NOAA's 'navy' behind ocean mapping, climate prediction

by Matthew Preusch, The Oregonian

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SEATTLE -- If NOAA is the federal agency charged with understanding the ocean, its Lake Union headquarters provides the ships its scientists need to get there.

You could also call the Marine Operations Center here home-base for the Pacific fleet of Jane's Navy - that is, Jane Lubchenco, the former Oregon
scientist who now heads the National Oceanic and Atmospheric Administration.

Last week, NOAA announced that after decades of calling Seattle home, the center would relocate to Newport in 2011 -- and bring with it roughly 70 staff jobs and direct responsibility for nine ships and an additional 110 commissioned officers and civilian "wage mariners" who spend most of their time at sea.

- Read about how Newport landed NOAA's fleet.

Robert Wilmot, chief of the center's marine engineers, humbly describes the center as the "meat and potatoes" side of the agency's prestigious research mission. "We see ourselves as production support people, the people that keep these ships running," Wilmot said.

But the research is huge: fisheries, hydrographic and oceanography -- or "fish," "hydro" and "osho" in NOAA slang. The missions vary from charting the shape of the ocean floor off Alaska; to tracking the health of fish stocks, many in decline yet valued by fishing fleets and markets; to assessing the impact of climate change on the oceans, which drive our weather.

Specialist scientists from all over conduct the data-gathering surveys, but the men and women of the marine operations here -- and soon, Newport -- get the scientists in position with the right equipment.

Most people know NOAA through its ever-present National Weather Service, but it is a vast agency with its own navy and air force, 12,500 employees and a $4 billion annual budget -- about half the Department of Commerce.

If the marine operations center in Seattle is any indication, Newport will be busy.

The agency has had ships in Seattle since 1899, when it was known as the U.S. Coast and Geodetic Survey.

The marine center has been at its current location, in a pair of two-story, midcentury buildings painted with NOAA's customary aqua and blue stripes, since 1963.

The center's hallways are decorated with photos of its white ships at sea and historic maps of the Seattle waterfront. Seaplanes landing and leaving Lake Union buzz by just offshore.

Late last week, however, one office bulletin board displayed an old Newport cigarette advertisement reading "Welcome aboard," apparently intended to poke fun at the upcoming move.

The 70 or so staffers here -- marine engineers, electrical technicians, medical staff, budget makers, human resources specialists -- make up the shore-side part of the center.

The 110 commissioned officers and civilian wage mariners sail on any of nine ships for which the center is responsible, from the 171-foot David Starr Jordan to the 231-foot Rainier. Four ships are ported here, the rest in Hawaii and Alaska. These NOAA workers can live anywhere, reporting to Seattle or wherever the ships are in port for the start of their seasons at sea.
(A fire in 2006 damaged the center's two docks and nearby buildings, however, forcing its four ships to find berths elsewhere around the Seattle area.)

But it's the 70 people who spend their working hours here on land who now wonder whether they should move to Newport.

And they wonder what such a move could mean for them.

"Those are the guys that come to work here everyday," said Capt. Michele Bullock, the center's commander.

For one thing, workers who don't like to brown bag their lunches will have to find somewhere in Newport to replace the food truck that pulls up and sounds its musical horn each day just after 11.

More significantly, they can expect an 8 percent pay cut once they move due to the loss of the enhanced cost of living pay they receive in Seattle.

Some at the center, such as engineering chief Wilmot, have worked here for two decades or more. His engineers figure out what repairs are needed on the boats, and much of that work is then done by contractors all over the West Coast who bid on the projects.

"Last week we had a repair in Newport," where the 215-foot fisheries boat Miller Freeman had a winch installed, Wilmot said.

In other parts of the center electrical technicians and engineers work on radar, radio and other equipment that takes the measurements that scientists use as data in their research.

"It's these folks here that help the scientists take what they want to do -- the concept -- and make that happen on the ship," Bullock said.

This week, the technicians are focused on trying to set up a rendezvous with a vendor and a ship, the McArthur II, in San Francisco so the vendor can repair the uninterrupted power supply system it installed in the boat.

Another day they might be figuring out how to get the sea-based communications system to allow mariners to watch more than just the Fox channel.

"They are getting tired of Fox," said Mike Webb, deputy chief of electric engineers.

It's all in service of helping NOAA's biologists and climatologists better predict where a hurricane might strike or how much Pollock Alaska fisherman can sustainably harvest.

"In some regards, we enable the larger mission," said Demian Bailey, chief of the center's operations division. "We aren't researchers, but we allow our researchers to do their jobs efficiently."
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Posted by kjironman1 on 08/09/09 at 9:59PM
Are they hiring? Where do I sign on?

Inappropriate? Alert us.

Posted by Menefree on 08/09/09 at 10:01PM
Another puff piece, Mr Preusch. NOAA is far from an ideal, scientific research organization. It is a huge, power-motivated bureaucracy. Its history includes, for example, suppression of the long-term efforts of Dr CD Keeling to provide the CO2 data upon which most legitimate climate models are based. Whether Dr Lubchenco -- a fine scientist -- can reform the beast remains to be seen.

Inappropriate? Alert us.

Posted by Schuetl on 08/10/09 at 7:08AM
Puff piece? Sounds like someone else has been smoking, perhaps a bit of baking before bed in the old kitchen?....the only missing element in this article is the relationship between the USCG and NOAA....quite a bit of the undersea mapping, especially in the arctic is done with the Healy, Polar Star and Polar Sea...check out the recent article in National Geographic regarding the mapping and land grab underway. I worked with the fine folks of NOAA and I did not meet one dedicated member to be power motivated....bureaucracy exists in all large organizations but the cooperation between the USCG and NOAA is and was impressive. Keeling's curve is accepted by most scientists and if he wasn't such a jerk perhaps more folks would sit up and take notice....I remember the most common criticism summarized as "He wants to measure CO2 in his belly....and he wants to measure it with the greatest precision and greatest accuracy he possibly can."

Inappropriate? Alert us.

Posted by bigharvey on 08/10/09 at 10:05AM
Wow, I liked this piece. It gave me a better understanding of some of the things that NOAA does. It also acknowledged that people who live in Seattle might not be 100% psyched about moving to a smaller town like Newport. It wasn't puffy to me at all.

Nice job.

Posted by **LOST2TIME** on **08/10/09 at 10:51AM**

What's to study. Let's drain the oceans and get on down the road.

Inappropriate? Alert us.

Posted by **westwoodman** on **08/10/09 at 12:27PM**

Lost, you just answered your own question.

What's to study? Well, if you propose draining the oceans then I assume you must have some plan for where to put the water, right? And, I also assume you've looked into the impacts of eliminating the oceans moderating effects on the weather, not to mention the displacement caused by elimination of a significant food source for much of the world's population.

And, although it might have escaped your notice, there is also the economic and financial impacts, such as the increased costs of transportation when ships can no longer be used...remember, they can do a "ton-mile" cheaper than any other form of transport.

Also the economies of shore-line communities are largely based upon the sea, either through water-related businesses or the tourists who come to frolic at the shore.

In short, there's lots to study. And, more importantly, the impact that the health of the oceans have upon each and every one of us every day. No oceans...no rain. None. Zip! Nada! You might like a drier Oregon, but when it doesn't rain for several years, I suspect you'll get tired of living in the desert.

WWM

Inappropriate? Alert us.

Posted by **conspirator5** on **08/10/09 at 2:40PM**

@WWM, Please don't feed the trolls. ^_^