# West Coast Governors' Agreement on Ocean Health Workshops on the Competitive NOAA Regional Ocean Partnership Funding Program

# **Workshop Summary**

November 15, 2010 - Newport, OR

Prepared by Kearns & West

# Introduction - Workshop Objectives, Structure and Participants

#### **Objectives**

The workshop was intended to inform the development of a proposal led by the West Coast Governors' Agreement on Ocean Health (WCGA) to pursue funding opportunities made available through a Regional Ocean Partnership Funding Program (ROPFP). The workshop was designed to:

- Provide an overview of the ROPFP;
- Identify ideas to advance West Coast regional coastal and marine spatial planning (CMSP) while supporting the full range of West Coast regional ocean priorities to facilitate a coordinated and robust application for funding under the ROPFP; and
- Confirm next steps moving forward.

Jessica Hamilton Keys, Natural Resources Policy Advisor to Governor Kulongoski, welcomed and thanked participants for attending the workshop. She provided context for the Regional Ocean Partnership Funding Program (ROPFP) and explained that in July 2010, the Obama administration established the first National Ocean Policy (NOP) to coordinate and encourage stewardship of the ocean, coasts and lakes. The purpose of the meeting was for workshop participants to articulate project ideas that align with various priorities of the ROPFP. She summarized the relationship of Action Coordination Teams (ACTs) with Marine Spatial Planning (MSP), and urged participants to share ideas for proposals to complement and augment ACT actions. She explained that her role in the workshop was to listen and to share the results of the workshop with the WCGA Executive Committee.

Jessica provided background on the WCGA, mentioning that the agreement was initiated by governors of the three states in 2006, with implementation of their 2008 Action Plan comprising 26 actions currently moving forward. She summarized the ROPFP process to date, and explained that the Obama administration has made the process competitive. She said that the West Coast is in a particularly strong position to build on existing structures and frameworks to advance regional ocean collaboration. Coastal and marine spatial planning (CMSP) is emphasized in the ROPFP. She emphasized that Congress has not yet appropriated funds for the ROPFP, but that NOAA initiated the proposal process to enable them to respond promptly should funds be available. The total

funding amount, to be distributed among nine regional ocean partnerships around the country, is proposed to be \$20 million. She reiterated the goal to incorporate and unify many regional voices to craft a strong final proposal. Debra Nudelman, Kearns & West facilitator, invited the workshop participants to introduce themselves and reviewed the agenda and ground rules.

#### Structure

The three statewide WCGA workshops were held to facilitate public input toward the development of a proposal(s) in pursuit of the ROPFP opportunity. The California Workshop was held in San Francisco, California on November 12; the Oregon workshop was held in Newport, Oregon on November 15; and the Washington workshop was held in Olympia, Washington on November 16, 2010. The agendas for each workshop were identical.

Each workshop proceeded according to the following basic structure:

- WCGA staff provided an overview of the context for the ROPFP. This included a review of the funding criteria and existing CMSP priorities as identified by the WCGA and other partnerships. Participants were provided with an opportunity to ask clarifying questions.
- Workshop participants were provided with an extended period of time, in both plenary and breakout settings, to share their views on priorities for CMSP along the West Coast.
- The workshop concluded with WCGA staff describing the next steps to develop the funding proposal and how public input can be submitted. Participants were provided with the opportunity to ask clarifying questions.

A workshop agenda is included in Appendix 1.

#### **Participants**

Fifty-nine participants attended the Oregon workshop; the list of workshop participants is attached as Appendix 2. Together, the participants represented a broad variety of stakeholder interests, including Oregon conservation groups, local, state, and federal agencies, commercial fishing interests, other ocean users, research institutions, and consulting organizations. Participants provided input during the workshop and on group report forms for consideration by the WCGA to develop a ROPFP proposal.

Jessica Hamilton Keys, Lisa DeBruyckere (WCGA Ocean Health Coordinator), and Debra Nudelman (Kearns & West Facilitator) convened the workshop.

#### Context for Regional Ocean Partnership Funding Program

Lisa DeBruyckere provided context for the ROPFP and shared that no other regional ocean partnership in the country is conducting a public engagement process of this extent. She then reviewed elements and highlights of the scoping document, emphasizing important deadlines and clarifying sections. In particular, she drew workshop participants' attention to the following goals of the scoping document:

- Highlight West Coast regional priorities;
- Merge concepts in the ocean policy task force, funding program, and WCGA action plan;

- Merge guiding criteria that are needed for the WCGA to compete nationally for this funding;
   and
- Bring structure and transparency to a complex issue within a short timeframe.

Lisa also explained other essential elements of the Scoping Document, including the three basic ways to submit ideas for the FFO, which include: 1) Attending workshops; 2) Submitting a 500-word description explaining a proposed project idea, and 3) Submitting a detailed proposal website via the online application tool. (Additional details can be found on page eight of this summary.)

She defined "regional" projects, explaining that a project does not have to occur at the same level in all three states to be considered a regional priority. In addition, she explained that the WCGA Action Coordination Team (ACT) work plans do not comprehensively address all priorities in the WCGA Action Plan—and that other ideas could help further a regional action plan. She said that it would be helpful to list other actions and partnerships that already exist to further proposed action plans. She said that she hopes workshop participants have a shared understanding that a project proposal may include priorities identified to date in any ACT work plan as well as other ideas beyond those work plans.

Lisa drew the group's attention to focus on advancing CMSP, and emphasized that the National Oceanic and Atmospheric Administration (NOAA) has stated it will give highest priority to projects that advance comprehensive CMSP. She urged collaboration among workshop participants, stating that the WCGA will present the most compelling case if it speaks with a unified voice. There are a limited number of projects that will be funded; the WCGA hopes to propose projects that both incorporate large themes and address a variety of smaller ideas from multiple participants.

She provided an overview of the timeline for submitting project ideas and for the subsequent review by members of the WCGA Executive Committee. Lisa finished her review of the Scoping Document by underscoring its utility as a working document and its main purpose as a framework for workshop participants.

A number of people asked questions regarding the CMSP project timeline; including how a project should fit into the short- and long-term five-year CMSP plan. Lisa answered that the ROPFP provides for two years of funding and that this process is a first step towards developing a five-year CMSP plan for the region. She said that compelling project ideas would fit into the short-term and the long-term CMSP vision.

A few people mentioned the need to establish a consistent work plan for each of the three states, and a timeline to influence state-level discussion. In addition, people advocated merging state-based projects into an integrated whole that covers the entire region cohesively, without showing signs of being "patched" together. Lisa also noted that this ROPFP is an opportunity, not a mandate. She urged workshop participants to be the experts and to help integrate these projects together.

Another participant asked how input from the ACTs will relate to the WCGA public process. Lisa answered by referring to the California workshop, where people referenced ACT work plans in their discussions, and the need to coalesce ideas. She mentioned that many of these ideas need further refinement and cohesion.

Other questions centered around the scale of project funding, to which Lisa answered that there is an anticipated \$1 million to \$3.5 million available for each award, but no hard cap. Another question focused on whether NOAA could partially fund certain aspects of a proposal or allocate funds based on an "all-or-nothing" approach. Lisa answered that these are cooperative agreements, not grants, and can therefore be partially funded. A federal funding entity can select certain aspects of the proposal to fund.

Other questions and subsequent discussion centered around the geographic scale of CMSP and how to integrate and standardize a ROP within pre-existing national infrastructure, datums, and data sets. It was mentioned that a Larger Marine Ecosystem (LME) construct has become a foundation for national ocean policy that can be built upon.

#### **Discussion of Regional CMSP Priorities**

#### Plenary Discussion of Regional CMSP Priorities

Debra Nudelman led a plenary discussion of regional CMSP priorities. Reviewing the priorities as identified by the WCGA, workshop participants considered what should be included in the ROPFP proposal, what other priorities should also be included, how these ideas can leverage existing activities, and other suggestions to improve the proposal.

Some participants initially agreed with the priorities, but add added that they foresaw challenges in using these general priorities to craft a specific, competitive proposal. On one side, the priorities are too general, and on the other, it may be challenging to see broader themes from the specific ACT actions that are detailed in Appendix C of the Scoping Document.

Other participants mentioned the need to standardize socioeconomic data for communities in different cities within the region. Another participant added that the WCGA action plan should capture CMSP more explicitly and asked how to further integrate the MSP policies of three states and merge the interests of those interested in data and those interested in marine policy into a larger plan. Another participant added that the region is still missing good data, which is essential for CMSP. There is a need to analyze and synthesize data sets among the three states as building blocks for regional CMSP. It was recommended that an aspect of the proposal should continue to build region-wide data analysis and synthesis to develop a standardized system among three states for permitting among agencies. A few others added that data collection and gap analysis should be a high priority in the proposal, and that a key component is to have continuity in data acquisition among the three states. Some added that there is a need for a robust plan of strategies of positioning and datums, particularly in estuaries, and the need to merge sea floor mapping with upland topography.

One participant mentioned that a competitive proposal should integrate stakeholder engagement and scientific capacity. They mentioned the need to craft a final proposal that indicates the importance of existing structures and acknowledges an incremental, multi-tiered process with clear outcomes. They indicated that this could be a way to help focus on data stewardship and infrastructure instead of more acquisition. They wondered how data that have already been

collected can be used to build common infrastructure and to help disseminate the information within a common data set.

One participant proposed an Integrated Ecosystem Assessments (IEA) community-based approach, which breaks the coastline into four linked nodes and integrates numerical, habitat, and socioeconomic data, and synthesizes the information on an interconnected sub-regional level. Another participant added the need to support stakeholder involvement.

Others mentioned that the high cost of data collection is a problem and we should be strategic about the financial feasibility of data needs when crafting proposals. Many participants proposed using existing data and tools to connect policy and data gaps to make it more accessible to decision-makers. Another participant mentioned that proposals should focus on identifying what is needed in the next one to two years to ensure that current projects are successful. Others mentioned that data collection and synthesis – including socioeconomic data – is already occurring as representatives of state agencies construct data portals along with regional representatives; this was further discussed in breakout groups. Another participant mentioned that the Pacific Fishery Management Council (PFMC) is crafting an ecosystem-based fishery management initiative, which could provide an opportunity for leveraging resources.

Some workshop participants disagreed that data acquisition and mapping is a top priority, and instead advocated for referencing national "Areas of Special Emphasis" (listed in the ROPFP), such as climate change, ocean acidification, regional ocean protection, water quality and sustainable land practices. They proposed identifying and targeting some of these areas where the West Coast could excel.

Participants discussed proposal timeframes. One participant mentioned the need to clarify the purpose of project proposals, and whether proposals are intended to be multi-year plans or whether they are intended to be awarded funding in the short term for a specific project idea. Another mentioned that through the actions of the Oregon Ocean Policy Advisory Council (OPAC) and Oregon Wave Energy Trust (OWET), Oregon could have an ocean plan by the end of 2011, and there needs to be support to both complete this plan and move forward with next steps. Still others mentioned the need to establish infrastructure and a long-term vision that enables access and positioning for more funding opportunities, even if it does not yield immediate results.

Some members of the group returned to the data discussion, mentioning that the data catalogue should be translated into metrics that can be used in a spatial context and the need to work with users of that information to hone in on spatial and temporal gaps. Others mentioned that a successful proposal should be interactive among scientists and managers and that databases and labs should be linked together, especially with regard to seafloor mapping. They mentioned two components of data: technology and human networking. One participant cautioned that there is a disparity in states' needs for data, and that some data gaps are specific to some states and do not apply to others. The group discussed the need to examine common data sets and parse through each state's similarities and differences in data needs. One participant asked whether a project can be state-specific, or whether it must span the entire region. Jessica Hamilton Keys reiterated that the ROPFP FFO seeks to support projects that are regional in scope.

Others proposed examining the work of other ROPs around country for ideas, drawing particular attention to the Gulf of Mexico model, which has an inclusive and transparent structure established. Another participant encouraged attending to terrestrial management, as well, indicating that the Oregon Land Conservation and Development Commission (LCDC) supported an interim strategy to prepare coastal communities for climate change via adaptive management, which has important implications for renewable energy development.

## Breakout Discussions of Regional CMSP Priorities

Debra Nudelman provided an overview of the breakout group activity and worked with the group to identify appropriate breakout group topics. Workshop participants self-selected into six breakout groups to discuss additional ideas for consideration in the funding proposal. Each group was asked to develop recommendations and share themes, priorities and consensus ideas with others when the groups reconvened.

The six breakout groups focused on the following topics:

Group #1: Data Portals

Group #2: Data Synthesis and Decision Support

Group #3: Data Synthesis and Decision Support

Group #4: Data Synthesis and Decision Support

Group #5: Public Engagement, Including Socioeconomic Impact

Group #6: Context and Strategic Focus

After the breakout groups discussed their topics, Debra reconvened the plenary and provided each group with the opportunity to share ideas and to brainstorm collaborative efforts. Although each breakout group had a main focus, there were many overlaps in priorities and themes discussed. The section below highlights key points made during the reports back from the breakout groups to the plenary.

#### Group #1: Data Portals

Overarching themes included leveraging existing projects and efforts and discussing the need to connect consumers and producers of data with the data itself. It is important to connect different state and federal standards and create a registry that would include any project that is applying for funding. Emerging priorities included creating a registry to connect both pre-existing and new data and people as well as to contain records of decisions for administrative purposes. The group identified the need to determine who maintains the registry across the region and discussed whether it will be a centralized entity or a dispersed collection of groups and servers. Consensus ideas included leveraging existing efforts, adopting data standards, developing ISMap and a plan for implementation, and developing a registry.

#### Group #2: Data Synthesis and Decision Support

Synthesizing data to address management issues was an overarching theme. Emerging priorities included addressing data availability, infrastructure, socioeconomic data, and integrated assessments. Consensus ideas included developing the West Coast regional data framework to have four nodes of interest with a coordinator for each group. Based on an IEA framework, the structure would contain three tiers, as follows:

- Tier 1, an Integrated West Coast data framework, which addresses data availability, infrastructure, socioeconomic data, uses integrated assessments as a tool, and capitalizes on existing nodes of information;
- Tier 2, which uses integrated ecosystem assessments (such as renewable wave energy, sustainable fishing, MPAs along the coast line, and climate change) as a decision-making tool; and
- Tier 3, which addresses high priority issues identified by ACTs. Most of these currently exist within a broader data framework.

## Group #3: Data Synthesis and Decision Support

Overarching themes included data stewardship, data sharing, processing, and collection, using metadata to differentiate between measured data and interpolated data. It is important to connect data to a national spatial reference system and to implement NOAA standards across the states (between states and between off-shore and on-shore data); leverage existing data sets; and foster integrated coastal and ocean mapping efforts between and within states to take advantage of funding opportunities. Emerging priorities included establishing region-wide standards and integrating them for all data information systems; integrating with national standards, where appropriate; coordinating a line of information and communication between data managers and decision-makers; defining local needs and subsequently determining data acquisition methods; conducting outreach and actively promoting data collection; fostering the concept of data stewardship; and continuing to synthesize data and metadata. Other topics included verifying and validating NOAA's vertical datum transformation tool as well as a plan that compares GPS data of estuary programs with V datum results and that modifies data as appropriate.

# Group #4: Data Synthesis and Decision Support

Overarching themes included relating the proposal to the management needs of WCGA. There are several management needs that could be used as case studies. There is a need to recognize and leverage existing data tools and networks, align experts' data, methods, scales, formats, and grid patterns in various topic areas, and bring human resources together.

#### Group #5: Public Engagement, Including Socioeconomic Impact

It is important to collect and standardize data for consumptive and non-consumptive uses through a credible process. Emerging priorities included assigning value to ecosystem services; promoting education and workshops to motivate public engagement; connecting inland and coastal communities; promoting methodology that provides transparency and allocates funds to analyze the framework; building a capacity and cumulative effects tool; providing for scenario-planning; engaging the public to develop management goals; investigating how to make an existing "Fish Cred" it more accessible to a wider variety of users by building on the work of Ecotrust; bridging the information gap between the charter industry and the general public; and considering that socioeconomic data often belongs to people who provided it.

#### Group #6: Context and Strategic Focus

Overarching themes included addressing climate change in addition to CMSP; using the same data and tools across different issues; incorporating stakeholders; structuring the proposal to partner with NOAA and their priority programs; determining how to allocate the West Coast share of funding; considering how this proposal aligns with other funding opportunities (because this is a cooperative

agreement); structuring the proposal in terms of pilot project(s) and focusing on a few individual ones to demonstrate how they could be scaled up to a regional scale; and considering how the IEA concept provides a framework for approaching the MSP process.

## Project Ideas

During a plenary discussion that followed the break out group reporting, Jessica Hamilton Keys invited workshop participants to articulate specific project ideas. The list below highlights these project ideas:

- Support public outreach and the effective engagement of stakeholders and coastal communities in the development of Oregon's ocean plan by the end of 2011.
- Develop a coastal training program that includes data synthesis and decision-support tools, using GOMA in the Gulf of Mexico as an example. The project concept would put a WCGA focus on a coastal training program model and would provide training and awareness for coastal communities.
- In partnership with The Nature Conservancy and Pacific Northwest National Labs, examine an area on the coast where there is likely to be renewable energy development, and use it as a case study area to examine different decision support tools and the effectiveness of MarineMap and Parametrix models. From this study, develop an understanding of data and tool gaps. Apply this study to renewable energy development, terrestrial issues, offshore wind, and transmission issues.
- Develop a portal for data stewardship to support state agency-run coastal atlases and possibly merge it with the Tier 1 proposals within an IEA framework.
- Develop training programs for MSP, possibly through the Oregon State University MSP Council. Four Sea Grant programs will be submitting a call for proposals to fund projects for regional social economic science.
- Develop the PISCO Consortium and merge concept with the IEA Tier 1 portal. Determine what metrics within the PISCO data catalogue (i.e., intertidal data sets), have been used for water quality assessments and marine reserves in California. This has the potential, if combined with other useful metrics, to support population replenishment data and interpret those data into a spatial analysis. In addition, use data that could be translated into dissolved oxygen data and integrate with biodiversity data sets and translating them into a listing and distribution of species within the context of ocean acidification.
- Develop a non-consumptive recreational use data project, partnering with Ecotrust and Natural Equity that examines how to standardize a regional data set in standards and methodology. Use spatial data that would be in a consistent framework that would be useful to the process. This project has implications for surfing, diving, and fishing interests, and will help create better synergy between consumptive and non-consumptive data collection.
- Partner with Oregon State University to integrate core datum and ship heights offshore using GPS and inertial data that had been collected. Improve horizontal and vertical data sets and develop consistent data sets for Oregon sea-floor mapping. More comprehensive data could be used in estuaries.
- Create a system to make data sets inter-operable and incorporate disparate types of data in multidimensional databases. Engage and partner with federal agencies such as NOAA.

Many participants agreed that funding feasibility for projects is uncertain. A few participants mentioned the need to partner with federal and state agencies, such as NOAA and Oregon Department of Fish and Game (ODFW), and to build upon work that has previously been done. Others observed the lack of a fisherman presence in the workshop, and acknowledged the need to make contact with the fishing industry to garner support and build partnerships; they mentioned that when scientists and fishermen work together, there is a higher likelihood of success. Overall, participants emphasized the need to develop project ideas that could align and work together within the region.

# Next Steps: Working Toward Achieving West Coast Regional Ocean Partnership Priorities and a Regional Coastal and Marine Spatial Plan

Lisa described the WCGA proposal review process moving forward. She indicated that by the end of all three workshops, the WCGA Executive Committee will have collected the 15 to 20 probable main ideas, and will then package, consolidate and coalesce them into three to five projects with a key federal funding piece. The Executive Committee will attempt to link people with similar ideas and provide the opportunity for collaboration and synergy. She encouraged workshop participants to inform others if leveraging funds is possible. She followed up by saying that there is no cost-sharing requirement, but it would bolster the competitiveness of the proposal. WCGA will have a fiscal sponsor that disperses funds to their entities.

In developing a response to the ROPFP, the WCGA is aiming to be as transparent as possible. The public is invited to provide direct input on WCGA's response to the ROPFP as well as to share information with other stakeholders. This can be done in three ways:

- 1. Attend a public workshop in one of the three West Coast states. The webcast of California's workshop will be available online. Workshop summaries will be posted on the WCGA website (www.westcoastoceans.gov) by November 23rd.
- 2. Submit a comment or idea (500 words or less) at www.westcoastoceans.gov. All submitted comments are public and available for others to read. For consideration in the proposal, comments must be submitted by December 3, 2010.
- 3. Submit a specific project idea at www.westcoastoceans.gov. Ideas can be submitted via an online survey until November 19th. The survey contains 31 questions, but "N/A" can be submitted for any question without an applicable answer. [A Word document version is also available]

All submitted ideas and proposals will be considered by the WCGA. On November 30th, the WCGA will host a post-workshop webinar to summarize input to date and describe the content of the draft proposal. The public can submit feedback on this proposal until December 3rd. The final proposal will be submitted to NOAA on December 10, 2010. A final decision from NOAA is anticipated in June 2011.

#### Meeting Summary and Acknowledgements

Debra Nudelman closed substantive discussion, thanked workshop participants for their efforts, and turned the workshop over to Jessica Hamilton Keys for a meeting summary and acknowledgements.

| Jessica commended workshop participants for their hard work and effort and thanked them for their willingness to engage in these important discussions. |
|---|
| The meeting adjourned at 4:00 pm.   |
| This meeting summary respectfully submitted by Kearns & West.   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |

# WEST COAST GOVERNORS' AGREEMENT ON OCEAN HEALTH WORKSHOPS ON THE COMPETITIVE NOAA REGIONAL OCEAN PARTNERSHIP **FUNDING PROGRAM**

MONDAY, NOVEMBER 15, 2010; 10:00 AM - 4:00 PM

Oregon Workshop Oregon Coast Community College, Central Campus 400 SE College Way -Room 140 Newport, Oregon 97366 (541) 265-2283

#### Workshop Objectives:

- Provide overview of the Regional Ocean Partnership Funding Program (ROPFP);
- Identify ideas to advance West Coast regional coastal and marine spatial planning (CMSP) while supporting the full range of West Coast regional ocean priorities to facilitate a coordinated and robust application for funding under the ROPFP; and
- Confirm next steps moving forward.

Welcome, Introductions, Workshop Purpose and Agenda 10:00 - 10:30

- Welcome, introductions, workshop purpose Jessica Hamilton Keys, Natural Resources Policy Advisor, Office of the Governor, WCGA State Lead for Oregon
- Agenda review and workshop objectives Debra Nudelman, Kearns & West

10:30 - 11:00Context for the Regional Ocean Partnership Funding Program including Funding Criteria and Existing CMSP Priorities - Lisa DeBruyckere, West Coast Governors' Agreement on Ocean Health Coordinator

- Review of funding criteria as outlined in the ROPFP
- Overview of Existing West Coast CMSP Related Priorities
- Outline WCGA approach to responding to the ROPFP
- Question/Answer

11:00 - 3:30Discussion of Regional CMSP Priorities (lunch provided)

- (~1.5 hours) Provide feedback on priorities identified in the Scoping Document, including identifying:
  - Which of these priorities, if any, do you agree should be included in the ROPFP proposal?
  - What other priorities should be included, if any?
  - How do these ideas leverage existing activities?
  - What else would you suggest to improve the proposal?
  - Others?
- (~1.5 hours) Break out groups over lunch to identify additional ideas for consideration:

- Self-select into break out groups with charge to do an assessment of new ideas against selection criteria
- (~1.5 hours) Reconvene plenary to coalesce breakout group efforts; seek areas
  of alignment, identify and strive to recommend activities with greatest likelihood
  of ensuring the West Coast can maximize the financial resources it receives to
  support marine spatial planning that furthers regional priorities for a healthy
  ocean and vibrant coastal communities:
  - Any overarching themes?
  - Any priorities emerging and why?
  - Any consensus ideas?

3:30 - 4:00

Working Toward Achieving West Coast Regional Ocean Partnership Priorities and a Regional Coastal and Marine Spatial Plan – Lisa DeBruyckere, West Coast Governors' Agreement on Ocean Health Coordinator

- Describe process and logistics for proposal development: brief overview and Q&A about grant application structure and guidance for submitting ideas
- Outline key next steps including:
  - Meeting summaries
  - Webinar
  - Public comment opportunities,
  - ROPFP proposal development schedule until December 10, and
  - Confirm ways to continue engaging with stakeholders as efforts progress beyond December
- Acknowledgements and concluding remarks

4:00

Adjourn

## **Appendix 2: Oregon Workshop Attendees**

Name Affiliation

Jonathan Allan Oregon Department of Geology and Mineral Industries

David Allen Oregon Ocean Policy Advisory Council

Susan Allen Pew Charitable Trusts

Jay E. Austin Environmental Law Institute
Hal Batchelder Oregon State University

Becca Bourson Grand Ronde Tribe Fish & Wildlife

Stephen Brandt Oregon Sea Grant Ellen J. Crivella GL Garrad Hassan

Jon Dasler David Evans and Associates, Inc.

Lisa DeBruyckere West Coast Governors' Agreement on Ocean Health

Nancy Fitzpatrick Oregon Albacore Commission

David Fox Oregon Department of Fish and Wildlife

Jim Golden Golden Marine Consulting
Chris Goldfinger Oregon State University

Emily Goodwin Gordon and Betty Moore Foundation

Daniel Grant Kearns & West

Mike Graybill South Slough National Estuarine Research Reserve Tanya Haddad Department of Land Conservation and Development

Jessica Hamilton Office of the Governor

Kevs

Robin Hartmann Oregon Shores

Sarah K. Henkel Hatfield Marine Science Center

Scott Heppell Oregon State University
Nancee Hunter Oregon Sea Grant

Onno Husing Oregon Coastal Zone Management Association

Daniel Jaynes GL Garrad Hassan

Paul Klarin Oregon Department of Land Conservation and Development

Justin Klure Pacific Energy Ventures, LLC
Mike Kosro Oregon State University
Steven R. Kopf Pacific Energy Ventures, LLC

Andy Lanier Department of Land Conservation and Development

Suzanne Lawrence Consultant
Paul Manson Parametrix
Chad T. Marriott Stoel Rives, LLP

Bruce Mate Oregon State University

Karen McLeod Communication Partnership for Science and the Sea

Greg McMurray Pacific Energy Ventures, LLC

Kristen Milligan Partnership for Interdisciplinary Studies of Coastal Oceans

Jaron Ming U.S. Department of the Interior - Bureau of Ocean Energy Management,

Regulation and Enforcement

Debra Nudelman Kearns & West

Jeremiah Osborne- Conservation Biology Institute

Gowey

Anna Pakenham Oregon Department of Fish and Wildlife

Heather Reiff Communication Partnership for Science and the Sea

Chris Romsas Oregon State University College of Oceanic and Atmospheric Sciences

Steve Rumrill Oregon Department of State Lands
Cyreis Schmitt Oregon Department of Fish and Wildlife
John Sharrard Environmental Systems Research Institute

Fred Sickler Ocean Policy Advisory Council
Louise Solliday Oregon Department of State Lands

Pete Stauffer Surfrider Foundation

Charles Steinback Ecotrust John Stevenson Ecotrust

Terry Thompson Lincoln County Commissioner

Kris Wall National Oceanic & Atmospheric Administration
Kuuipo Walsh Oregon State University Institute for Natural Resources

Richard B. Williams Science Applications International Corporation

Krystyna National Fish and Wildlife Foundation

Wolniakowski

Dawn Wright Oregon State University