

# **DRAFT April 28, 2010 DRAFT**

A Report to the Oregon Legislature with Recommendations

## **A Strategy to Improve Nearshore Research and Management in Oregon's Territorial Sea**

Nearshore Research Task Force

### **A. Introduction**

The 2009 Oregon Legislature charged the Nearshore Research Task Force with examining ways in which Oregon's nearshore management and research capacity should be strengthened to meet on-coming challenges. Specifically, the Task Force was charged with recommending a "long-term funding and coordination strategy for implementing the **nearshore priorities** of the state." The strategy would include "transparent procedures and oversight mechanisms for pursuing, securing and administering public and private funds, and mechanisms for data sharing and coordination among state agencies, universities and other stakeholders, and mechanisms to reevaluate priorities and programs."

The legislature also directed that the Task Force strategy include:

- “(a) Background, analysis, and recommendations relating to:
  - (A) Research and monitoring of nearshore resources;
  - (B) Management of nearshore resources and policy formation; and
  - (C) Education and outreach.
- (b) Identify current and anticipated funding needs of nearshore programs.
- (c) Determine transparent procedures and oversight mechanisms for pursuing, securing and administering public and private funds.
- (d) Identify mechanisms for data sharing and coordination among state agencies, universities and other stakeholders, and mechanisms to reevaluate priorities and program.”

## **B. Strategy Synopsis**

The Task Force is pleased to offer a strategy that meets these legislative requirements. The strategy builds upon Oregon's existing programs and authorities and would add new or modified entities and emphasize capacities that should significantly strengthen the state's ability to carry out long-term, sustainable management of ocean resources and uses.

The Strategy is based on the following principles:

- have the trust of all parties;
- provide flexibility to meet new challenges and opportunities;
- be supported by a range of funding sources;
- be future oriented with long term strategic objectives for the marine environment;
- meet the unique needs and opportunities of the State of Oregon;
- include affected ocean users;
- capitalize and build on existing structure and resources; and
- be knowledge-based .

The Task Force agrees that the strategy should have the following elements:

- a broadly representative stakeholder advisory body;
- an independent science advisory entity;
- a flexible, broad-based, transparent funding capacity in an independent entity;
- an executive level coordinating body;
- clear data management and data sharing processes and responsibilities;
- links to scientific research and monitoring programs;
- strong science/policy coordination functions;
- links to management and implementation; and
- strong engagement of local communities.

## **C. Background**

## 1. Nearshore Management Issues

The Task Force foresees a number of existing and emerging issues that will dominate Oregon's nearshore management agenda:

- Continued community engagement in ocean stewardship: The advent of community teams to implement marine reserves and local fishermen advisory groups to help develop the state's ocean alternative energy development plan creates significant opportunities as well as needs;
- Sustainable management of nearshore fisheries: This is a primary concern to coastal communities with small-boat fleets and to the crabbing industry which rely on the nearshore for economically viable fisheries;,
- Development of ocean alternative energy resources; Oregon's energetic wave environment has created a new demand for ocean space and raised numerous concerns about effects on fisheries and on coastal ecosystems;
- Implementation of marine reserves; These areas offer unprecedented opportunities for research and monitoring to help understand effects of climate change and various fishery management decisions, to help replenish nearshore fish stocks, and to ensure long-term viability of a variety of marine species;
- Human health and ecological effects of nearshore ocean water quality; Increased outbreaks of pathogens in shellfish and growing awareness of the effects of persistent organic pollutants in the ocean create concern about Oregon's nearshore water quality;
- Invasive non-native species: The number of such species is unknown, principally because no monitoring system is in place but could have significant effects on nearshore and estuarine ecosystems;
- Effects of hypoxia on nearshore ecosystems and resources: The hypoxia phenomenon is only marginally understood is of concern because of effects on nearshore ecosystems and on fisheries;

- Ocean disposal of dredged materials from coastal ports: Disposal in the nearshore environment of sediments from dredging pose questions and raise concerns about effects on nearshore resources such as crab and razor clams; and
- Effects of climate change: Because of the strong ocean-atmosphere connect, concerns about increased acidification and warming of ocean waters, as well as other ecological phenomena, will bear close monitoring.
- The overall vitality of the ocean ecosystem: Oregon will need to understand key ecosystem interactions to proactively avoid further listings of marine species as threatened or endangered and to ensure adequate habitat for species already listed to support the ultimate goal of recovery.
- Land/Sea interactions: The cumulative effects of human actions on land-sea processes, especially in estuaries, and effects on nearshore ecosystems are not well understood for Oregon..

Overarching these specific issues are two new opportunities to address ocean management needs on a more comprehensive basis. One is the regional cooperation and partnerships with federal agencies and adjacent states as part of the West Coast Governors Agreement on Ocean Health. This regional partnership is one of several such partnerships expected to be a key part of a national ocean policy that stresses regional approaches to addressing ocean issues. The second opportunity is the increased emphasis on Marine Spatial Planning as likely operational element of the national ocean policy. This emphasis, coupled with emerging technical capacity within the State of Oregon, including detailed mapping of the seafloor, will enable Oregon to overcome many of the past challenges of data management and data sharing to support nearshore ocean management decisions.

#### ***Discussion Issues:***

***This list summarizes key issues or areas of concern to managers where additional research or monitoring would likely be needed or beneficial. No priority order is implied.***

## 2. Nearshore Management Priorities

The legislature required that this report help to implement Oregon's nearshore priorities found in four policy and research documents.

A. The Oregon Territorial Sea Plan contains the state's overarching ocean management priority, which is direct re-statement of Statewide Planning Goal 19, Ocean Resources:

*The overall ocean-management goal of the State of Oregon is to conserve the long-term values, benefits, and natural resources of the nearshore ocean and the continental shelf.*

*To achieve this goal, the State of Oregon will:*

- 1. give higher priority to the protection of renewable marine resources than to the development of non-renewable ocean resources;*
- 2. support development of ocean resources that is environmentally sound and economically beneficial to coastal communities and the state;*
- 3. protect the diversity of marine life, the functions of the marine ecosystem, the diversity of marine and estuarine habitats, and the overall health of the marine environment; and*
- 4. seek the conservation of ocean resources within the larger marine region that is of ecologic and economic interest to the State of Oregon.*

B. The Oregon Nearshore Marine Resource Management Strategy addresses priorities contained in the three principal goals:

1. Improved communication and partnerships

- Increase opportunities for public involvement.*
- Expand cooperative partnerships with sport and commercial fishing interests, research institutions, federal/state/local government agencies, tribes, non-governmental organizations, and others as appropriate to identify specific opportunities for collaborative action.*
- Develop or enhance education programs and opportunities.*

2. Stronger science and information

- *Improve our understanding of the status of nearshore marine resources.*
- *Improve our understanding of factors affecting nearshore marine resource sustainability.*
- *Identify and prioritize species and habitats of greatest management need.*
- *Gather scientific, social, and economic information needed for effective management.*
- *Identify and prioritize information gaps.*

### 3. Better decision-making processes

- *Maintain an open decision-making process and seek the advice and assistance of interested parties.*
- *Facilitate use of the best and most current science.*
- *Encourage resource management frameworks that are adaptive and based on the best available information.*

C. The West Coast Governors' Agreement on Ocean Health Action Plan identifies a number of actions for seven priority topics but makes no priority policy distinctions;

*Priority Area 1: Ensure Clean Coastal Waters and Beaches*

*Priority Area 2: Protect and Restore Ocean and Coastal Habitats*

*Priority Area 3: Promote the Effective Implementation of Ecosystem-Based Management*

*Priority Area 4: Reduce Adverse Impacts of Offshore Energy Development*

*Priority Area 5: Increase Ocean Awareness and Literacy Among Citizens*

*Priority Area 6: Expand Ocean and Coastal Scientific Information, Research, and Monitoring;*

*Priority Area 7: Foster Sustainable Economic Development in Coastal Communities*

D. West Coast regional marine research and information plan developed by Sea Grant.

(to be added)

## **D. Principal Elements of the Nearshore Research and Management Strategy:**

### **1. Stakeholder Advisory Body**

The Oregon Ocean Policy Advisory Council, created by Oregon state law, currently serves the function as a stakeholder advisory body to the Governor and state agencies. However, its membership does not include all affected stakeholders that have a significant public interest in nearshore management. Additional members and more clearly defined role for this stakeholder advisory body would ensure that all affected parties (i.e. stakeholders) have a meaningful role in determining and carrying out the state's ocean stewardship endeavors.

The membership of the current Ocean Policy Advisory Council (OPAC) should be supplemented with additional members representing community-based marine resource groups and other ocean users (e.g. ocean energy companies, navigation interests, outdoor outfitters, marine wildlife or birding tours). Conversely, the Oregon Sea Grant member of the current OPAC could be moved to the Science Advisory entity.

This so-called OPAC 3.0 stakeholder body would have a chartered relationship with and formally advise the Cabinet, the Executive-level policy oversight body, and could, upon request, assist state agencies by providing for stakeholder input and advice for particular ocean management situations. OPAC 3.0 would play a significant role in advising the Cabinet on ocean policy and management issues and priorities and in developing the state's strategic plan for nearshore research, and monitoring. State agencies could certainly remain as ex-officio members of OPAC 3.0 to help facilitate coordination with stakeholders.

***DISCUSSION ISSUES: What are the advantages and drawbacks of retaining OPAC, broadening its membership, and clarifying its role in priority setting and management? What is the optimum membership of***

***OPAC 3.0? Who would appoint members? If the Governor, should member nominations go to the State Senate for confirmation? To what entity is the OPAC 3.0 responsible? The Executive-level body? The Governor? Who would provide staff and logistic support to OPAC 2.0?***

## **2. Scientific Advisory Body**

The use of accurate, timely, trusted, relevant scientific data and information is crucial for achieving Oregon's nearshore management priorities. An independent scientific advisory body is necessary to facilitate and ensure that appropriate, trusted, timely scientific information and advice is acquired, reviewed, and provided throughout the state's ocean management program. At present, the Scientific and Technical Advisory Committee (STAC) advises the Ocean Policy Advisory Council on particular issues (e.g. marine reserves) but does not otherwise provide a range of scientific oversight and advisory functions throughout the state's ocean management program.

A scientific advice and coordination body, termed the Oregon Academy of Marine Sciences (Academy) would serve three principal functions:

A. Advise key institutions, including the Cabinet, on scientific and data issues and needs associated with the state's nearshore management policies, goals, and objectives. The "Academy" would empanel and support a permanent Scientific and Technical Advisory Committee (STAC-Plus) with specific membership from a range of scientific disciplines, including social sciences, that would provide advice to key agencies and institutions. The Academy could also sponsor symposia, convene panels of experts, or commission special studies to assist the OPAC 2.0, the Cabinet, or state agencies to address emerging scientific and data needs. It would assist the Executive-level body prepare a multi-year research strategic plan as a basis for funding decisions by the funding entity.

B. Work closely with the funding entity to ensure the scientific integrity of all phases of the funding for research and monitoring supported by the funding entity. The Academy could provide guidance and oversight for the process to solicit, review, and award proposals for funding, and provide standards and procedures, including peer-review, for

ensuring that the results of scientific research or monitoring are high quality science. The Academy could, as requested, convene peer-review workshops or panels of experts to provide the funding agency with advice and expert opinion.

C. Provide a scientific advisory point of contact for state agencies and community marine teams to assist in addressing data and information needs and scientific research or monitoring needs that may arise in the implementation of state agency marine management programs and community-based programs. Scientific support for research and monitoring of marine reserves and other areas by local programs is especially important and the Academy should emphasize the collection of scientific data to support implementation and management of reserves.

These principles would frame the Academy's mission:

- utilize expertise based upon topic, not geographic location;
- provide balance among disciplines;
- avoid conflict of interest in the scientific review process;
- ensure the integrity of the scientific process (i.e. rigorous; repeatable); and
- use peer-review processes whenever appropriate.

When carrying out its advisory duties to assist the Executive in preparing a multiyear strategic plan for nearshore research and monitoring, the Academy would:

- use an inclusive process;
- involve community organizations and people with working knowledge;
- account for long term (>3 yrs) as well as short term (<3 yrs) needs;
- be flexible, responsive to needs, scalable, adaptable;
- address core priority needs;
- develop and use criteria for setting research priorities;
- address a board range social, biological, economic issues;
- be the basis of funding; and
- promote multiple values.

**DISCUSSION ISSUES:** The TF has discussed many potential functions of a science advisory body that, taken together, imply an entity broader in scope than an advisory committee (STAC). If a broader entity (i.e. the

Academy), where would it reside: in an existing institution (e.g. Oregon University System) with a director, much like the Institute for Natural Resources (e.g. an Institute for Nearshore Science)? How would it be staffed and funded? Would it be sufficient to have a small but specific legislative appropriation and then depend on supplemental support from grants, perhaps through the funding entity? A Board of Directors would be needed; what should that membership be and who would appoint...the Governor? the Legislature? the Executive-level body? Would the Academy Board, in turn, appoint members to the Scientific and Technical Advisory Committee or recommend membership to someone else (e.g. the Governor) for actual appointment? Should the TF recommend the composition of membership on a Board?

### **3. Funding Mechanism/Entity**

The Oregon Legislature emphasized funding for three basic reasons: one, the costs of funding needed nearshore research, data sharing, and management of ocean resources outstrip available funding; two, that the state does not or cannot take advantage of all potential funding sources; and three, that coordinated use of available funds would stretch scarce resources. Thus the legislature directed the Task Force to recommend a “long-term funding and coordination strategy.”

A key element of the Task Force’s proposed strategy is a mechanism to receive and allocate funding from a wide range of sources safeguarded with strong procedures and standards to support research, monitoring, and other activities needed to provide “protection and utilization” (i.e. management) of the state’s nearshore ocean resources. At present, no such funding mechanism exists.

The funding mechanism should be a stand-alone non-profit entity, a Trust, that would have oversight by a Board of Directors with diverse membership. This is the mechanism used most frequently in analogous situations in such states as California, Washington,

and Massachusetts to enable diverse private and public sources to contribute directly to an entity whose objectives and purposes are aligned with those of the state.

The Trust could be chartered (i.e. incorporated) at the direction of the legislature, by the legislature, or on the motion of the Governor with purposes, objectives, and operations closely associated with the mission and management of the other elements of Oregon's nearshore institutional framework (e.g. the Executive level body, the scientific advisory body, etc). Regardless of the actual method, it would be beneficial for the Oregon Legislature to confer official approval of the formation of such an entity and provide guidance on the purpose, objectives, membership, and other factors.

The Trust would raise and hold funds from many sources including state, federal, and other public funds, private foundations, businesses, and other organizations. The Trust would allocate these funds at the direction of its Board of Directors, by-laws, and other procedural guidance documents adopted by the Board. The Trust would consult with the Academy's Nearshore Research and Monitoring Strategic Plan and seek comment from the Executive-level body in preparing funding strategies and annual funding plans.

The bulk of funds spent by the Trust would likely be allocated through a proposal-driven process to support research, monitoring, data management, outreach and engagement of coastal community organizations, and other activities to implement the research and monitoring strategic plan and associated action plans approved by the Marine Cabinet. The Trust would likely spend some funds for purposes identified by the funding strategy that are not proposal-driven, such as data management, monitoring, convening Expert Panels, scientific symposia or workshops sponsored by the Academy, and support for projects sponsored by community teams, although certain professional standards could be required. In addition, it is highly likely that various fund sources, whether public or private, will provide funds for certain purposes (e.g. fisheries-related research, effects of wave energy devices on physical or biological processes) so the Trust would develop standards and procedures that would ensure the scientific integrity of the use of those funds based on the following principles:

- provide a firewall between funder and research results;
- be open, neutral, transparent through a trusted process;

- support a spectrum of research and activities pursuant to its charter;
- be flexible to meet rapidly moving needs ;
- be value-added to research systems that exists now;
- help leverage additional funds;
- use open competitive process for research;
- be administered with low overhead;
- make annual reports to public on research results; and
- support long-term commitment/investment from state.

***DISCUSSION:* Are there other aspects of a funding entity to be included? Should it have its own scientific advisory committee or rely on the Academy to provide scientific advice or oversight of its funding processes? How specific should the TF be with regard to structure, mission, and methods of such an entity? Who should actually file the articles of incorporation?**

#### **4. Executive-level Policy Oversight and Coordination**

Oregon does not currently have a formal Executive-level body to oversee and coordinate nearshore ocean affairs. At present, state agencies serve as ex-officio members of the Ocean Policy Advisory Council and, from time-to-time, are convened by the Office of the Governor as an informal Marine Cabinet. Neither of these mechanisms provides the needed coordinated oversight, program integration, or engagement of the research community, stakeholders and the public.

A mechanism is needed to ensures overall policy and program coordination, guards the long-term ocean management interests of the state, provides stakeholders with a strong voice in ocean management and research, ensures the best possible scientific advice and information is available to marine managers and the public, and connects the activities of the funding institution and the science advisory body with the state's nearshore management priorities.

A formal Marine Cabinet, composed of directors of key state agencies, a representative of the Governor, executives of marine science institutions, and perhaps the public-at-large, would

- have no independent authority to manage ocean resources or uses;
- provide oversight and policy coordination among the parties with interests in Oregon's nearshore marine management (e.g state agencies, the Governor's office, legislators, academic research institutions, stakeholders, and the public);
- be advised by OPAC 3.0 (the stakeholder advisory entity) and the STAC-Plus (the science advisory body);
- periodically prepare a nearshore strategic plan with advice from the OPAC 3.0 to identify key issues and priority needs;
- consult with the Academy to adopt a multiyear Nearshore Research and Monitoring Plan based on the priorities and needs in the strategic plan;
- comment on funding plans and activities of the Trust (Note: the Trust could not be controlled by the Cabinet without risking its status as independent non-profit private corporation);
- prepare a biennial report to the governor and the legislature regarding marine research and management issues.

The Marine Cabinet would request the OPAC 3.0 to provide policy advice, as needed, as well as use the OPAC 3.0 as a mechanism to engage stakeholders and the public on a periodic basis to determine nearshore ocean management needs and opportunities. This outreach would be a part of strategic planning for research and monitoring purposes.

The Marine Cabinet could also be a vital element in developing and presenting to potential external funders a coordinated "state" strategy or initiative that had the support of all stakeholders in the process.

**DISCUSSION: What should be the membership of the Cabinet? How would it formally constituted? What level of staff support would it require? Should there be more guidance on how the cabinet will establish the**

**priorities to focus on for research, data gathering, convenings and funding?**

## **5. Data Management Structure/Processes**

Strong data management is a critical element of the state's long-term nearshore management Enterprise and is one of the principal issues of concern to the Legislature. At present, the state has no overarching structure, policies, or processes for ensuring or facilitating data integration into marine management programs or decisions. But conditions are ripe to develop far better processes and standards for sharing data for marine management decisions. These conditions result from the advent of near-universal reliance on digital data, the ease of use and data management capacities of the Internet, relatively inexpensive high-powered software and hardware, and a growing professional capacity among state agencies. A strategically conceived and executed program of data management is necessary to ensure that data and information from a variety of sources is available to state agencies, community groups, stakeholders, and the public and to account for constantly evolving data and scientific information as well as technologies. Informal or ad hoc efforts at data coordination exist among staff from state and federal agencies, academia, industry, and non-governmental organizations, most notably to support the marine reserves nomination process in 2008.

A Marine Data Network would be distributed, not centralized, and based on protocols and standards recommended by a Data Committee empanelled by the Cabinet and approved by the Oregon Geographic Information Council under the auspices of the state Geospatial Enterprise Office. Numerous data users that already share data informally would participate on the Data Committee including users from state agencies, programs at Oregon State University, federal agencies, and private non-profit foundations.

It is likely that the Network will require some staff capacity to provide on-going oversight, cataloging, coordination, and advice, particularly as new data sets become available. This capacity could be housed in an existing state agency program, the Academy, a non-governmental entity, or a university.

The Marine Data Network should:

- Specify metadata standards (data about the data) consistent with federal data standards for all data acquired or used by Oregon's Nearshore Ocean Enterprise;
- Accommodate interoperability (take advantage of new Internet Web 2.0 technologies and the capabilities of Google Maps);
- Integrate separate data sources and allow users to discover and access new data and information in a convenient way;
- Maintain a data catalogue to track new datasets that are developed and identify datasets that become obsolete;
- Integrate new data sets from ocean observing systems without architecture or client application changes;
- Enable users to access data on the network with a variety of different tools (e.g. simple web browsers, analysis tools such as MarineMape and ArcGIS):

Among the kinds of data to be accommodated by the Network are:

- Traditional geospatial (GIS) data (i.e. points, lines, areas) of coastal and ocean features, resources, and ocean uses, served in a variety of formats;
- Gridded data from ocean and coastal observing data from satellites, radar, and models (use a standard suite of web services or data protocols for interoperability and integration);
- Point observation data from devices such as current meters and wave buoys or gliders (integrated with federal efforts to integrate similar regional and national data).
- Non-geographic informational data such as PDFs, reports, images, websites, and spreadsheets, all of which can be "geotagged" through metadata information and can provide supporting data for decision makers.

**DISCUSSION: Where should this Network be headquartered? A state agency? An academic institution? A stand-alone? Does the Task Force need to make a recommendation now?**

## **6. Scientific Research and Monitoring Capacity**

Oregon must increase its scientific research and monitoring capacity in order to successfully address important nearshore ocean management needs of the state and coastal communities. Although Oregon has several outstanding academic institutions that support a wide range of research and monitoring in the marine environment off Oregon, the state has no coordinated approach to identify specific research or monitoring needed to acquire data and information needed to support critical management decisions.

In the long term, the State of Oregon needs to develop a research and monitoring capacity focused on the nearshore to understand, predict, and respond to the effects of changes in marine ecosystems from climate change, human uses in coastal watersheds, and from cumulative effects of a variety of stressors that affect the wider global ocean. In the short term, the designation of marine reserves and pending development of ocean alternative energy facilities provide significant opportunities to develop and implement basic research and monitoring efforts. Such efforts will benefit both short and long term management of the nearshore ocean and provide a better understanding of the effects on of a variety of stressors on nearshore ecosystems, resources, uses, and coastal communities.

Some scientific research and monitoring in Oregon's nearshore ocean is currently funded, and will undoubtedly continue to be funded, through a variety of sources that are not accountable to the State of Oregon, such as federal agencies and the National Science Foundation. The key for the state is to create a mechanism to leverage new funds and coordinate with other programs to support research and monitoring in the nearshore ocean needed to improve management of ocean resources at the state and community level. Thus, the Oregon Academy of Marine Science, discussed above, is proposed as a key institution to assist "the state" through the Marine Cabinet, also discussed above, to identify research and monitoring priorities and develop a Nearshore Research and Monitoring Strategy to meet those priorities. This strategy would then be used by the funding entity, the Trust, to attract and disburse funds. The Cabinet, the Academy, and

the Trust would develop necessary guidelines to ensure transparency, accountability, and other standards for a Nearshore Research and Monitoring Program.

In addition to research and monitoring activities that might be funded by the Trust through accepted proposal-driven and peer-reviewed processes, some state agencies with ocean management responsibilities, such as the Oregon Department of Fish and Wildlife, frequently conduct specific research and monitoring using staff resources as part of program efforts to meet those responsibilities. Those needs would be factored into the Trust's funding strategy.

***DISCUSSION: This is an issue discussed by the TF, but is this section needed? Is this the place to identify, in approximate terms, top priorities for research and monitoring?***

## **7. Community Engagement and Education**

The engagement of coastal communities in the long-term stewardship of nearshore ocean resources is an exciting and positive development that should be supported and encouraged through local community teams organized around implementation of marine reserves and planning for ocean alternative energy. This community-based approach creates an opportunity to strengthen Oregon's ocean stewardship efforts but will need financial and technical support to succeed over time. Local groups will need financial support for projects, research, outreach, monitoring, etc. as well as technical support from state agencies and universities. Opportunities abound for researchers to collaborate with local fishermen and others to take advantage of local knowledge.

The Trust should, as part of its mission, establish a program with processes to specifically support community group activities and capacity. In addition, the Trust could provide funding support for marine-related programs and activities in K-12 learning in public and private schools, community stewardship organizations such as the Haystack Rock Awareness Program in Cannon Beach, and other local entities. The Trust would propose these programs and activities as part of its overall funding strategy that would be approved by its Board of Directors with advice from the Marine Cabinet and OPAC 3.0.

***Discussion:***

***Should we get more clarity on what we propose here? Since funding is limited, how would the Trust decide to fund communities vs fund research? focused only on this piece? Would the community groups interface with OPAC as the policy body?***

## **8. State Agency Programs**

State agencies are the entities that have responsibilities and authorities for managing ocean resources and uses. The overall purpose of the Oregon Nearshore Management Enterprise is to improve and support these agencies with information, tools, and processes needed to do their jobs well. State agencies will be involved in all aspects of the Enterprise, particularly carrying out their respective missions, engaging with the Marine Cabinet and the Academy and working with federal agencies and other states.

State agency programs and authorities are more fully described in Part 1.E. of the Oregon Territorial Sea Plan. Agencies are currently involved in these nearshore-related programs and activities and which comprise an informal Marine Cabinet are:

**Oregon Department of Fish and Wildlife:** on-going fisheries management of commercial and recreational fisheries, including direct participation in Pacific Fishery Management Council process; commercial fisheries data collection from log-books and other records; management of nearshore developmental fisheries; marine habitat program biological and physical surveys and assessments of nearshore habitats; implementation of marine reserves; biological consultation on dredged material disposal in the nearshore and preparation of ocean alternative energy;

**Oregon Department of Land Conservation and Development:** preparing plan for ocean alternative energy development; oversees implementation of Goal 19; provides funding support to ODFW for marine habitat program field work, to OPRD for rocky shores inventory assessments, and to DOGMI for ocean shore erosion studies; hosts marine data on Coastal Atlas website; provides coordinating function and technical assistance to other agencies on marine data and information technologies; reviews federal

agency actions affecting Territorial Sea (e.g. dredged material disposal) for consistency with state standards; provides ocean policy advice to Office of the Governor and assists in Action Teams of the West Coast Governors Agreement on Ocean Health; provides administrative support for OPAC 2.0.

**Oregon Department of State Lands:** has proprietary interests in submerged and submersible lands (i.e. the seabed) in the Territorial Sea; adopts rules and issues leases for ocean uses that contact the seabed (e.g. submarine cables, anchors for wave energy devices); supports policy decisions of the State Land Board regarding ocean uses.

**Oregon Department of Geology and Mineral Industries:** maintains geologic data and maps; approves oil, gas, and mineral surveys and development; conducts surveys and monitoring of ocean shoreline sediment and erosion processes.

**Oregon Department of Environmental Quality:** has oil spill prevention and response responsibilities and evaluates oil spill contingency plans mandated by state law, is state on-scene coordinator for oil or hazardous material spill response in marine environment.

**Oregon Parks and Recreation Department:** manages and provides recreational and interpretive services to visitors to coastal state parks and rocky intertidal areas; issues permits for shore-front protective structures and other beach activities, including crossing the beach with a pipeline or cable.

***Discussion:***

***Is it necessary to discuss further how state agencies would interface with this framework?***