

*Discussion Draft*

*The Origins  
of  
Coastal Marine Spatial Planning (CMSP) in Oregon*

*Onno Husing, Director, OCZMA  
September 19, 2011*



*Oregon Coastal Zone Management Association (OCZMA)*  
[www.oczma.org](http://www.oczma.org)

## PREFACE

This document provides an insider's account of how the concept of "ocean zoning" or "ocean planning"—coastal marine spatial planning (CMSP)—took root in the State of Oregon.

This story is directed at two distinct audiences.

*Oregonians* are the first audience. The State of Oregon's CMSP process is now entering the final phase where we actually prepare a spatially explicit ocean plan for Oregon's Territorial Sea. Like the states of Rhode Island, Massachusetts and South Carolina, Oregon's process was driven by necessity. Proposed new uses of the offshore (renewable energy development) challenged the status quo. This document helps Oregonians understand what's taken place in Oregon during the last few years. And, it reminds coastal residents that *leaders on the Oregon Coast* were the original advocates for ocean planning in Oregon.

The second audience is *a national audience*. One year ago, President Barak Obama issued Executive Order 13547 (E.O. 13547) establishing a new National Ocean Policy (NOP). At the heart of NOP is CMSP. The NOP—especially CMSP—has sparked concerns among some constituencies that need access to ocean resources. The main critique of CMSP has been that CMSP is vague, that no one can say, with any certainty, what the real implications are. That's a valid observation. In different parts of the country, CMSP is a work in progress. That's why sharing our experience in Oregon, at this moment in time, is helpful to others.

In Oregon, we believe CMSP will meet *our* needs. Oregonians want to protect the marine environment, preserve existing ocean uses/users, and explore the enormous potential of tapping the ocean for renewable energy.

Even though we have not completed our planning process in Oregon, we can say with increasing confidence ocean planning represents a *much* better way of doing business.

## About the Author



Onno Husing is the Director of the Oregon Coastal Zone Management Association (OCZMA). OCZMA is an extension of local governments on the Oregon Coast.

Husing played a pivotal role in spearheading coastal marine spatial planning (CMSP) in Oregon. Oregon's CMSP process is scheduled for completion during the late spring of 2012.

Husing serves on Oregon's Ocean Policy Advisory Council (OPAC) and was on the Board of the Oregon Wave Energy Trust (OWET).

Onno Husing graduated from the University of Oregon's School of Law in 1988. He also holds a masters degree in City & Regional Planning and Anthropology. Husing began his career in 1976 as a researcher and commercial fisherman in Cape Cod. He wrote a masters thesis on the birth of the New England Fishery Management Council (NEFMC). During 1980, Husing worked as a researcher at the Woods Hole Oceanographic Institution (WHOI). In 1981-1982 Husing was a Knauss Fellow on Capitol Hill (focused on offshore oil & gas development and the United Nations Law of the Sea Conference).

## Acknowledgements

In Freeman House's book, *Totem Salmon: Life Lessons from Another Species* (1999), he states, "Writing in the first person can be a tricky business, especially when drawing your stories from a collective experience that has involved scores of people, only a few of whom are mentioned in the text."

I identify, completely, with those sentiments.

This account, as well, cannot do justice to the scores of people who played a role birthing coastal marine spatial planning (CMSP) in Oregon. Some key individuals have been mentioned in this document. The names of many others, who made major contributions, do not appear in this text. And, of course, people will have their own different perspectives on this process. They need to write histories of their experiences to round out the story.

But, I do want to express special thanks to the OCZMA membership. As these events unfolded, many far-sighted local government officials supported our work. And, special thanks are extended to the many individuals who took time out of their busy lives to attend what must have seemed like countless local meetings on the ocean plan. Those people are the bedrock of this historic effort.

Onno Husing

## Credits

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**Economic Development Administration (EDA)**  
<http://www.eda.org>



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**Oregon Wave Energy Trust (OWET)**  
<http://www.oregonwave.net>



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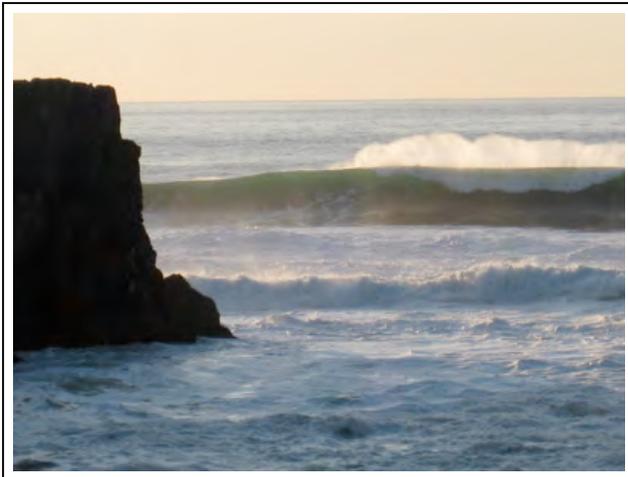
### *The Origins of Coastal Marine Spatial Planning (CMSP) in Oregon*

*Onno Husing*

#### ABSTRACT

During 2006 and 2007 the Federal Energy Regulatory Commission (FERC) received eight Preliminary Permit (PP) applications for wave energy sites in Oregon's Territorial Sea (0 to 3 miles). In Oregon, it felt like a modern day Gold Rush. One project, "Reedsport OPT Wave Park" submitted by Ocean Power Technologies (OPT), was proposed to be located in the heart of some of the most productive Dungeness crab fishing grounds. The ensuing controversy underscored the need for coastal marine spatial planning (CMSP) to reconcile emerging conflicts. This article charts the events that thrust Oregon into the forefront of implementation of CMSP in the United States.

The story of wave energy development in Oregon began in 2005. That's the year Ocean Power Technologies (OPT), based in Pennington, New Jersey, evaluated twelve different locations around the United States for wave energy deployments. OPT was looking for a place to deploy an array of point-absorber devices ("PowerBuoys").



Like other companies, OPT reviewed the Electric Power Research Institute (EPRI)'s evaluation of wave energy on the West Coast (released during 2004). EPRI found the wave climate off Oregon to be "outstanding."

EPRI's finding didn't surprise anyone. Oregon is located on the *eastern* side of the Pacific Ocean. Prevailing winds, moving west to east across the ocean, generate vast amounts of wave energy on the Oregon Coast. Scotland and Portugal have world-class wave energy resources for the same reason; prevailing winds build wave energy over the entire reach of the Atlantic Ocean.

**Why OPT? Why Reedsport, Oregon?**



Just north of the City of Reedsport, there's a vacant industrial site in the unincorporated community of Gardiner. In 1999, International Paper (IP) closed their paper mill in Gardiner. Two infrastructure assets remain at that site: (a) an ocean outfall previously used to discharge effluent from the paper mill into the ocean, and, (b) an electrical substation owned by the Bonneville Power Administration (BPA).



The outfall provides infrastructure to run transmission lines and fiber optic cables to the ocean with minimal costs and permitting issues. The substation provides a connection to the grid.

The bathymetry off the Southern Oregon Coast works for OPT because the ocean reaches optimal depths to deploy and test OPT wave energy buoys relatively close to shore. That's important because it costs about \$1 million a mile to lay transmission cables.

During 2006 the *jurisdictional* considerations were also pivotal. OPT determined they could site a commercial/utility-scale wave facility off Reedsport *entirely* within Oregon's Territorial Sea. In those days the U.S. Department of Interior (DOI) was *not* close to being ready to lease tracts on the Outer Continental Shelf (OCS) in federal waters. So, during 2006-2007, OPT needed to secure a site within state waters.

The ocean bottom off Reedsport is deep sand. That's ideal substrate for the large concrete anchors OPT proposed to deploy. But, the deep sand also makes that area off Reedsport prime Dungeness crab fishing grounds.

OPT received encouragement from leaders in Western Douglas County eager to promote economic development. But, OPT probably selected Reedsport because Oregon’s state government sent strong signals they supported wave energy development. During 2005, an influential business association called the Oregon Innovation Council (Oregon InC) determined Oregon had unique advantages when it came to wave energy. These include: robust wave resources, a sophisticated manufacturing sector (including Oregon Iron Works—OIW), and, a university community with world-class ocean expertise. Oregon, InC.’s advocacy prompted Oregon Governor Ted Kulongoski to make wave energy a top economic development priority for his administration (**Footnote #1**).

Governor Kulongoski’s thinking was captured in a press release (October 2006) in which he stated:

I want Oregon to launch a new wave of alternative energy development, and I mean that literally. By tapping the energy of ocean waves, we can move Oregon toward national leadership in renewable energy technology. Oregon’s investment in energy security will mean a healthier environment, a more reliable supply of home-grown energy, and good jobs for our state.

During July 2006, OPT filed a Preliminary Permit (PP) application to FERC for the Reedsport OPT Wave Park. The Federal Energy Regulatory Commission (FERC) granted OPT a PP for the project in October 2006 (FERC P-12713). The issuance of that PP set into motion a series of fateful events.

### *A Brief Look at OPT*

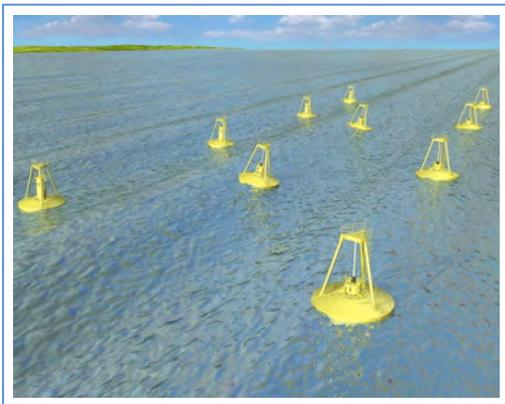


OPT was founded in 1994. The company describes their mission as, “Capture wave energy using large floating buoys anchored to the seabed using innovative power take-off systems.” (<http://www.oceanpowertechnologies.com/>).



*OPT Buoy under Construction (photos courtesy of OPT)*

During the 1990s OPT secured contracts from the U.S. Navy to develop wave energy devices for military applications. In 1997, OPT began ocean trials of their “PowerBuoy” technology. OPT describes their PowerBuoy as, “A leading edge, ocean-tested, proprietary system which generates reliable, clean, and environmentally-beneficial electricity.”



OPT's first initial public offering (IPO) was on the London Stock Exchange in October 2003 ("OPT"). In 2007 OPT completed their IPO with a listing on NASDAQ ("OPTT"). OPT's jump on the competition explains the company's eagerness to move rapidly to secure development sites off Oregon.

*(Image courtesy of OPT)*

### ***Meetings in Reedsport (2006-2007)***

During October 2006, Governor Kulongoski designated the Reedsport OPT Wave Park as an "Oregon Solutions" project (<http://www.orsolutions.org/>). The Oregon Solutions program's mission is to enhance coordination among state and federal agencies and stakeholders for complex projects the Governor deems a priority. State Senator Joanne Verger and Reedsport Mayor Keith Tymchuk served as Co-Conveners of the process. The first Oregon Solutions meeting was held in Reedsport on October 4, 2006.

I attended those meetings in Reedsport on behalf of OCZMA for the following reasons.



The Oregon Coastal Zone Management Association (OCZMA) is an extension of local governments under Oregon law founded in 1976 ([www.oczma.org](http://www.oczma.org)). The Coquille Indian Tribe is an Associate Member of OCZMA. OCZMA works closely with ports and the recreational and commercial fishing industries on the Oregon Coast. OCZMA's mission is to provide technical

support on ocean and coastal issues to its member jurisdictions and coordinate local/regional policy responses to issues impacting the Oregon Coast.

During 2006, the Economic Development Administration (EDA) approached OCZMA about working on wave energy issues. And, on August 17, 2006, the Lincoln County Commission filed a PP with FERC encompassing *the entire* Territorial Sea west of Lincoln County (P-12727). Lincoln County filed the PP as a means to guide offshore energy development off Lincoln County. Shortly afterwards, Douglas County and Tillamook County, following Lincoln County's lead also began to prepare PP applications for the Territorial Sea west of their jurisdictions. The bold action by the Lincoln County Commission—to file a PP for the entire Territorial Sea west of their county—foreshadowed the influence local governments would exercise shaping offshore development. And, in Oregon, Lincoln County's PP application was the first historic step towards embracing the concept of marine spatial planning (**Footnote #2**).

And, again, during 2006, OPT had to be taken seriously. They began spending serious money in Oregon. Steve Kopf, a skilled energy-siting consultant, was retained to serve as their agent in "settlement talks" with state/federal agencies and stakeholders. OPT commissioned bathymetric surveys off Reedsport. And, OPT began preparing a Notice of Intent and Preliminary Application Document (NOI PAD). That's *the* major step towards the filing of a FERC license to connect to the electric grid. OPT also sought subsidies from Congress and federal and state agencies to underwrite their deployment.

OPT's project created controversy because OPT wanted to locate the project in the heart of some of *best* Dungeness crab fishing grounds in Oregon. Fishing industry leaders urged OPT to move their deployment farther west into deeper water. OPT said they could *not* move their project because of increased costs and the technical limitations of their mooring technologies. As such, the *location* of OPT's deployment was non-negotiable.

Out of frustration fishermen stopped attending Oregon Solutions meetings. I recommended to Keith Tymchuk and Steve Kopf that a separate "Reedsport Fishermen's Committee" be established to address conflicts between OPT's project and the fisheries (**Footnote #3**).

Under Reedsport Mayor Keith Tymchuk's signature (Tymchuk also serves as a Port of Umpqua Port Commissioner), the Port of Umpqua sent written invitations to local fishermen asking for their participation in the committee. Invitations were also sent to Oregon's four seafood commodity commissions because OPT's project would set precedents for the entire region.



*Mayor Keith Tymchuk, City of Reedsport*

### ***A Rough Start***

The first organizational meeting of the Reedsport Fishermen's Committee was held in Reedsport on May 31, 2007 at the Port of Umpqua.

When the first meeting convened, Hugh Link, the Interim Director of the Oregon Dungeness Crab Commission (ODCC), handed Keith Tymchuk a written statement. ODCC's letter stated that unless *the location* of OPT's deployment was on the table for discussion, meetings with fishermen would be pointless. The battle lines were drawn. It was a short meeting. Fortunately, over the months, the parties stayed at the table. A total of six meetings of the committee were held in Reedsport during 2007.

Steve Kopf attended the second meeting. Kopf outlined the FERC regulatory process. He stressed how FERC's process would unfold in stages. And, if OPT gained permission from FERC to move from one stage to the next stage in FERC's permit process, that did *not* guarantee FERC would grant authorization to OPT to deploy a commercial-scale wave energy project off Reedsport.

Kopf stressed OPT would deploy buoys in stages over time. And, he noted OPT's project would be subject to tremendous scrutiny and environmental monitoring. Using an iterative process known as "adaptive management", the effects of the deployment on the marine environment and fisheries would be under constant review. If adverse impacts on the environment or fisheries were discovered, FERC would require OPT to take corrective/remedial measures.



*Steve Kopf*

OPT's message to Oregon fishermen can be *paraphrased* as follows:

Work with us. Help us at OPT understand how to make the wave deployment

less burdensome on the fisheries. Together we can shape the process. And together, we can gather information and learn if this technology makes sense in this tough marine environment. If OPT strikes agreements with you (stakeholders), together, under FERC's licensing process, those agreements will be legally binding on OPT.

At the same time OPT said they were prepared to litigate if their Reedsport project was challenged.

Stakeholders in Reedsport were reluctant to comment on OPT's project. Here's why. They wanted to know *how many* other energy projects were in the works for Oregon waters and/or *where* they'd be located. They worried about the cumulative effects of multiple projects. And, people in Reedsport sought clarity about the state's future plans for marine reserves.

More than anything, the stakeholders were astonished Oregon didn't have *a planning process* in place to site wave energy development (or even one on the drawing boards). They grasped, at once, the absurdity of companies filing for development sites in the ocean—like prospectors during frontier days—without a larger framework.

There was culture shock. It was hard to fathom a federal agency (FERC) had authority to award a private corporation exclusive rights to occupy public ocean space for decades at a time—*especially* within prime fishing grounds. As that reality hit home, one stakeholder exclaimed, “Why, why, that's *un-American!*”

There was anger. People asked *who* decided to promote wave energy in Oregon and *when* those decisions were made. Support for renewable energy development was voiced (especially if jobs on the Oregon Coast could be created). But, the consensus view was it was bad public policy to: (a) evict fishermen from fishing grounds when fishing provides so many family wage jobs in the community, and, (b) jeopardize ocean health because environmental impacts hadn't been adequately considered.

### *OPT Makes an Important Gesture*

On October 3, 2007, the 5th meeting of the Reedsport Fishermen's Committee, OPT's Wave Park Program Manager, Paul Ammann, traveled to Reedsport. Ammann got an earful. One fisherman said, “Look, if we were apple growers, what you want to do is put your project in the middle of our orchard!” Paul Ammann responded, “We don't want to be in the middle of your orchard.” Ammann pledged OPT would try to re-engineer the project and move it to deeper water.



On November 12, 2007 Paul Ammann returned to Reedsport for the final (6th) meeting. Ammann announced OPT would move their project further west, six fathoms deeper (a little less than one-half mile west). OPT's gesture was *not* well received. That's because: (a) the crab fishery would still be impacted, and (b) the other community concerns remained unaddressed.

Over the course of six meetings different groups of fishermen and other members of the community attended and provided input. It

was difficult, even for me, to track and be responsive to the commentary received. We learned a valuable lesson. You really need a core group of respected stakeholders (representing diverse interests) to attend most if not all the major meetings to share information and provide consistent/coordinated feedback.

### ***Meeting With Oregon’s Governor: A Step Towards CMSP***



The year 2007 was a time of escalating tensions on the Oregon Coast. Again, the “Gold Rush” for wave energy sites was underway.

Then, during the spring of 2007, Governor Kulongoski’s Office announced they would hold an open nomination process to establish marine reserves. That meant people from anywhere in Oregon could nominate a marine reserve site, of any size and location, without engaging coastal residents. Anxiety levels in the region rose to new heights.

By late summer of 2007 respected community leaders from a number of coastal communities began to express, *in public*, their deep concerns. Demonstrations were being staged on the South Coast. The press picked up on the controversy.

The Coastal Caucus, a bipartisan group of state legislators representing the Oregon Coast, elevated these matters (marine reserves and wave energy) to the highest circles within Governor’s Office (**Footnote #4**).

On September 10, 2007, the Coastal Caucus met with the Governor’s senior staff in the State Capitol. Several of us, who had been on the front lines of these issues, were asked to attend. At the meeting, the case for preparing a spatially/explicit comprehensive “ocean plan” gained traction. Within a month, during October 2007, the drafting of a Memorandum of Understanding (MOU) between the State of Oregon and FERC to coordinate the siting of wave energy developments in Oregon’s Territorial Sea was underway.

On November 1, 2007, Governor Kulongoski invited the Coastal Caucus and fourteen leaders of Oregon’s fishing industry to meet with him in Salem. At that meeting Governor Kulongoski pledged: (a) coastal community interests would be protected, and, (b) state agencies would work with community leaders to identify sites for wave energy and marine reserves. With those pledges Governor Kulongoski launched CMSP in Oregon.

### ***A Sudden Change in OPT’s Plans***

By late 2007, OPT was ready to initiate a community dialogue about *a second* wave energy deployment on the South Coast—this time off Coos Bay (FERC P-12749). The Oregon International Port of Coos Bay co-hosted a community meeting with OPT in Charleston on January 16, 2008 to discuss OPT’s plans for Coos Bay.



On that same day fishermen and other community leaders met in Coos Bay. They discussed how to enhance their leverage over offshore energy development. Together, they decided to form a new *autonomous* committee to represent community/ stakeholder interests on the South Coast. This new committee would engage OPT on both the Reedsport project and the Coos Bay project.

Over a hundred people attended the public meeting in Charleston that evening with OPT (January 16, 2008). Steve Kopf described OPT's plans to deploy a *twenty-buoy* array off Coos Bay. Then, on March 7, 2008, 52 days after the public meeting in Charleston, OPT announced they had amended their FERC application to expand their Coos Bay deployment from *20-buoys* to *200-buoys*. OPT's announcement surprised everyone, including leaders of state agencies and state legislators.

On March 21, 2008, Steve Kopf met with community leaders in Coos Bay to discuss OPT's amended filing. Senator Joanne Verger and Representative Arnie Roblan attended. The media crowded into the meeting room.



The first order of business was the adoption of the name of "SOORC" (the Southern Oregon Ocean Resource Coalition) for the new community group. Nick Furman (Director of the Oregon Dungeness Crab Commission) was elected Chairman. SOORC also voted to pursue a 501(c)(3) non-profit status.

Then it was Steve Kopf's turn. Kopf acknowledged that OPT's March 7, 2008 amended filing to FERC, without prior notice to the community, "broke the trust." He asked us to focus on how OPT could restore that trust. Kopf explained OPT's motivations. Kopf said, "Our investors, who have confidence in us, wanted to know we can do a big project. They needed to see a clear path how to do that."

Senator Verger calmly told Kopf, "OPT needs to understand coastal ports and the fishing industry stand tall on the Oregon Coast." Verger recommended OPT pursue demonstration-scale projects before taking on commercial-scale projects.

### *Oregon and FERC's Memorandum of Understanding (MOU)*

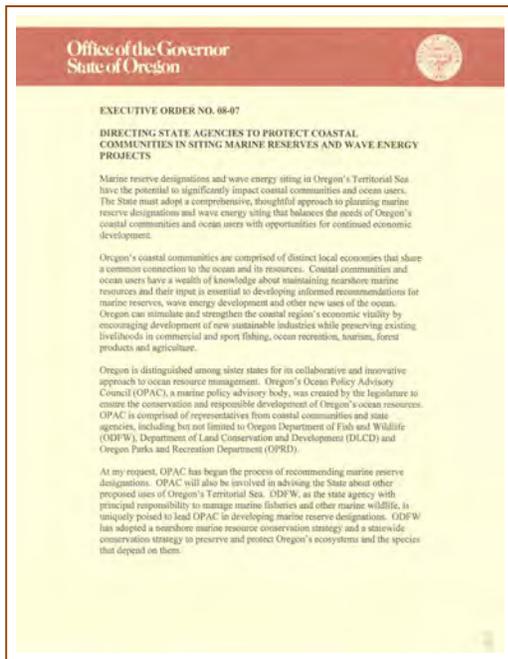
On March 26, 2008, Governor Kulongoski signed and released a Memorandum of Understanding (MOU) with FERC regarding wave energy development in Oregon's Territorial Sea.

Governor Kulongoski also wrote a letter to the Chairman of FERC and OPT explaining the purpose of the MOU. The letter stated:

"I am a strong proponent of the development of wave energy technology and hope it will one day help Oregon and others transition to clean energy. I have also been working

cooperatively with OPT on its application for a small demonstration project composed of 14 (author's note: later downsized to 10 buoys) wave energy buoys off the coast near Reedsport.

However, my support for the use of Oregon waters is presently limited to testing and research of a limited number of small demonstration projects in order to commercialize the technology and develop the scientific analysis of the potential impacts of the technology on ocean resources and existing uses.”



The MOU made it clear FERC and the State of Oregon *would coordinate* state and federal regulatory activities in Oregon's Territorial Sea through a planning process. In effect, wave energy developers were put on notice *commercial-scale* projects in Oregon waters were unlikely to be authorized by FERC until the State of Oregon completed a coastal marine spatial plan (CMSP) to guide the siting of projects.

That same day, March 26, 2008, Governor Kulongoski also issued Executive Order (E.O.) 08-07 (DIRECTING STATE AGENCIES TO PROTECT COASTAL COMMUNITIES IN SITING MARINE RESERVES AND WAVE ENERGY PROJECTS). E.O. 08-07 directed state agencies to collaborate with stakeholders on the Oregon Coast to guide wave energy and marine reserve siting decisions. Taken together, the MOU and the E.O. 08-07 codified the Governor's pledges to coastal communities, and, laid the foundation for CMSP in Oregon. OCZMA and

Oregon State University (OSU) Sea Grant Extension were named entities engaged with outreach to coastal communities.

The State of Oregon and FERC had, in effect, with the MOU, tapped the brakes on wave energy development. That gave us breathing room to carry out a CMSP process.

OPT, to their credit, became early supporters of marine spatial planning. OPT's management team understood *not* having an ocean plan was bad for business. And, during the summer of 2008 the Oregon Wave Energy Trust (OWET), the entity in Oregon charged with promoting "responsible" wave energy in Oregon, also backed ocean planning.

Later, we learned the managers at Douglas Electric Cooperative and Coos-Curry Electric Cooperative Inc. played important behind-the-scenes roles. During the height of the controversy in Reedsport they informed OPT that their Board of Directors supported efforts to reconcile conflicts with ocean users. The implications were obvious. PPAs with those two utilities were contingent upon successful outcomes of an ocean plan.

### ***Attracting Community Support: Defining the Local Role***

At OCZMA's January 2008 quarterly meeting in Brookings, there was an extended discussion about "ocean zoning" (that's what we called CMSP in the early days). The local government officials, understanding offshore development was inevitable, supported the concept of CMSP as a means to protect coastal community interests.



*OCZMA January 2008 Meeting in Brookings*

A month later, during February 2008, it came to my attention that the staff at the Meyer Memorial Trust (MMT) were interested in receiving a grant application from OCZMA to help coastal communities engage marine resource management issues.

With that important news, OCZMA set to work developing a work scope and cost estimates for a community-driven ocean planning process. Our local process would be fully coordinated with the state government.

The first pressing task was to identify methods to document *the location* of fishing grounds and other important

features of the marine environment. With spatially-explicit information (maps), we could steer wave energy projects away from key fishing grounds and sensitive marine/coastal resources to places in the ocean with few conflicts.

It became clear that Ecotrust, headquartered in Portland, had the GIS methodologies specifically adapted for these purposes. Ecotrust's expertise was developed working as contractors for the State of California's Marine Life Protection Act (MLPA) process. Ed Backus (Vice President of Fisheries for Ecotrust) shared the maps Ecotrust prepared of Dungeness crab fishing grounds in California. They were stunning. It was precisely the kind of documentation needed for Oregon's ocean plan.



*Ecotrust Interview with fisherman*

Here's how Ecotrust's methodology works. Ecotrust staff interview fishermen one-on-one. Before an interview starts, the fishermen are asked to read and sign consent forms. The consent form is a non-disclosure agreement (NDA). It confirms the data remains the property of the individual fisherman. The consent form also states Ecotrust is *not* authorized to release individual data. Only *aggregated* information, the combination of data from many interviews, is used to generate data displays for the public planning process.

During interviews fishermen are asked to describe the general location of their key fishing grounds. Data is accumulated for each separate fishery (crab, tuna, salmon, etc.). Fishermen divide up *a metaphorical 100 pennies* to each area they fish. So, if a fisherman made 25% of their income *over their careers* harvesting shrimp from a certain area of ocean, they assign 25 pennies to that fishing ground.

With Ed Backus, focus groups were held with fishermen to gauge their interest in participating in a mapping process carried out by Ecotrust/OCZMA. People were impressed by the methodology. But, they had deep concerns about how data would be used and controlled. We pledged *our process* would be different than California's MLPA process (**Footnote #5**). Trusted *local* people would spearhead data gathering *and* they would control the release of the data. We also urged people on the coast to understand if they engaged the process they could *shape the*

**outcomes** of the ocean plan. Still, the data gathering process was fraught with risks. If **any** information leaked it would be a huge setback. Thankfully, during the spring of 2008, enough influential local leaders signaled a willingness to move forward.

At OCZMA's June 2008 meeting local government officials voted, unanimously, to authorize OCZMA staff to apply to MMT for a \$500,000 grant to gather data with Ecotrust. A month later, I approached my colleagues on OWET about providing matching funds for a MMT grant application. OWET agreed, in principle, to support fishing grounds mapping. They understood mapping would expedite wave energy siting. And, the Governor's Office was in strong support of our efforts. Progress was happening on all fronts.

On September 15, 2008, OCZMA submitted a \$500,000 grant application to MMT. That same day the bottom dropped out of the stock market as global financial markets imploded. Soon afterwards, MMT staff let OCZMA know their Board could not make funding commitments. The process was, momentarily, dead in the water.

Then, like the cavalry coming to the rescue, the Oregon Department of Land Conservation and Development (DLC) informed us they would direct \$68,000 from National Oceanic & Atmospheric Administration (NOAA) to underwrite a fishing grounds mapping **pilot project**. DLC's timely commitment of resources kept the process on track and cemented the local-state partnership.

### ***SOORC Launches Mapping Pilot Project***

SOORC agreed to spearhead a fishing grounds mapping project for their sub-region of the



Oregon Coast (Winchester Bay to Bandon). OCZMA served as the contracting entity with DLC. OCZMA, in turn, contracted with Ecotrust. As Director of OCZMA, I promised my colleagues at SOORC we would **not** finalize a contract with DLC/Ecotrust until SOORC approved the terms. That showed we were in this together **as equals**.

Many hours were spent researching Oregon's Open Records Law. Everyone involved with the pilot project needed to believe adequate safeguards were in place to shield confidential fishing grounds data from public disclosure.

The other challenge was finding flexible contract language for the pilot project. We agreed with DLC that SOORC/OCZMA would deliver fishing grounds maps to DLC "sufficient for planning purposes." The maps had to strike a balance between public disclosure and protection of proprietary data. The first step was to get the interview process underway. Then, in time, Ecotrust would produce sets of draft maps. SOORC would examine different map formats and interact with DLC staff to agree on data displays **SOORC felt** they could release to the public.

This step-wise approach—**with control vested in SOORC**—was the way forward. The leadership at DLC deserves credit for understanding that. Together, we hoped that eventually we'd all agree on formats to display data "sufficient for planning purposes."

During the spring of 2009, Ecotrust staff began interviews in Coos County. The members of SOORC recruited their colleagues. The pilot project went well. Many fishermen, enough fishermen (not all fishermen), “put their pennies down” because they *trusted* SOORC.

By the fall of 2009, members of SOORC began to review draft aggregate fishing ground maps. The maps, broken down into individual fishery sectors, were incredibly accurate. SOORC though, struggled to find data displays for public release. SOORC decided to hold meetings with other fishing industry leaders to seek their input. Those meetings did *not* yield progress. Large parts of those meetings were devoted to policy discussions about the merits and mechanics of ocean planning. For me, it drove home the fact that different local fishermen committees in Oregon were at different stages in their understanding of the issues. The leaders of SOORC understood they had to make the tough calls on data displays.

### ***Invoking Goal 19: Success at Last***

During early November 2009, Ecotrust prepared yet another map based on feedback from SOORC and DLCD. On November 10, 2009, Ecotrust shared it with SOORC. SOORC embraced the new map and voted to share it with DLCD (to see if it provided enough data to invoke Goal 19).

That was the burning question. Were the data displays on the SOORC map sufficient to satisfy the Implementation Requirements under Goal 19? Goal 19, the “Ocean Resources Goal,” codifies state ocean policy in Oregon. Goal 19 prioritizes protection of the marine environment, fisheries, and other existing uses over the development of new uses of the ocean (**Footnote #6**).

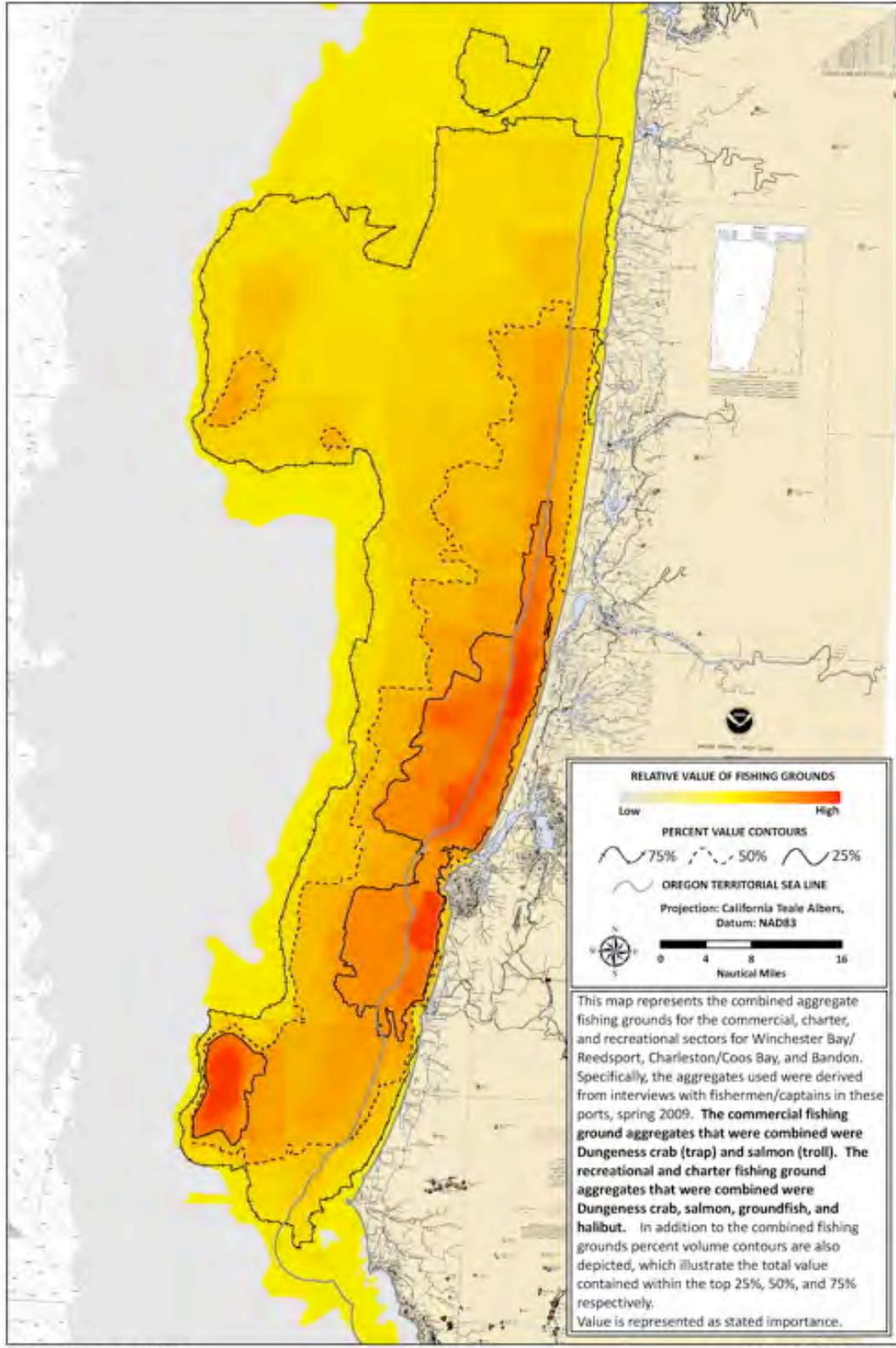
Nick Furman (Chair of SOORC) showed the latest map to Paul Klarin. Klarin said the draft map provided sufficient data. On January 12, 2010, SOORC voted to submit, *formally*, the SOORC map to DLCD (routed through OCZMA as contractor). With that vote, SOORC’s map (see the next page) entered the public domain.

SOORC’s pilot project provided much needed data for the ocean plan. And, it blazed a trail for other Oregon fishermen (sport and commercial) to follow.

But, more than anything, the pilot project validated SOORC’s sense of *community empowerment*. With each passing interview another individual on the Oregon Coast signaled strong support and trust in the ocean plan process. The roots of the concept of CMSP were taking hold and strengthening in the region. Many people—enough people—were taking ownership in the process. We could begin to make the case that what we were doing was a bipartisan, genuine, bottom up/community-driven process.

# Southern Oregon Ocean Resource Coalition (SOORC) Pilot Project Combined Value Fishing Grounds

All landings (Winchester Bay/Reedsport - Charleston/Coos Bay - Bandon), All sectors (commercial, charter, recreational sport boat)



FINAL MAP PRODUCT

JANUARY 28, 2010

### ***An Important New Amendment to Oregon’s Territorial Sea Plan (TSP)***

During 2009, another important parallel process was taking place in Oregon. The Territorial Sea Plan Working Group (TSPWG) of the Ocean Policy Advisory Council (OPAC), and, the Land



Conservation & Development Commission’s (LCDC) Territorial Sea Plan Advisory Committee (TSPAC), drafted amendments to **Part 5** of the TSP. The amendments to Part 5 established regulatory authority to transform Oregon’s TSP into a ***spatially-explicit*** plan. Part 5 was also amended to include important new language about accommodating renewable energy development within Oregon’s Territorial Sea.

On November 5, 2009, at a meeting in Springfield, Oregon, LCDC adopted the amendments to the TSP (the new Part 5). The TSP now had the framework to

receive maps (overlays) on fishing grounds, shipping lanes, fiber optic cable landings, avian use areas, dredge spoil sites, ocean outfalls, whale migration routes, and areas of ocean used by the scientific research community (etc.).

### ***An Unexpected Test***

On February 3, 2010, several weeks **after** SOORC released their map, OPT emailed interested parties notice of their Final License application to FERC for the Reedsport OPT Project. OPT’s application contained a reference to “Phase 3.” Phase 3 is a potential 100-buoy (50 MW) project ***adjacent to*** the 10-buoy deployment off Reedsport.

Members of SOORC spotted the reference to Phase 3. It set off alarms. The SOORC fishing grounds map, released just a month earlier, seemed to prove OPT’s proposed site off Reedsport were highly productive crab grounds. Now, again, it seemed a utility-scale wave energy deployment was being proposed for that same area.

Here’s a key thing to understand.

OPT’s deployment off Reedsport—Phase 1 (1 buoy) & Phase 2 (9 buoys)—will be located within 30 acres of prime Dungeness crab fishing grounds. Coastal stakeholders agreed ***not*** to contest the grandfathering of OPT’s Phase 1 and Phase 2 into Oregon’s TSP at that location because the MOU with FERC and the E.O. 08-07 guaranteed future ***commercial scale*** projects (such as Phase 3) would be sited through a comprehensive ocean plan.

The February 3, 2010 filing to FERC by OPT (with the reference to Phase 3) appeared contrary to that understanding. Stakeholders in the region, who placed their trust in the process, now questioned if the state government would stand behind its commitment to CMSP.

During February 2010, in light of these new concerns, OPT sent representatives to Oregon to confer with state and local officials. OPT gave assurances they understood the designation of ***future*** wave energy development sites (beyond their 10-buoy demonstration project) was subject to the TSP amendment process. OPT’s statements did ***not*** assuage local concerns. And, three

months later, on May 27, 2010, OPT did file a separate PP to FERC for Phase 3 (FERC P-13666) for that same site off Reedsport.



OPT managers met with Paul Klarin (photo at left), DLCD's Ocean Program Manager, in Salem. Paul Klarin informed OPT that their proposal to locate Phase 3 *at that location* off Reedsport, if submitted to the State of Oregon at a later date, would probably trigger a finding by DLCD that Phase 3 did *not* comply with Goal 19. Klarin asserted DLCD could issue that finding because: (a) LCDC adopted the amended Part 5 of the TSP, and, (b) DLCD was in possession of the SOORC map (which provided documentation sufficient to apply the Implementation Requirements of Goal 19). As such, in *that* circumstance, DLCD had the *authority* and the *information* to invoke Goal 19 in advance of the completion and adoption of the amendments to the TSP.

The implications were clear. If you mapped your fishing grounds and submitted those maps to DLCD you received Goal 19 protection. On March 11, 2010, Governor Kulongoski sent letters to the four Oregon Seafood Commodity Commissions confirming his support for CMSP. The Governor's letter had a major impact. Confidence in the ocean plan soared. Many fishermen put aside their reservations and participated in the fishing grounds mapping project. Ecotrust's field staff worked diligently to keep the interview process on track. During November 2010, OCZMA submitted to DLCD port-based fishing ground maps from *nearly every* fishing community on the Oregon Coast.

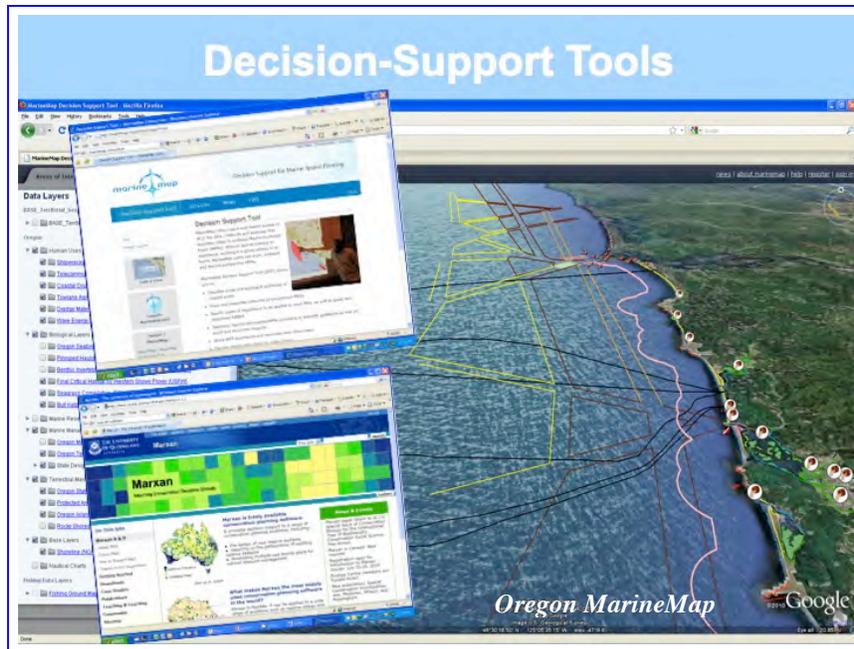
### ***Oregon's TSP Amendment Process: Where Things Stand***

Looking ahead, the State of Oregon, working through OPAC and the TSPAC, anticipates submitting amendments to the TSP to LCDC by the *late spring/early summer* of 2012.

In addition to fishing grounds mapping/community outreach, other important activities have been underway. The Oregon Department of Fish & Wildlife (ODFW) created the *Nearshore Ecological Data Atlas* with the assistance of the technical expertise from The Nature Conservancy (TNC) and NOAA's Biogeography Branch.

ODFW has also been working with Ecotrust to gather shoreside economic information and develop models to describe how ocean-based activity contributes to the coastal economy (*The Shoreside Economics Analysis & Model for the Territorial Sea Plan*). Early on, getting better information about shoreside economics was identified as a critical component of carrying out CMSP. Funding to undertake the *Shoreside Economics Study* was provided by the David & Lucile Packard Foundation. The introduction of funds from private foundations to underwrite parts of Oregon's planning process sparked controversy. But, given the State of Oregon's current financial circumstances, this outside money played a central role in making Oregon's CMSP process possible. We had to work our way through that difficult discussion.

The Surfrider Foundation (again, with funding from the David & Lucile Packard Foundation) worked with Ecotrust and Natural Equity to provide *spatial* information (maps) on recreational activities on the Oregon Coast (*The Non Consumptive Recreational Use Study*). A research team conducted interviews with 4,000 Oregonians to estimate the size of the recreation community and the economic contribution of non-consumptive recreation on the coast. The findings of the study are remarkable. Last year 80% of Oregonians visited the Oregon Coast. And, overall visits to the Oregon Coast generated \$2.4 billion in revenue.



In addition, in the last year or two, OSU researchers prepared bathymetric profiles of Oregon’s Territorial Sea with a combined \$5 million (funding from the State of Oregon and NOAA). Two years ago in Oregon, only 2% of Oregon’s Territorial Sea was mapped. Today, over 50% of Oregon’s Territorial Sea has been mapped.

DLCD staff is integrating all of this data into a state-of-the-art web-based GIS system called “Oregon MarineMap.” Oregon MarineMap was built upon

the original “MarineMap” pioneered at the University of California at Santa Barbara (**Footnote #7**). OWET provided funding to DLCDC to develop Oregon MarineMap. Ecotrust staff has been providing technical support to DLCDC.

And, the State of Oregon, with funding from OWET, in collaboration with the Bureau of Ocean Energy, Management, and Regulatory Enforcement (BOEMRE), is developing a multi-criteria tool for evaluating the potential impacts of the phased development of ocean renewable energy power plants that considers various proposed technologies. *The Cumulative Effects Analysis Framework* is being carried out by: Aquatera, Parametrix, the European Marine Energy Centre, and Powertech. The final product will be a GIS tool for assessing various development scenarios and potential impacts and benefits. The *Framework* is an important step in developing more robust and effective tools that will assist decision makers in better understanding the effects on the marine and coastal environment (ecological, economic, and social) from ocean renewable energy projects. That, in turn, will make environmental studies undertaken pursuant to the National Environmental Policy Act (NEPA) much more effective.

### ***The Home Stretch: Making Citizen Involvement Real***

Looking ahead, the TSP amendment process in Oregon—the actual development of the *spatial* plan—begins in earnest during the fall of 2011. The process is scheduled to conclude by late spring/early summer of 2012. That’s when OPAC and the TSPAC anticipate submitting the TSP amendments to LCDC for adoption.

A central task is the identification of “opportunity zones” for wave energy development consistent with Goal 19. The TSP amendment process will also yield important insights/recommendations to BOEMRE regarding promising places for ocean energy development to take place on the OCS.

Public engagement will be key. Here’s why. Oregonians have tremendous emotional and economic attachments to the Oregon Coast. As the actual location of opportunity zones for renewable energy start to come into focus—with *lines on maps*—much more media coverage and public involvement in the process will follow.

Having sufficient resources to help Oregonians engage the CMSP process is a critically important factor because public confidence is key. A number of local governments on the Oregon Coast are stepping up and taking leadership roles. Those elected officials are forming local committees—through their planning commissions and other forums—to facilitate public input into OPAC’s planning process for their area. From my perspective, as a member of OPAC/TSPWG/TSPAC, that’s a welcome and necessary development.

We are off to a good start. During April and May of 2011, TSPWG held seven first round “Work Sessions” on the TSP amendment process (six on the coast and one in Salem).



I took away several important observations from those meetings. The more people understood CMSP and Goal 19 the more enthused they became about the ocean planning process. People attending our Work Sessions were impressed with the data displays on Oregon MarineMap. In addition, people communicated they felt the TSPWG would represent their interests.

People also commented they believe the CMSP process would bring Oregonians together. I agree 100%. It can. We have an historic opportunity to build many important *new relationships*, connect Oregonians to the ocean, and greatly boost ocean literacy.

The resulting social capital is important because, before long, we need *informed* Oregonians to participate in West Coast-wide discussions led by a Regional Planning Body (RPB) to establish a CMSP framework in federal waters.

However, during the first round of Work Sessions, concerns were raised about protecting important viewsheds on the coast. Goal 19 provides that aesthetic issues must be addressed. Local leaders testified that important interest groups—property owners, realtors, the Chambers of Commerce, the tourism industry, other Oregonians—will demand to know steps are being taken to protect at least the iconic viewsheds.

On July 26, 2011, Tillamook County Commissioner Tim Josi (a member of LCDC and Chair of TSPAC), at a TSPWG meeting in Newport, urged the TSPWG to address viewshed issues. Discussions are now underway to stand up a process to: (a) examine viewshed protection issues, and, (b) secure resources to provide technical support for local government-driven public outreach efforts (**Footnote # 8**).

### ***Wave Energy in Oregon: Where Things Stand***

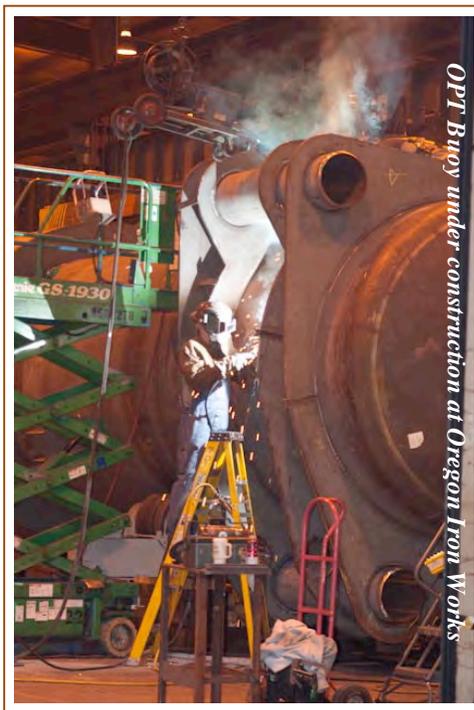


Wave energy constitutes a tremendous potential economic development opportunity for the State of Oregon. And, it could provide a plentiful supply of renewable energy. Since 2006, the State of Oregon has invested over \$12 million dollars in wave energy development. And, the federal government (USDOE) has invested

\$15 million to promote wave energy in Oregon. The Northwest National Marine Renewable Energy Center (NNMREC) was established at OSU with funding assistance from the state and the federal government. Soon, NNMREC hopes to establish several in-water test sites within Oregon's Territorial Sea.

A study conducted by EcoNorthwest (funded by OWET) (*Economic Impacts of Wave Energy to Oregon's Economy*) found that the wave energy industry in Oregon could sustain 13,000 new jobs in Oregon. Because of sound investments made by OWET and Oregon's leadership in ocean planning, the State of Oregon is at the forefront of wave energy development in North America.

OPT is moving forward with their demonstration project off Reedsport. By the time OPT deploys that first buoy they will have spent **\$6 million** in Oregon. OPT is scheduled to deploy their first buoy during 2012.



OPT's Reedsport demonstration project will generate a wealth of information. The FERC application for Phase 1 & Phase 2 outlines an ambitious research and monitoring program. Through a transparent process, guided by the principles of adaptive management, we will learn how OPT's devices interact with the marine environment. Information gained from that deployment will inform future decisions about ocean renewable energy in the Territorial Sea and the OCS.

And, today, in addition to OPT, a number of other wave energy technology companies are setting up shop in Oregon. They see opportunities here. OWET has created an inviting environment for ocean energy companies to move to Oregon. OWET investments have funded environmental studies, annual conferences on wave energy in Oregon, and research and development. OWET has also contributed to the fishing grounds mapping effort and other community outreach activities.

A major objective of Oregon's TSP amendment process is the identification of practical sites the wave energy industry can work with. That objective was underscored in the amendments to Part 5 of the TSP. The MOU with FERC and E.O. 08-07 provides additional policy guidance emphasizing Oregon's CMSP process will identify opportunity zones for ocean energy. Even though Governor Kulongoski has left office, Governor John Kitzhaber, his successor, is equally committed to exploring the potential of wave energy off Oregon.

Here's why Oregon's CMSP exercise will succeed at accommodating the needs of the wave energy industry and ensure Oregon's ocean resources and ocean users are protected. First, Oregon has done a terrific job gathering data and developing decision support tools. Second, at all levels (federal-tribal-state-local) talented people are engaged. Third, in Oregon, we have a large canvas to work with. Oregon's Territorial Sea is approximately **1,250 square miles**. Fourth, the OCS (federal waters) off Oregon provides thousands of additional square miles to site ocean renewable energy projects. Fifth, our colleagues in the wave energy industry, through OWET, are engaged in the process.

Wave energy is a nascent industry. That means it won't, at least in the near future, need expansive areas of ocean off Oregon to operate. Oregonians need to understand that. The wave energy industry, though, does require development sites that take into account the logistics of early stage technology development. As these technologies advance, the wave energy industry hopes to move utility-scale power plants further offshore to further reduce conflicts with existing ocean users.

### ***Closing Thoughts: Making Ocean Planning Work***

We've come a long way since the difficult days in Reedsport. We had to experience Reedsport to get to where we are today. The State of Oregon is now on a path to demonstrate how CMSP/ocean planning works.



A year ago President Obama issued Executive Order 13574. (E.O. 13574) which established the new National Ocean Policy (NOP). At the heart of the NOP is CMSP. The progress Oregon was making in developing a comprehensive ocean plan—with genuine *community involvement*—influenced the development of the NOP. Other similar groundbreaking CMSP efforts in Rhode Island and Massachusetts also informed the NOP.

Oregon's CMSP process is a work in progress. There are challenges ahead. We've got to make the citizen involvement process work. The tribes on the Oregon Coast are becoming more engaged. Together, we need to identify pragmatic sites that work for offshore energy development. We are *not* declaring victory in Oregon—at least yet. The next crucial chapter in our process is about to be written.

Having offered those caveats, nobody in Oregon expresses nostalgia for the unstructured discussions that marked the Reedsport process. Support for

ocean planning in Oregon continues to build. People on the coast, as they engage the process, need to recall *local leaders on the Oregon Coast* asked the State of Oregon to prepare an ocean plan.

We are working with our colleagues in Washington State to coordinate our respective CMSP activities. Important steps have been initiated to build seamless inventories of ocean resources and ocean uses off the Pacific Northwest. This inter-state collaboration must be nourished.

To colleagues in other states concerned about what CMSP means for them, we recommend that you follow our approach. *Engage* the process. Make CMSP work for your communities and region.

In closing, it needs to be underscored that we've developed great partnerships with federal agencies. The establishment of the Oregon Renewable Energy Task Force (supported by BOEMRE) is the latest example of this collaboration. And, years from now, historians will see the MOU between FERC and the State of Oregon (executed in March 2008) as the dawn of a new era in state/federal relations as it relates to America's oceans.

**Draft Footnotes (September 19, 2011)**  
**for**  
***The Origins of Coastal Marine Spatial Planning (CMSP) in Oregon***

**Footnote #1 (page 7)** The earliest activity in Oregon on wave energy can be traced to research & development work carried out by Professor Annette von Jouanne at OSU's Electrical Engineering & Computer Science Department. OSU's first proposal to become a national research center for wave energy was submitted in 2004. My introduction to wave energy took place on February 24, 2005 when Professor von Jouanne made a presentation to the Coastal Caucus. The research assets at OSU, the Wallace Energy Systems & Renewables Facility (WESRF) and the O.H. Hinsdale Wave Research Lab (HWRL), were factors that helped the Oregon Innovation Council (Oregon InC.) understand Oregon has major strategic advantages in this arena.

**Footnote #2 (page 8)** FERC declined to grant a PP to Lincoln County because FERC viewed Lincoln County's ambitious proposal as "site banking." That's where an applicant, in the minds of FERC, has applied to develop such a broad area of ocean space that, in effect, they'd lock up large swaths of ocean space without demonstrating that they could or would actually develop energy facilities in that area. And, once the State of Oregon entered into the MOU with FERC and committed to developing a comprehensive ocean plan for the Territorial Sea, these local government filings were rendered moot.

**Footnote #3 (page 9)** There are a number of fishermen committees in Oregon (they are all quite different). The most notable example is the Oregon Fishermen's Cable Committee (OFCC) formed in 1999 to negotiate the siting of a transoceanic cable project with AT&T. Later, the City of Depoe Bay established a fishermen's committee called Nearshore Action Team (NSAT). In Port Orford, the Port Orford Ocean Resources Team (POORT) provides a community forum for fishermen. When wave energy development issues surfaced in 2006, the Lincoln County Commission established the Fishermen Involved with Natural Energy (FINE) and the Tillamook County Commission established the Fisherman's Advisory Committee for Tillamook (FACT). The Southern Oregon Ocean Resource Coalition (SOORC) was established in early 2008.

**Footnote #4 (page 11)** The Coastal Caucus, the state legislators representing the Oregon Coast, play a leading role shaping public policy on ocean and coastal issues in Oregon. It made a huge difference when the Coastal Caucus, local government leaders, and, key people in the fisheries, joined to back the concept of ocean planning. Yes, Governor Kulongoski's leadership role was a key factor. But, having the Coastal Caucus supportive opened many doors in the region. Their support also gave their constituents confidence that people on the Oregon Coast could shape the outcomes of the ocean plan.

**Footnote #5 (page 14)** People in California directly engaged in the MLPA process should write histories of their process. The MLPA experience, though, had a profound influence on CMSP in Oregon. Many Oregon stakeholders perceived the MLPA process in California was *not* well grounded in community involvement. As such, from the beginning, we knew many fishermen on the Oregon Coast would resist working with Ecotrust. That's because Ecotrust was deeply involved with the MLPA process. Early on, I verified Ecotrust did *not* make policy calls during the MLPA process. And, I confirmed Ecotrust acted honorably in their dealings with stakeholders in California. Looking back, Oregonians should understand it was through

*California's* groundbreaking MLPA process that Ecotrust developed their fishing grounds mapping methodologies. Those same methods ended up empowering Oregon stakeholders and anchoring CMSP efforts in Oregon.

**Footnote #6 (page 16)** Goal 19 was written several decades ago within the context of offshore oil & gas development. That's why Goal 19 places a clear priority for the preservation of "living resources" over the development of non-renewable resources. Ocean-based renewable energy development wasn't on anyone's radar screen when Goal 19 was formulated.

**Footnote #7 (page 20)** ....(IN PROGRESS)...*Discussion of the genesis of MarineMap, including acknowledgements of the Gordon & Betty Moore Foundation and other funders that made MarineMap possible. This footnote, along with the earlier Footnote #5, explains the debt Oregon owes to earlier work in California. The point is each time CMSP is implemented somewhere, like Oregon, important experience is gained and additional best practices are developed.*

**Footnote #8 (page 21)** Thus far, the Oregon Territorial Sea Plan amendment process has focused exclusively on activities in the ocean. However, there's a growing appreciation that local governments (cities and counties) on the Oregon Coast will need to review and update/amend their local comprehensive *land use plans* and ordinances to prepare for offshore renewable energy development. Making the State of Oregon truly "shovel ready" for MHK (marine hydrokinetic energy) means the terrestrial half of the equation also needs to be addressed.

