

# NORTHWEST DEFENSE

The newsletter of the Northwest Environmental Defense Center

Spring 2007



## The Costs of Coal

If you were to aim your index finger at the single largest threat to environmental and public health in the state of Oregon, that finger would probably have to point directly at Portland General Electric's power plant near Boardman. This pulverized coal-burning power plant was exempted from the Clean Air Act's most stringent control technology requirements when it was built decades ago, and, as a result, it continues to spew hundreds of thousands of tons of harmful pollutants into the air every year. The coal this plant combusts and the energy it produces are relatively inexpensive, but just who is being asked to pay the true costs of producing this power? The answer, it seems, is everyone other than PGE.

Coal extraction, whether in the form of underground mining, mountain-top removal mining, or strip mining, is incredibly harmful to the environment. When coal surfaces are exposed, pyrite (iron sulfide) comes into contact with water and air and forms sulfuric acid. As water drains from the mine the acid moves into local waterways, and as long as rain falls on the mine tailings, sulfuric acid production continues, whether the mine is still operational or not. If the coal is strip mined, the entire exposed seam leaches sulfuric acid, harming local aquatic plants and animals and leaving soils infertile.

The coal for the PGE Boardman plant is mined in Wyoming and shipped by diesel exhaust-spewing rail to the plant. During coal combustion, the plant emits massive amounts

of conventional pollutants into the eastern Oregon air. The plant's emissions of sulfur dioxide and nitrogen oxides are far and away the highest reported emissions by any major source in the state. These emissions have been directly implicated in studies finding that the Columbia River Gorge experiences some of the worst acid rain levels in the entire country.



Deposition of nitrogen-rich pollutants, such as those emitted by PGE Boardman, has been shown to limit tree growth, reduce crop yields, and harm crop marketability. It is not a stretch to suggest that Columbia Gorge vineyards and pear farmers have taken a hit to their bottom line in order to subsidize cheap power from the Boardman plant.

These same emissions have also been implicated in the rapid deterioration of Native American rock images in the Columbia Gorge. The loss of these images represents yet another in a long string of unjust costs that Columbia

River tribal peoples have borne for Pacific Northwest power production.

Those who appreciate native plants are also paying a price. Deposition of pollutants such as those emitted by PGE Boardman results in over-nitrification. This phenomenon harms alpine lakes and sensitive lichen populations, and also enables invasive species to choke out wildflowers.

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# Measure 37 and the Oregon Coast



The true impacts of Oregon's 2004 ballot Measure 37 on growth in cash-strapped counties are only just unfolding. Oregon's land use guidelines represent a collective vision of state residents for where and how to grow and which resources to protect. Voters who sought "fair compensation" instead face developer claims to discard these guidelines in favor of haphazard conversion of thousands of acres of beachfront, farm and forest lands in their communities.

In Salem, the State legislature and Governor Kulongoski continue to pursue a fair solution that accommodates small landowners while protecting the interests of neighbors and communities. Meanwhile, NEDC students are supporting citizen efforts to articulate Measure 37's looming threats to the beautiful natural resources and well-coordinated communities that Oregonians take pride in.

“As Jacques Cousteau put it, ‘people protect what they love’,  
-NEDC volunteer Eric DeWeese”

NEDC's support for the adoption of a fair Measure 37 alternative grew out of its new coastal program. So many claims are filed in Oregon counties that in the state's coastal areas, the extent of land conversion threatened by the claims is largely unknown. Led by Project Coordinator Liz Crosson, student volunteers have been documenting Measure 37 claims in Tillamook, Lincoln, and Clatsop counties one by one. By gathering claims and highlighting cases with the most potential for coastal environmental damage, these students are creating a database of information to support partner groups like Surfrider Foundation who work on the ground to promote a fair alternative.

“As Jacques Cousteau put it, ‘people protect what they love’,” says NEDC volunteer Eric DeWeese. The coast is a special place for millions of Oregonians and a major attraction for visitors. Measure 37 threatens the natural beauty and the long-term viability of the coast by inviting sprawl, congestion and uncoordinated development. Over 200 claims involving 17,000+ acres of land have been filed in the three northern coastal counties alone. Just one mid-sized claim in Clatsop County could add 160 residential dwellings to 42 acres of riverfront property near the coastal shorelands boundary on the Little Walluski River near Astoria. The Columbia Land Trust is currently engaged in a restoration project a few miles downstream of the proposed development, where the Little Walluski enters Young's Bay, but this proposed bird and wildlife habitat cannot flourish in the middle of a residential neighborhood. By documenting this type of loss of wildlife and community resources, students hope to foster support for better alternatives.

*by Carey Whitehead*

# Lands & Wildlife Project Group

The Lands and Wildlife project group worked on a variety of projects this term, including partnering with other organizations to assist with legal research, attending local planning meetings, and submitting comments on permit applications and agency proposals.

NEDC students Hallison Putnam, Drew Kerr, and Ashley Jones commented on Bull Run Watershed planning. The Draft Agreement proposes exchanging forested uplands owned by the City of Portland for Mount Hood Forest Service lands that contain the City's water utility infrastructure. Arguing in favor of management decisions ensuring continued protection of the watershed, NEDC urged the City to think carefully before exchanging any lands that might negatively affect water quality.



Student member Neal Clark helped the Madrone Wall Preservation Committee with legal research on an Oregon Supreme Court Case. The Committee is working against a proposal to quarry the Madrone Wall area, which would destroy the unique ecosystem and numerous recreational opportunities available there. Madrone Wall sits on a 44 acre site two miles east of Carver on County Scenic Highway 224. An unusual rock bluff, the outcropping provides for striking vistas and numerous low-impact recreational opportunities such as hiking, picnicking, and rock climbing.

The Siuslaw National Forest recently published a draft Environmental Assessment on management of commercial special forest products. Student members Megan Olson and Adele Peters submitted extensive comments on the assessment. Megan and



Western snowy plover. Photo by Blake Matheson.

Adele asked the Siuslaw National Forest managers to consider excluding moss harvest altogether and, if not, at least revising the proposed harvest rotation period to more sustainable levels. The two also pointed out the potential adverse effects of the plan on endangered species such as the marbled murrelet, northern spotted owl, western snowy plover, and Oregon silverspot butterfly.

The Lands and Wildlife Project Group also submitted comments to the U.S. Army Corps of Engineers, the OR Department of Environmental Quality, and the OR Department of Land Conservation and Development regarding Freeman Rock, Inc.'s permit to mine gravel from the Chetco River. The Chetco, a beautiful river on the wild, sparsely populated southern Oregon Coast, has historically provided great fish habitat.

Multiple gravel extraction sites threaten the continued vitality of this river ecosystem. With the Chetco suffering significant gravel extraction impacts over the past century, NEDC requested that Freeman's application be denied, especially given the disapproval of NOAA Fisheries of this project and others like it on the Chetco.

Thanks so much to all the great volunteers who made this happen!!!

*Katie Strong  
Natasha Bellis  
Lands & Wildlife  
Project Coordinators*

# Oregon's Air Saga Continues:

## *The New Source Review Program's Inadequacies*

NEDC volunteer and PEAC clinical intern, Jared Kahn (3L), has spent considerable time over the past two years trying to understand the complex intricacies, problems and inadequacies of Oregon's New Source Review and Prevention of Significant Deterioration programs (collectively "NSR"). NEDC believes that Oregon's NSR program is not equivalent to the Federal NSR program's requirements because, as applied, the Oregon program allows facilities to escape the requirements that the Federal NSR would demand.

The baseline period is the starting point of the calculation to see whether the proposed emissions increase exceeds the SER. Oregon utilizes a thirty-year old "potential to emit" scenario baseline period versus the Federal "actual emissions" ten-year look-back period. A thirty-year old baseline is simply not representative of a facility's recent operating levels. Through tedious calculations of actual modification permits, Jared discovered that using Oregon's thirty-year old baseline versus the Federal ten-year old baseline period resulted in

*Through tedious calculations of actual modification permits, Jared discovered that using Oregon's thirty-year old baseline versus the Federal ten-year old baseline period resulted in fundamental differences that allowed facilities to escape emission control technology requirements.*

The Clean Air Act's NSR program is designed to ensure that economic growth will occur in a manner consistent with the preservation of existing air resources by prohibiting the construction or modification of a major emitting facility unless the facility has received a NSR permit and the facility employs the best available control technology ("BACT") to control its emissions. Essentially, if a facility undergoes a major modification that increases emissions by the Significant Emission Rate ("SER"), then the facility will be required to install BACT. The Oregon NSR program makes the

fundamental differences that allowed facilities to escape emission control technology requirements. In addition, DEQ admitted the baseline calculation is a 'guess' because the DEQ does not have emissions data from thirty-years ago. Moreover, EPA guidance specifically states that no state program can have a baseline older or less representative than that of the Federal program.

Oregon also allows facilities to bank emissions reductions – 'unassigned emissions'. Later, when the facility proposes a major modification, the facility is allowed to first use up the banked emissions and then still increase emissions up to the SER before NSR is triggered. In some situations, proposed modifications allowed facilities to first increase emissions by hundreds of tons although the SER for that pollutant is only forty tons. The Federal program does not allow this banking tactic.

In addition, Oregon is failing to implement the provision that triggers NSR from an accumulation of minor modifications since the baseline period when the total emissions from the several modifications equals the SER. This provision requires tracking and calculating thirty-years of minor modification emission increases for each individual facility. However, the DEQ is not taking any necessary steps to account for these minor emissions increases – a complete failure to implement regulatory requirements.

To make matters worse, Oregon has not required Best Available Control Technology (BACT) for sources that have triggered NSR. DEQ has read a new step into the program that requires the facility to first conduct an air quality analysis to show there is an effect from the emissions increase before



scheme more complicated – more industry friendly – and less protective of air quality.

The gist of the matter – NEDC has identified several facilities that escaped BACT requirements because of Oregon's NSR program, which the Federal program would have required installation of emission control technology.

# Water & Air Project Group

NEDC's Water and Air Project Group spent the semester commenting, drafting a sixty day notice, and researching different legal angles to address threats to Oregon's air and water quality. Chris Ling and Jessie King took the lead on drafting two construction stormwater permit comments to Oregon's Department of Environmental Quality (DEQ). Located on the Columbia Slough, the construction sites require general stormwater discharge permits. Students conducted file reviews and researched the Clean Water Act, Oregon statutes, and regulations to address why the permits provided inadequate water quality protection to the Slough. Also working on stormwater commenting, Hallison Putnam took the lead on municipal stormwater permits proposed for the City of Troutdale and City of Wood Village. To tackle the complex regulations, Hallison contacted NEDC alumni for assistance, and researched how other states implement permits that are more protective of water quality. NEDC student Johannes Epke also commented to support DEQ's proposed Title V air pollution permit fee increase.

In addition to commenting, on behalf of NEDC and Willamette

Riverkeeper, several NEDC students drafted a Sixty Day Notice to the U.S. Army Corps of Engineers for failing to consult with NOAA Fisheries and the Fish and Wildlife Service pursuant to the Endangered Species Act (ESA). The Corps owns and operates thirteen dams in the Willamette River basin, which is home to the ESA-listed Upper Willamette River Chinook Salmon, Upper Willamette River Steelhead, Columbia River population of Bull Trout, and Oregon Chub. Students worked with NEDC Board member Brett VandenHeuval and PEAC Staff Attorney and NEDC Board Member Stephanie Parent, who provided guidance on crafting an ESA Sixty Day Notice. Special thanks to NEDC student volunteers Johannes Epke and Jeff Nadeau for their research on listed fish species.



Last Fall, a group of NEDC students began researching and discussing the potential for NEDC to reinstate a campaign to designate Outstanding Natural Resource Waters (ONRW) pursuant to the Clean Water Act (CWA) in Oregon. Designation of a water body as an ONRW provides the maximum level of protection under the CWA by prohibiting the lowering of water quality. While activities that result in short-term and temporary changes in water quality may be allowed, once an ONRW is designated, the state may not issue a permit for any activity that will permanently lower the water quality of the designated waterbody. NEDC students researched how other states designate ONRWs and met with River Network's Gayle Killam to discuss how citizen groups around the country use ONRW designation to protect waterbodies. Special thanks to ONRW Working Group

volunteers Andrew Kerr, Hallison Putnam, Tarah Heinzen, Kristin Monsell, Hanne Eastwood, and Erica Maharg.

Student volunteers Kristen Monsell, Gilbert Mears, Paul Spencer, and Jessie King also assisted Executive Director Mark Riskedahl in legal research projects on NEPA, energy facility siting, and wetlands mitigation. Paul likewise presented his research to NEDC

students at a March meeting. Student volunteers Sam Dashiell and Johannes Epke researched air quality issues in the Columbia River Gorge and prepared fact sheets on how air quality degradation impacts environmental and economic resources.

In addition to project work, NEDC welcomed several expert speakers on air and water topics affecting the Northwest. NEDC guest speakers included Columbia Riverkeeper's Executive Director Brent Foster, public interest law attorney Scott Jerger, PEAC staff attorney Allison LaPlante, and Student Directors Ellen Trescott and Jamie Saul.

*Lauren Goldberg*  
*Water & Air Project Coordinator*

PGE Boardman also benefits at the expense of anyone who derives income from the many sectors within Oregon's economy that rely upon clear air, and those who simply appreciate scenic vistas. A recent study has found that pollutant emissions from this single power plant cause haze in 14 wilderness areas and national parks throughout the region. Air quality in the Mt. Hood Wilderness suffers the most from the facility's emissions.



On the global warming front, the plant is a huge source of carbon dioxide emissions and PGE has never been required to internalize the costs of those emissions.

PGE Boardman's air pollution permit also authorizes the plant to emit over 100 tons of Hazardous Air Pollutants (including mercury) every year. Last summer, NEDC and other conservation groups advocated before Oregon's Environmental Quality Commission for more stringent mercury capture and control technology at the Boardman plant. After Oregon DEQ originally came out with a lax proposal, NEDC contacted mercury control experts from around the country and agency staff from other states and learned that, despite PGE's contentions to the contrary, mercury control technology was field-tested, cost effective, and commercially-available. Citizen advocacy resulted in a much more stringent mercury control plan.

Someone is making an awful lot of money off the Boardman plant. PGE reported earnings of \$40 million during the 4th quarter of 2006, as compared to a loss of \$9 million during the 4th quarter of 2005 when the Boardman plant was offline for repairs. The company's corporate executives are certainly doing well. The Oregonian reported, for example, that CEO Peggy Fowler's annual compensation is \$610,000, and she is eligible for an annual bonus of as much as \$915,000. But when it comes time for PGE to step up to the plate and install meaningful pollution controls on its facility, it balks, consistently claiming that the controls are too expensive or too demanding. This excuse is no longer acceptable.

To be sure, PGE has an outstanding green power program, and rate-payer demand has made that program one of the top five programs in the entire nation. Now that it is out from under the wing of Enron, PGE also has a greater commitment to environmental and public health concerns than many other American utilities. We anticipate that when

concerned citizens finally step up and clearly state that they are tired of the acid rain, regional haze, over-nitrification and other environmental and public health harms linked to PGE Boardman's emissions, the company will finally be required to bear the costs associated with the externalities it has passed on to local communities and the broader environment over the last several decades. It is time for PGE to prove it is an industry leader by installing the best-available control technology at the Boardman plant.

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To date, however, PGE has demonstrated that it won't make such changes on its own initiative. And Oregon's Department of Environmental Quality also repeatedly shown a lack of will to impose meaningful controls on large industrial polluters like PGE. That leaves it up to the rest of us to ensure that PGE does what is necessary – and what is right – to protect public health and environment. Accordingly, NEDC and a broad coalition of other conservation, public health and tribal interests will be applying pressure this summer to advocate for state-of-the-art pollution control technology at PGE Boardman.

With your help, we will be able to provide PGE with the encouragement it needs to finally do what it should have done long ago.



## NEDC Unveils New Water Quality Commenting Guide for Coastal Citizens

Thanks to the great work of NEDC's coastal clerk, Liz Crosson, our new commenting guide for Oregon coastal citizens concerned with water quality issues in their community is online. There are various guides to commenting on Clean Water Act (CWA) water quality permits, but this guide will prove helpful for citizens who are specifically focused on water quality issues related to wastewater treatment systems and sewage treatment plants on the Oregon coast. The rugged Oregon coast is the pride of the state, especially for those who live amongst its steep cliffs, wet winters and precious waterways; and wastewater treatment and discharge can have long term effects on the integrity of this special region.



The guide, *Speaking Up For the Coast: NEDC's Wastewater Facility Water Quality Permit Comment Guide for Coastal Citizens*, includes four chapters guiding citizens through the process of writing comments to the Department of Environmental Quality (DEQ) and the Environmental Protection Agency (EPA). Materials are intended to inform citizens on the basics of wastewater treatment and provide guidelines enabling them to get involved in improving the wastewater treatment in their community. It includes an overview of some of the major water quality concerns found in many wastewater treatment facility permits such as mixing zones, anti-degradation, and total maximum daily loads (TMDL). Sample comments are also provided to help citizens formulate effective comments. Community members have an opportunity to provide feedback at least every five years, when a facility's permit is renewed. There are also opportunities for commenting every time a new facility is proposed. Comment writing is an important way to get involved in protecting the water quality of your community and this guide can make it easy.

Check out the commenting guide at: [www.nedc.org](http://www.nedc.org)

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requiring BACT. However, if there is a major modification, the Clean Air Act requires both the installation of BACT and an air quality analysis test – not BACT installation dependent upon the results of an air quality analysis. Isn't it intuitive that there will be an impact to the air quality with the addition of hundreds of tons of pollutants emitted into the air?

With your support, NEDC and PEAC will continue to work diligently to resolve the inadequacies in Oregon's NSR program.

## Litigation Update

NEDC vs. BPA- On January 24th, the Ninth Circuit U.S. Court of Appeals reiterated its directive to the Bonneville Power Authority (BPA) to fully restore funding for the Fish Passage Center, and found BPA's actions to defund the center "arbitrary, capricious and contrary to law". The Center's history of sound science has prevailed over the personal political agenda of Idaho's senior senator Larry Craig, who single-handedly attempted to shut the Center down. The court characterized BPA's faulty reliance on Senator Craig's remarks as "slavish adherence to a sentence in a legislative committee report". Thanks to NEDC Board Member and PEAC staff attorney Stephanie Parent for her work on this case.

NEDC vs. DEQ- On March 25th, NEDC and Columbia Riverkeeper filed suit against the Oregon Department of Environmental Quality (DEQ) concerning the terms of the 1200-COLS industrial stormwater permit for the Columbia Slough. The hundreds of industrial sites covered by the permit are never required to sample for the wide range of harmful pollutants such as arsenic, chromium, cadmium and cyanide that are commonly found in industrial stormwater pollution. NEDC spent thousands of dollars and considerable time conducting water quality sampling and analysis to document that these harmful pollutants are flying below the radar screen, and are being discharged without restriction. The permit also contains other provisions that fail to protect fish, wildlife and human health. Thanks to NEDC Board Member and PEAC staff attorney Melissa Powers for her work on this case.

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