults do not move much from their home reef.

- The nearshore is very productive in terms of forage fish - such as sand lance, smelts, anchovies, herring, and sardines. Little is known about the distribution and abundance of most of the forage species, yet these species provide the primary food source for most of the harvested species as well as seabirds and marine mammals.
- Green sturgeon and white sturgeon leaving their native estuaries migrate up and down the coast very close to shore. Green sturgeon are listed by NOAA as threatened for the southern population and as a species of concern for the northern population.

f. Seabirds

- Most of the larger offshore rocks and many cliffs along the shore have seabird nesting colonies. USFWS noted in Oregon's Ocean Plan that 33 rocks and islands are of particular importance and needing protection because of seabird colony use. These colonies are the largest on the West Coast south of Alaska.
- The locations of the colonies have been mapped and surveyed periodically for total count and nesting success. The status of seabird colonies is dynamic, and highly correlated with ocean productivity which drive the food chain that support their forage fish. Increased numbers of bald eagles has also impacted seabird nesting sites. The forest dwelling, endangered marbled murrelet travels from the forest to the nearshore to feed on forage fish, and has the added stress of forest harvest. Intensive at-sea and forest surveys in the early 1990's provided good data on ocean feeding sites.

g. Marine mammals

- Seal and sea lion haul-outs have all been mapped with periodic surveys of adult and pup counts. Oregon has two commonly found species of seals and two commonly found species of sea lions.
- The harbor seal population in Oregon and the rest of the West Coast has recovered from pre-Marine Mammal Protection Act days, and now appears to be at carrying capacity. California sea lions, which are transient in Oregon, also appear to be at carrying capacity.
- The eastern stock of Stellar sea lions (California to SE Alaska), a threatened species under ESA, continues to grow, though Stellers are found in only certain locations.
- The nearshore provides the primary migration corridor and an important feeding area for gray whales.

h. General ecology unknowns

- There are likely "hotspots" and general sources and sinks for fish larvae and recruitment. Scientists at OSU and others are currently studying larval dispersal and recruitment and may be able to identify some areas.
- There has been some research in Oregon's rocky intertidal areas that has confirmed the above statement, but we do not know where they are in the subtidal nearshore.
- The nearshore area off the mouth of the Columbia appears to be a nursery area for juvenile flatfish. There are likely other areas that have dense concentrations of juvenile fish or Dungeness crab in the nearshore, but we do not know where they are (OFWC recently mandated a logbook for our commercial crab fishery). In general, it is believed that areas off the mouths of estuaries and close to shore support concentrations of juvenile flat fishes.

- Specific areas where egg-bearing Dungeness crab congregate have been identified in Puget Sound. It is likely that similar areas occur in Oregon's nearshore; we do not know these locations.
- Most food web relationships for nearshore fishes and invertebrates are poorly understood.
- Relative biodiversity in different parts of the nearshore has not been studied.

IV. THE SCIENCE OF MARINE RESERVES AND LESSONS LEARNED FROM MARINE RESERVE SITING PROCESSES

The Science of Marine Reserves

There is empirical evidence of increased biomass, density, size and diversity within no-take reserves. Scientists have studied the performance of at least 124 fully protected marine reserves of many different sizes in a variety of temperate and tropical habitats. A comprehensive review of these studies indicate that most well enforced marine reserves result in increases in biomass, size, diversity of species, and reproductive output of marine animals and plants. These findings include not just fished species but other plants, invertebrates, and fishes.

Certain species are likely to benefit more from marine reserves than others. For instance, sedentary species and species with high site fidelity are more likely to benefit. It is also documented that, although many fished and nonfished animals and plants become more plentiful within newly established marine reserves, some decline. For example, a fished animal may increase in number and size in marine reserves and consequently reduce the number of its prey.

Lessons Learned From Other Marine Reserve Processes:

Several studies have examined the process of establishing marine reserves in other localities that can be helpful in informing Oregon's process. The following are two examples that reflect the general themes of recent process analyses:

From "Guidelines for Marine Protected Areas" (IUCN, 1996), edited by Graeme Kelleher:

"The fundamental criterion for success in MPA planning and management is to bring in from the beginning every significant sector that will affect, or be affected by, the MPA. The reasons for this are simple. First, if those in a sector like fisheries or tourism are not involved from the beginning, they will be inclined to see the MPA planners and managers as either not interested in their sector or actively trying to disadvantage their interests. Second, no expert, however competent, has the detailed knowledge that would allow him or her to define adequately the interests of most sectors."

A second came from an analysis of the recent California process (*From: Mize, James. 2006: Environmental Law Institute: Washington, DC*):

"Findings and Recommendations

Whether marine reserves offer an appropriate solution to concerns in other states is best left to those jurisdictions, given the particular circumstances and conditions within those waters. For those states that choose to adopt marine reserves, California's experience with the

implementation of the MLPA offers several lessons that can assist in designing implementation strategies. Jurisdictions should keep the following principles in mind when drafting their own measures:

- **Establish authority for designations.** Announce the constitutional, statutory, and common-law basis for prohibiting the taking of marine life, tying the need and purpose for marine reserves to the public trust. Early communication of established authority will help develop support for the validity of the designation process. Skipping this step will only embolden detractors to challenge the process.
- **Include public participation.** Solicit stakeholders and constituents' input at an early stage, and allow opportunities for submission of additional information often during the designation process. Giving those affected by the process an opportunity to be heard results in stronger public acceptance, more practical designations, and defuses potential legal challenges.
- **Allocate sufficient resources to enforcement.** Marine reserve restrictions are unlike terrestrial reserves and require additional monitoring and education to assure that reserves do not become "paper parks." States should acknowledge these increased responsibilities when designating marine reserves and plan accordingly.
- **Establish funding sources.** Determine how marine reserve implementation is to be paid for at an early stage to avoid the uncertainty and hesitation of unfunded mandates. Consider not only general appropriations from the state treasury, but other less traditional sources of funding as well. Where possible, tie funding of marine reserves to activities that rely upon or affect ocean and coastal resources by using extraction taxes or user fees. Evaluate potential public-private partnership agreements with marine conservation organizations supportive of the designation process.
- **Be realistic with expectations.** When embarking on the designation process, one can easily be overly optimistic in assessing how quickly the job can be done; temper such optimism with patience. Expect controversy over designating marine reserves, be prepared for designations to take time to be determined and implemented, and allow sufficient time for stakeholders to be "on board" with the designation process.
- **Manage communications carefully.** While it is tempting to focus on the purpose and need for action, dire predictions over the state of fishery resources in state waters may disaffect supporters during the designation process. Where possible, affirm individual contributions to the process and the power of diffuse individuals to collectively make a positive difference in protecting ocean and coastal resources. But be cautious not to oversell potential benefits of marine reserves. Rather, highlight marine reserves as a necessary component of an overall strategy for the improvement of state waters."

V. OREGON'S PROCESS FOR ESTABLISHING MARINE RESERVES :

The OPAC Process

The Oregon Ocean Policy Advisory Council (OPAC) is a legislatively mandated marine policy advisory body to provide, among other statutory charges, advice to the Governor, state agencies and local governments on ocean policy and resource management matters (ORS 196.443).

OPAC membership (**Attachment 1**) is representative of coastal community interests, state agencies, conservation interests and the general public. Meetings of OPAC are usually held in communities along the Oregon coast.

The Governor's current charge to OPAC is to recommend sites for long-term marine reserves (no take) in state waters.

Since 2005, OPAC and its working subcommittees have been developing the details of a process to nominate and recommend marine reserves in state waters. OPAC is developing recommendations on a public nomination process to use the expertise of ocean users, scientists and the public in determining where marine reserves may be recommended for siting. A public outreach process, sponsored by Oregon Sea Grant Extension will take place starting in February of 2008. The public will have the opportunity to weigh in on the process, the goals and objectives of the OPAC effort.

ODFW's role supporting the marine reserve process

ODFW sits on OPAC and its working committees. All state agencies are non-voting members. ODFW also participates in the Governor's Marine Cabinet discussions involving the OPAC and marine reserves process. ODFW provides advice on ocean regulatory issues, and scientific/habitat/fishery data to support the information needs for OPAC.

OPAC Recommended Goals for Oregon's Marine Reserves

The working goal for marine reserves in Oregon, adopted by OPAC, is to:

“Protect and sustain a limited system of ecologically-special places in Oregon's Territorial Sea to conserve marine habitats and biodiversity; provide a framework for scientific research and effectiveness monitoring; and avoid, to the extent practicable, potential adverse social and economic effects on ocean users and ocean-dependent communities.

A limited system is a collection of individual sites that are representative of marine habitats and that are ecologically significant when taken as a whole.” (OPAC, 2007)”

Oregon Fish and Wildlife Commission (OFWC) Role in Marine Reserve Designation:

The Oregon Attorney General has written an overview of the role of the state agencies in a marine reserves siting process. It lists a number of state agencies which will or could have a role in establishing marine reserves in Oregon. No one agency has the authority to establish marine reserves. Department of State Lands will conduct rulemaking following the OPAC process to recommend sites. The OFWC will have as its charge, to establish fishery regulations that would apply to areas designated by the Department of State Lands. OFWC will not be establishing the boundaries of marine reserves, nor will OFWC address regulations related to transit, or navigation, if any.

At this stage in the OPAC process, the above-referenced definition of marine reserves would involve the adoption of regulations to prohibit take of all ocean fish and invertebrate species

regulated by ODFW. It is not yet clear if impacts on birds and marine mammals will be restricted as well.

The OFWC will be working under a number of policies established in Statute and Administrative Rule (e.g., Oregon Ocean Resources Management Policy, Oregon's Food Fish Management Policy, The Native Fish Conservation Policy, the Oregon Territorial Sea Plan and Oregon Ocean Resource Management Plan, as well as others).

The Oregon Ocean Resources Management Policy (ORS 196.420):

“Policy. It is the policy of the State of Oregon to: (1) Conserve the long-term values, benefits and natural resources of the ocean both within the state and beyond by giving clear priority to the proper management and protection of renewable resources over nonrenewable resources;

(2) Encourage ocean resources development which is environmentally sound and economically beneficial to adjacent local governments and to the state;

(3) Assert the interests of this state as a partner with federal agencies in the sound management of the ocean resources within the United States Exclusive Economic Zone and on the continental shelf;

(4) Encourage research, study and understanding of ocean processes, marine life and other ocean resources;

(5) Encourage research and development of new, innovative marine technologies to study and utilize ocean resources; and

(6) Ensure that the Ocean Policy Advisory Council will work closely with coastal local governments to incorporate in its activities coastal local government and resident concerns, coastal economic sustainability and expertise of coastal residents. [1987 c.576 §4; 1991 c.501 §4; 2003 c.744 §5]”

An important factor in the OPAC and state agency rulemaking process is to consider the economic impact of siting reserves. The Food Fish Management Policy states:

“506.109 Food fish management policy. It is the policy of the State of Oregon that food fish shall be managed to provide the optimum economic, commercial, recreational and aesthetic benefits for present and future generations of the citizens of this state. In furtherance of this policy, the goals of food fish management are:

(1) To maintain all species of food fish at optimum levels in all suitable waters of the state and prevent the extinction of any indigenous species.

(2) To develop and manage the lands and waters of this state in a manner that will optimize the production, utilization and public enjoyment of food fish.

(3) To permit an optimum and equitable utilization of available food fish.

(4) To develop and maintain access to the lands and waters of the state and the food fish resources thereon.

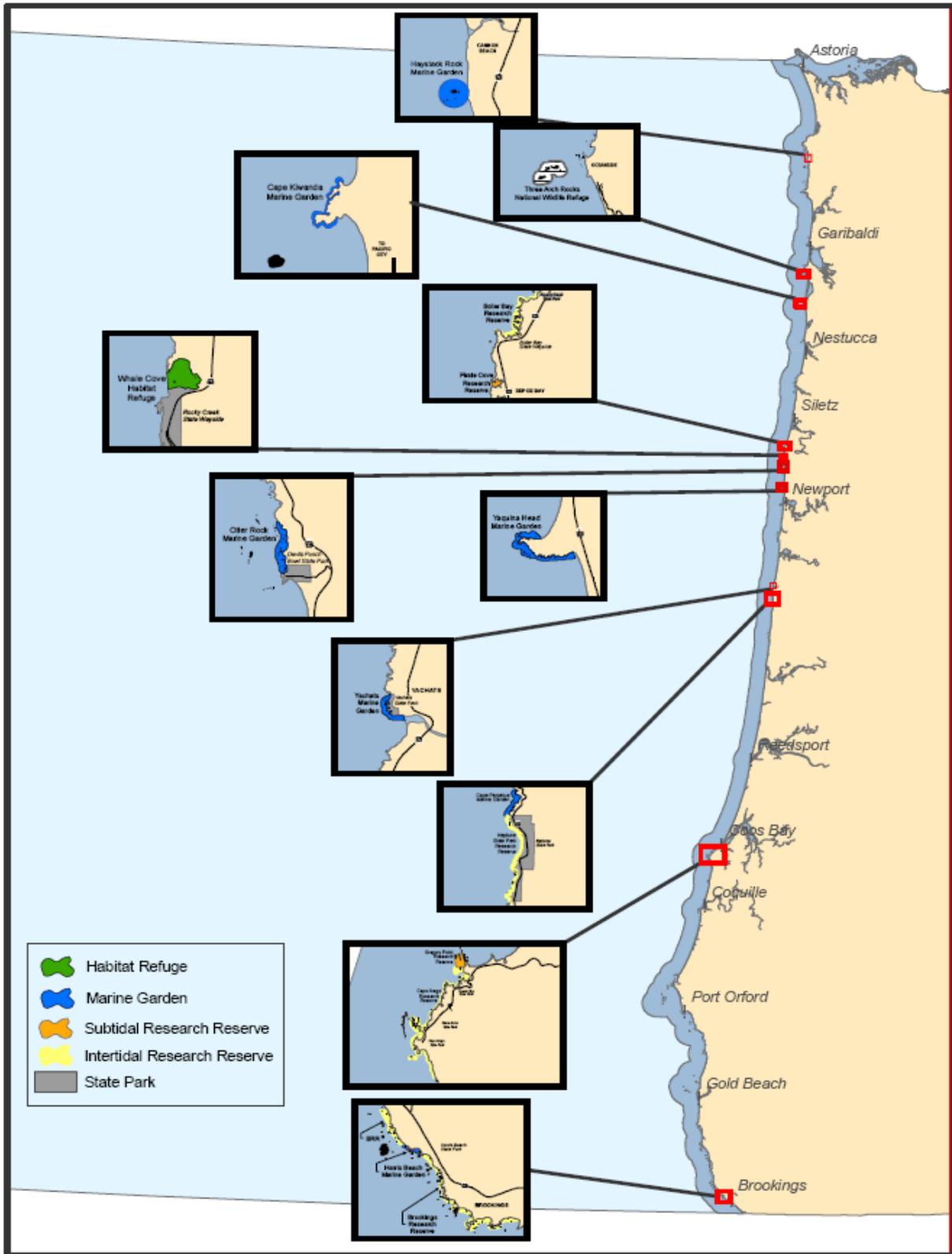
(5) To regulate food fish populations and the utilization and public enjoyment of food fish in a manner that is compatible with other uses of the lands and waters of the state and provides optimum commercial and public recreational benefits.

(6) To preserve the economic contribution of the sports and commercial fishing

industries in a manner consistent with sound food fish management practices.

(7) To develop and implement a program for optimizing the return of Oregon food fish for Oregon's recreational and commercial fisheries. [1975 c.253 §15; 1985 c.529 §2] "make decisions that allow for the best social, economic and recreational utilization of (fish and) wildlife resources by all user groups" (ORS496.012(7)).

Figure 1. Areas with special management designations within Oregon's Territorial Sea
Intertidal and Subtidal Marine Protected Areas in Oregon



ODFW/MRP 10/18/07

Attachment 1:

THE OREGON OCEAN POLICY ADVISORY COUNCIL

(updated January, 2008)

Membership on the Ocean Policy Advisory Council is specified in ORS 196.438

VOTING COUNCIL MEMBERS *EX OFFICIO* COUNCIL MEMBERS

A representative of the following, appointed by the Governor:

South Coast commercial fisheries
Brad Pettinger, Brookings

North Coast commercial fisheries
Scott McMullen, Astoria

North Coast charter, sport or recreational fisheries : Frank Warrens, Portland

South Coast charter, sport or recreational Fisheries: James O. Pex, North Bend

Ports, marine transportation or navigation
Jim Bergeron, Commissioner, Port of Astoria

Coastal non-fishing recreation
Fred Sickler, Lincoln City

A coastal conservation or environmental organization
Robin Hartmann, Oregon Shores Coastal Coalition, Roseburg

A statewide conservation or environmental organization: Paul Engelmeyer, Audubon Society, Yachats

Oregon Coastal Indian tribes
Robert Kentta, Confederated Tribes of Siletz

North Coastal County Commissioner
Terry Thompson, Commissioner, Lincoln County

South Coastal County Commissioner
John Griffith, Coos County Commissioner

Coastal City Elected Official
Jack Brown, Councilor, City of Depoe Bay

Public-at-large

David Allen, Newport
and
James W. Good, Corvallis

The Governor or Governor's designee

Jessica Hamilton, Natural Resources Policy Advisor

Department of Environmental Quality

*Stephanie Hallock, Director
(Greg Pettit, alternate)*

Department of Fish and Wildlife

*Roy Elicker, Director
(Patty Burke, alternate)*

Department of Geology and Mineral Industries

*Vicki McConnell, Director
(Jonathan Allan, alternate)*

Department of Land Conservation & Development

*Richard Whitman, Director
(Paul Klarin, alternate)*

Department of State Lands

*Louise Solliday, Director
(Jeff Kroft, alternate)*

Department of Agriculture

*Katy Coba, Director
(Dalton Hobbs, alternate)*

Dept. of Parks and Recreation

*Tim Wood, Director
(Jim Myron, alternate)*

Oregon State University, Sea Grant College

*Robert Malouf, Director
(Jay Rasmussen, Ext. Sea Grant, alternate)*

A coast-wide local governments' organization

Onno Husing, Oregon Coastal Zone Management Association, Newport

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1. OPAC Membership (Attachment 1)