



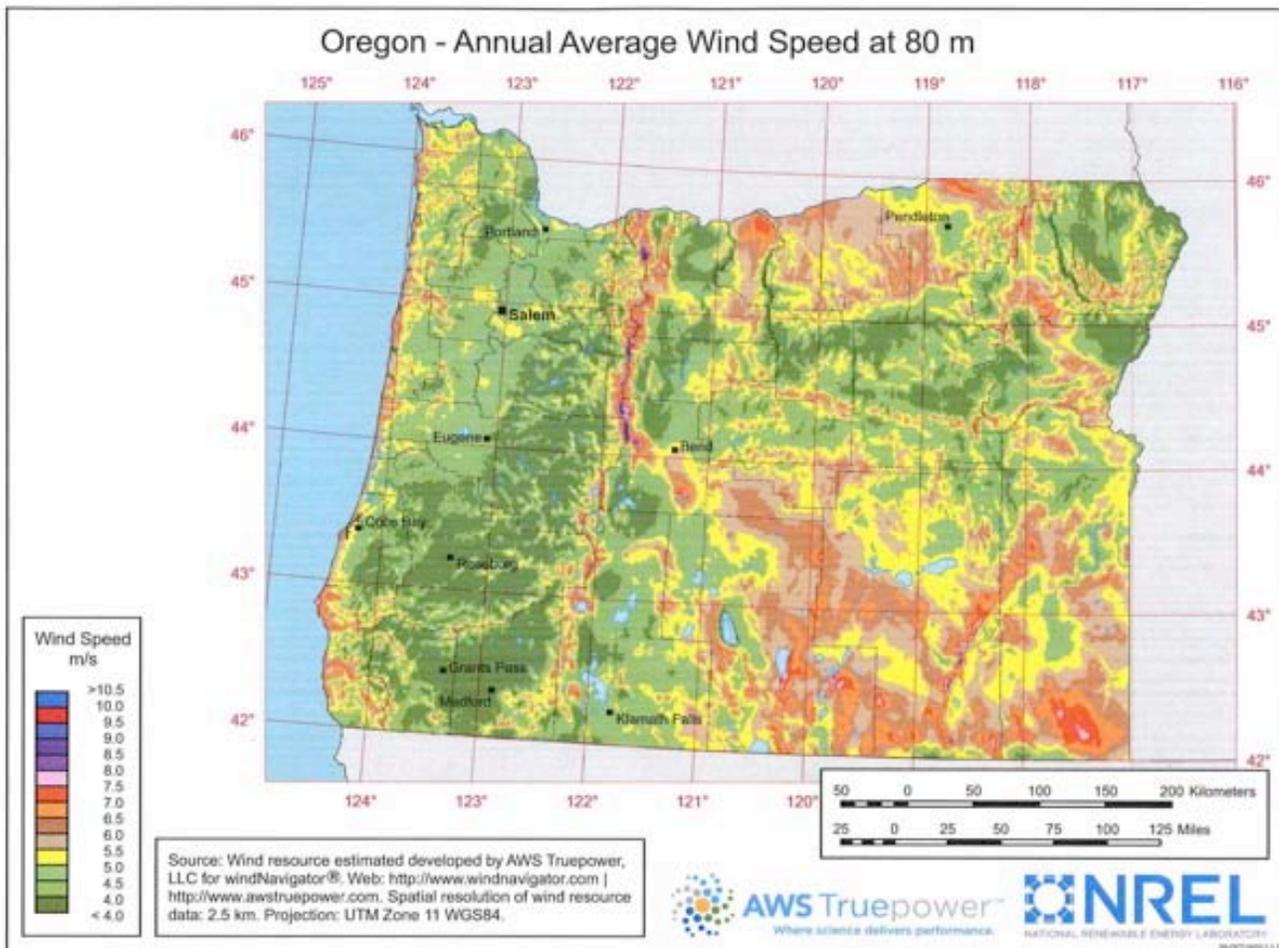
Oregon Coastal Notes

Oregon Coastal Zone Management Association

April 2011

The Challenges and Opportunities of Renewable Energy Development on the Oregon Coast—Onno Husing, Director, OCZMA

On October 19, 2005, the Oregon Department of Energy (ODOE) held a memorable meeting about *wind energy* in Rockaway Beach, Oregon. Shirley Kalkhoven, Mayor of the City of Nehalem, remembers that meeting well. Shirley recalled, “There must have been a hundred citizens from North Tillamook County and wind energy developers at that meeting. It was a big deal.”



The Rockaway Beach meeting focused on Renewable Generation, Inc.’s (RGI—a Texas-based company) proposal to erect between 56 and 74 large (1.5 Mega Watt) wind towers in a line on a ridgeline between the City of Wheeler (on the north) and the City of Garibaldi (on the south).

RGI's wind towers—had they been built—would have been installed directly behind those towns overlooking U.S. Highway 101. Shirley recalls, “To put it mildly, a number of people spoke out against putting wind farms on forested coastal hills near locations that are considered scenic.”

RGI's project, first aired during 2003, spurred citizens in Nehalem, Wheeler, Manzanita, Neahkahnie and Rockaway Beach to form an organization called, “The Alliance to Protect Oregon's Coast” (APOC). In less than three weeks APOC gathered 1,500 signatures opposing RGI's wind energy project on the North Coast.

In the end, RGI determined the beach communities on the North Coast in Tillamook County were *not* a good fit for their project. So, RGI moved their project out-of-state. Shirley noted, “APOC's still around. They're keeping an eye on energy projects that would harm important coastal viewsheds. Those viewsheds are enormously important assets for Oregon.”

A Field Trip to Grayland, Washington

On March 7, 2011, Shirley Kalkhoven participated in a daylong field trip to Grayland, Washington (on the Washington Coast) to tour ***a community-based wind energy project***. Cleantech Law Partners, LLC, and the Energy Trust of Oregon sponsored the tour. I went along and it was a fabulous experience!



Shirley Kalkhoven

Our large white van pulled out of Newport shortly after 8:00 a.m. Several renewable energy experts joined us for the trip. It was a rolling classroom. The first thing they gave us was ***a wind map*** of the Oregon Coast (see map on the front page). With one glance you could see a thin strip of land ***along the beach*** with high ratings for wind energy resources. That was my first take-away message. The majority of ideal places for wind energy generation on the Oregon Coast are located ***along the coastline*** because of the proximity of the ocean. As you go east into the Coast Range there are fewer sites (but, certainly, some site do exist).

About two hours later we picked up Mayor Kalkhoven in Nehalem. When Shirley stepped into the van the first thing she did was explain her ties to APOC. Shirley said she was making the trip to Grayland to get informed about wind energy ***and*** learn about energy issues in general.

A Story of Incredible Local Leadership

As we drove into Grayland, to our right (to the east) off in the distance you could see four wind towers. We stopped at a restaurant to have lunch. During the meal, Craig Dublanko, the CEO of the Coastal Community Action Program (CCAP) of Aberdeen, Washington, walked us through the history of their wind energy project.



Craig Dublanko

To make a long story short, CCAP raised the \$15 million to build a four-turbine wind energy project. It was an amazing feat. CCAP is a nonprofit organization (www.coastalcap.org/) providing social services to low-income families in the area. Hungry for funds, CCAP was told by Northwest Sustainable Energy for Economic Development (SEED) that maybe, just maybe, CCAP could create a stable revenue stream *if* they could persuade foundations and other funders to help them build a community wind energy project in their community.

A State Senator from Washington, James (Jim) Hargrove, who understood the value of CCAP, orchestrated a \$5 million earmark in the state budget. That breathed life into the project. The other key player was the Grays Harbor Public Utility District. The utility entered into a Power Purchase Agreement (PPA) with CCAP for 7.5 cents a kilowatt hour. That was a generous but fair deal.



The other key event that made CCAP's wind energy project possible was the Washington Legislature's enactment of a Renewable Portfolio Standard (RPS). The RPS requires utilities to buy a percentage of renewable

energy as part of their energy portfolio. RPS creates a market for that higher cost renewable power. Oregon also has a RPS requirement.

On June 26, 2010, CCAP hosted a "Flip the Switch" unveiling of the completed project. At the time, Craig Dublanko was quoted as saying, "For us, this is a social service project. For the rest of the country, it's a renewable energy project. We are going to be able to help families, and that's what we are really about."

Today, CCAP's wind project is working. CCAP is meeting their energy production targets. The documented impacts on avian and bat species have been amazingly low. They have not received complaints about noise. CCAP is netting about \$500,000 a year (conservatively). And, other revenue is being generated in the community because of operations and maintenance activities. Even our tour brought money into the community because we had lunch at a local restaurant.

You feel small when you stand next to those tall gleaming towers. From the ridge top you can see the Pacific Ocean shimmering a mile or so in the distance. Each of the General Electric (GE) wind turbines cost about two million dollars. And, each GE turbine generates about 1.5 megawatts (MW). So, it's a 6 MW project. That provides enough power to satisfy most of the load demands for Grayland's population of about 1500 and some of the power needs of several nearby communities.

The fascinating thing is CCAP managed to carry out the wind project with *strong* community support. That's because: (1) CCAP had a transparent public process, and, (2) the project didn't compromise compelling coastal landscapes and it was at a scale that fit the community.

What Does This Mean for the Oregon Coast?

CCAP's project provides a lot of information about the viability of wind energy on the Oregon Coast.

Keep in mind, there are three classes of wind energy development. There are "big wind" projects, meaning large numbers of turbines. Those are projects often carried out by large energy companies. Then, there are modest sized projects, (community-based or community-scale projects like CCAP's project in Grayland). And, before long, expect to see more and more micro wind projects. That's where homeowners and businesses invest in their own wind towers to power their homes and businesses.

Here's another take away message from the trip. Craig Dublanko from CCAP thinks the "sweet spot" for modest-scale wind projects (community-based or community-scale) on the Oregon Coast could be 10 MW to 20 MW proposals (6 to 10 turbine projects). We asked Dublanko about the role the \$5 million grant made to the economic viability of the project. He replied, "If we had an optimal wind energy site, better than the one we have, we would *not* have needed that \$5 million grant."

It is possible and laudable to identify places, where, under the right circumstances, wind energy could work on the Oregon Coast. After all, wind power is the most competitive renewable energy generation technology. The wind maps show the Oregon Coast has a lot of wind resources. And, the Oregon Coast has a highly *diverse* 350-mile long coastline (with populated and unpopulated areas). With fact-finding and outreach, it should be possible to identify *just the right places* with the electric *grid capacity* and *low visual impacts on scenery* and *low environmental impacts* (especially for avian and bat species) that can attract *community support*. The factors of scale and context, obviously, are key.

On the ride home to Newport we peppered the experts with questions. What skill sets are needed to prepare a comprehensive resource assessment for *all* renewable energy generation opportunities (*onshore and offshore*)? What are the right steps? How much early scoping work is a technical exercise of examining grid integration issues? When do you engage the communities? The answer to that is early and often. How should you handle viewshed protection issues? What about promoting energy efficiency?

During the conversation, Shirley warned us that many coastal residents are still likely to oppose wind energy because of concerns about visual impacts.

Concluding Thoughts

The next day Shirley and I talked on the phone about the trip. I wanted to make sure I understood Shirley's concerns. I explained to Shirley how OCZMA ran *precisely the same risks* when we spearheaded ocean planning. At times people on the Oregon Coast thought we were being far too *pro-wave energy* development.

I made the following points to Shirley.



When we set out to do the ocean plan, we *promoted community involvement* in the process. The ocean planning process, so far, has been a success. It's serving as a national model. The process will protect the marine environment, fisheries, ocean viewsheds, and identify sites for wave energy development Oregonians can support (and local, state, and federal agencies can approve).



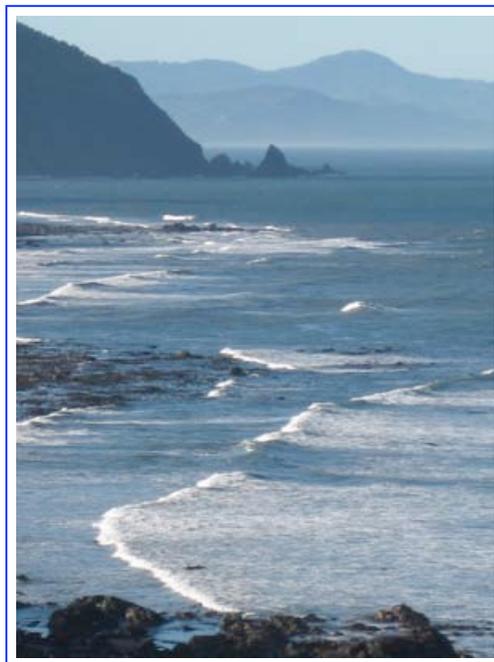
The other important upside to taking gradual/careful steps to examine *all renewable energy* generation opportunities on the coast is to make our communities *more energy secure*. In the Northwest, since the 1930s, we’ve benefitted tremendously from *affordable power* provided by the Bonneville Power Administration (BPA). The dams on the Columbia River, though, are finite resources.

Communities on the Oregon Coast will have to meet future energy needs from non-hydro resources. Renewable technologies (onshore and offshore) could be a predictable/affordable part of that mix and cushion us from future energy price shocks. Moreover, under ORS 469A.210, the goal is to, by 2025, have *at least eight percent* of Oregon’s retail electrical load come from “small-scale renewable energy projects with a generating capacity of 20 megawatts or less.” In any event, it will take time to lay the groundwork for small-scale energy projects.

In some respects, the value proposition is simple. If a renewable energy resources assessment is prepared for the Oregon Coast, *working with utilities as partners*, with that information in hand, we can reduce the number of emotional and frustrating public meetings about energy projects that won’t work in our region—like that meeting in Rockaway Beach about RGI. And, the information can be utilized to target *practical* investments in renewable energy generation (public or private sector investments).

And, at the city and county level, we need to review our local ordinances and comprehensive land use plans. The traditional conditional use permit framework is *not* up to this challenge. We learned that back in the 1990s during the cell phone tower boom. We weren’t ready for all those applications. Let’s take steps to adopt new ordinances reflecting best practices and prepare our region for this new era of small-scale renewable energy projects.

After I stepped down off my soapbox, Shirley chuckled and said, “Okay, I see the merits of that approach. Get ahead of the issues. Get the right experts. Do fact-finding. Partner with utilities. But still, for heavens sake, be careful!”



Information about OCZMA

The Oregon Coastal Zone Management Association (OCZMA), formed in 1976 under ORS Chapter 190, is a voluntary association of coastal counties, cities, ports, soil & water conservation districts, and the Coquille Indian Tribe on the Oregon Coast established to provide a forum for the resolution of issues of particular concern to the local governments of the coast and the people they represent.

Association Officers

Jack Brown • Chair (City of Depoe Bay)

Vacant • Vice Chair

Vacant • Secretary-Treasurer

FY 2010-11

Association Staff

Onno Husing • Executive Director

Georgia York • Executive Assistant

Telephone: (541) 265-8918

Fax: (541) 265-5241

New E-mail Addresses: onno@oczma.org

(effective immediately) georgia@oczma.org

Web Site: www.oczma.org



P.O. Box 1033; 313 SW 2nd, Suite C
Newport, Oregon 97365

Association Membership

Clatsop County

Coos County

Curry County

Douglas County

Lane County

Lincoln County

Tillamook County

City of Brookings

City of Cannon Beach

City of Coos Bay

City of Depoe Bay

City of Florence

City of Garibaldi

City of Lakeside

City of Lincoln City

City of Manzanita

City of Nehalem

City of Newport

City of North Bend

City of Port Orford

City of Reedsport

City of Rockaway Beach

City of Tillamook

City of Toledo

City of Yachats

Port of Alsea

Port of Astoria

Port of Bandon

Port of Brookings Harbor

Oregon International Port

of Coos Bay

Port of Garibaldi

Port of Gold Beach

Port of Nehalem

Port of Newport

Port of Port Orford

Port of Siuslaw

Port of Tillamook Bay

Port of Toledo

Port of Umpqua

Clatsop SWCD

Coos SWCD

Curry SWCD

Lincoln SWCD

Siuslaw SWCD

Tillamook SWCD

Umpqua SWCD

Coquille Indian Tribe