



121 SW Salmon
Portland, Oregon 97204

PRSR STD
US POSTAGE
PAID
PORTLAND OR
PERMIT NO 164

A newsletter for **PGE Renewable Power** customers.

Spring 2011

Renewable Report

A Quarterly Newsletter from **Portland General Electric**



Low-impact hydro

Pelton Round Butte one example of renewable energy

Did you know that all hydropower is not created equal? Although hydropower is common in our region, it is not classified as a renewable energy source unless it is certified as "low-impact hydropower."

Certified low-impact hydro is generated at dams that have met stringent standards to minimize their impact on rivers, fish and wildlife, and have been certified by the Low Impact Hydropower Institute. Upgrading a facility to low-impact hydro certification standards can be an expensive process. Just as a certified organic label can help consumers choose the foods and farming practices they want to support, low-impact hydropower can help energy consumers choose the hydropower generation practices they want to support.

In 2010, approximately 44 percent of PGE's Green SourceSM option came from certified low-impact hydro sources from the Clark Fork project in Idaho.

Certification means that the hydropower facility has been found by LIHI to meet or exceed the institute's certification criteria, which address eight key areas: river flows, water quality, fish passage and protection, watershed protection, threatened and endangered species protection, cultural resource protection, recreation, and facilities recommended for removal. Certification is designed to provide consumers with assurance that a facility has avoided or

reduced its environmental impacts pursuant to the Low Impact Hydropower Institute's criteria.

The Pelton Round Butte hydro project owned by PGE and the Confederated Tribes of Warm Springs was certified as low-impact hydropower in 2007. The project impounds the Deschutes River about six miles west of Madras and about 90 miles southeast of downtown Portland. With 465 million watts capacity and one of its dams rising 440 feet, Pelton Round Butte is one of the largest hydro projects in the United States to receive the designation. Only three other Oregon facilities have LIHI certification.

Pelton Round Butte is unusual in that most certified projects are small dams, sometimes built in streams that have few migrating fish. In 2010, its first full year of operation, nearly 100,000 juvenile anadromous fish — including 50,000 sockeye salmon, 42,000 spring Chinook salmon and 7,800 steelhead smolts — were transferred downstream to continue their migration to the Pacific Ocean. Most migration takes place from February to July.

This marks the first downstream passage of salmon and steelhead in 40 years, thanks to this new underwater tower and fish collection facility. You can find out more about this project at **DeschutesPassage.com**.

You can learn more about different types of renewable energy, from wind power to wave energy, at **GreenPowerOregon.com**.

Thank you for purchasing renewable energy from PGE.

By choosing these environmentally superior options, you're helping to avoid greenhouse gas emissions, restore our watersheds for wild salmon and create a more sustainable future for Oregon.

We know you care about these issues, so Portland General Electric is sharing updates on the projects funded with your support. We've also included other news you can use.

In this issue:

- Low-impacy hydro
- Planning for salmon
- Customer profile: Lewis & Clark
- Nationwide green challenge
- Join us on facebook
- Events Connection
- Coupons and discounts online
- Miller Paint coupon

If you have questions about this newsletter, please contact:

Thor Hinckley, Manager,
PGE Renewable Power Program
at renewables@pgn.com



Portland General Electric

If you'd prefer to receive an electronic version of this newsletter, please send an e-mail with your name and address to: renewables@pgn.com

Printed on 100% PC recycled paper. Please recycle.

© 2011 Portland General Electric

Thanks for your support!

We thank the organizations shown at right for their support of renewable power. We welcome these customers to our Commercial/Industrial Renewable Power program, Clean Wind.

Platinum

City of Beaverton	Burgerville EasyStreet Online Services	Lewis & Clark
-------------------	---	---------------

Gold

City of Gresham	Kaiser Permanente	ON Semiconductor
City of Hillsboro Civic Center	LaCrosse Footwear, Inc.	Portland Streetcar
City of Lake Oswego Water Treatment Plant	Legacy Good Samaritan Hospital and Medical Center	Precision Castparts
City of Salem		Providence Newberg Medical Center
Dave's Killer Bread	Lewis and Clark College	Sanyo Solar Oregon
Epson Portland	Metro	Siltronic
Elephants Delicatessen	Multnomah County	Stimson Lumber
ESCO	New Seasons Market	The Standard
Evrax Oregon Steel	OHSU	ViaWest, Inc.
Intel	OMSI	Xerox

Silver

A to Z Wineworks	Legacy Meridian Park Hospital	Organically Grown Company
American Honda Motor Company	Legacy Mount Hood Medical Center	Staples, Inc.
Computer Forms Inc.	MachineWorks, LLC	Torpet LLC
Deschutes Brewery, Inc.	NORPAC Foods	Toyota Motor Sales VA Medical Hospital Yahoo!

Bronze

ACME Construction Supply	Lamb's Thriftway	Rosedale Elementary School
The Allison Inn & Spa	Lifesource Natural Foods	Rose City Printing & Packaging
Canvas Dreams, LLC	Michaels Printing	Shorenstein Realty Services
Clark/Kjos Architects	The Nature Conservancy	Stevens Printing, Inc.
Classic Foods, Ltd.	National College of Natural Medicine	Sunset Athletic Club
Crown Plaza		St. Luke's Lutheran Church
Dept. of Administrative Services	Norm Thompson Outfitters	Suburban Door Company
DocuSource	One Green World	Sunshine Dairy
Earl & Brown Co. Inc.	Opus Interactive	Temp-Control Mechanical Corp.
Irwin Hodson	Oregon Electric Group	Tosoh Quartz, Inc.
Hopworks Urban Brewery	Oregon's Wild Harvest	Tryon Creek State Park
House Spirits Distillery	Parr Lumber Company	Under Armour
Grand Central Baking Company	Powell's Books	University of Portland
Green Earth Baking	PREM Group	Walsh Construction Company
The Joinery	Provvista Specialty Foods	Willakenzie Estate
	Rodda Paint Company	
	Rosa Parks Elementary School	



- Environmentally Responsible
- Ultra-Low VOC's
- Solvent Free
- Green SealTM Certified

\$10 OFF

your next purchase of \$50 or more.



Bring this coupon in to any of our company owned stores to receive \$10 off your next purchase of paint and/or painting supplies totalling \$50 or more! For a location near you, go to www.millerpaint.com.

Coupon valid at Miller Paint Company owned stores only. No cash value. Valid only on full price retail transactions. Expires December 31, 2011. Limit one coupon per household, one coupon per transaction. Not valid in conjunction with any other offers or promotions. Coupon must be surrendered at time of purchase. PGENL

For a full listing of our business customers who buy renewable power, please visit GreenPowerOregon.com.



Protecting nature. Preserving life.™



Greg Ciannella, former stewardship coordinator for the Johnson Creek Watershed Council, describes habitat improvements planned for the lower reach of Johnson Creek at Milwaukie. Habitat Support funds are helping to improve habitat for salmon and steelhead.

© Jim Yukavitch

Planning for salmon

Habitat Support customers help fund Johnson Creek plan

Mother Nature may seem random, but she's not. Anyone trying to improve habitat for salmon and other wildlife knows success requires lots of careful planning. That's exactly what the Johnson Creek Watershed Council has done.

Flowing into the Willamette River at Milwaukie, Johnson Creek is one of few remaining Portland metro-area streams that still provide habitat for migrating salmon and steelhead. Like most urban streams, however, the creek has its problems. In addition to typical habitat degradation, it suffers from higher levels of pollution and erosion due to the proximity of so much human development.

That's why the watershed council is targeting the creek's lower one-quarter mile for restoration. Previous work upstream is already showing positive results with coho salmon returning this winter.

But before on-the-ground work can begin, a critical first step was a solid strategy.

"We had to understand more about the stream's geomorphology, hydrology and habitat conditions before we could develop a plan to save it," said Greg Ciannella, former Johnson Creek Watershed Council stewardship coordinator.

Now the plan is complete. The next step is to find funding to implement it, which the watershed council should secure this spring. Restoration activities will begin this summer.

Woody debris will be added and boulders strategically placed to create alcoves and side channels for fish and to slow floodwaters that can wash them away. Native vegetation will be planted along stream banks to filter chemical-filled runoff and mud during heavy rains. An interpretive overlook for visitors will also be built where the creek meets the river.

"We're excited about the project design," Ciannella said. "Right now lower Johnson Creek provides little for native fish. Our treatment will do nothing but improve it for salmon and steelhead."

For an additional \$2.50 donation per month, you can directly support projects like this by adding Habitat Support to your renewable power option. The funds are administered by The Nature Conservancy. To add Habitat Support to your renewable option, visit GreenPowerOregon.com.

Customer profile: Lewis & Clark

Portland's Lewis & Clark serves 3,500 students with undergraduate degrees in Arts and Sciences, a graduate school of education and counseling and a renowned law school. Lewis & Clark has been a renewable power customer since 2004 and recently purchased enough renewable energy to reach the 100 percent renewable level for campus buildings with the majority of renewable power being purchased by undergraduate students through a student initiative.

Renewable Report recently spoke with Amy Dvorak, sustainability manager at Lewis & Clark about the school's sustainability efforts.

Why did Lewis & Clark decide to purchase renewable energy?

Lewis & Clark students are investing in a new energy future. By putting their money where their values are, students are contributing to a future where public support matched by technological innovation will result in new renewables supplying a much greater portion of the energy grid. To upgrade the campus commitment to 100 percent, students voted to increase their voluntary fee for renewable energy starting in the 2010-11 school year; seven out of eight undergraduates decided to contribute this extra amount.

What are some of your other green practice initiatives?

Lewis & Clark has developed a Climate-Neutral Action Plan that will significantly reduce the carbon emissions footprint on the campus by the year 2018. Some examples include:

- A 100 mW solar array installed in 2008 on the roof of the sports center. The array produces approximately 0.67 percent of Lewis & Clark's total electrical energy use.
- A shuttle bus system that provides a connection to public transportation instead of using individual cars.
- A declaration that all new facilities on campus be designed to a standard equivalent to the LEED Silver rating system. Existing buildings will be subjected to a LEED standard for existing buildings.



Learn more about Lewis & Clark at www.lclark.edu. You can find a searchable list of all businesses that buy renewable power at GreenPowerOregon.com.

Events Connection

Resources for sustainable events and volunteer opportunities

You can find many organizations at GreenPowerOregon.com that offer educational events and volunteer opportunities, ranging from tree planting and habitat restoration to educational events. For more events, visit the Events Connection page in the Community section of GreenPowerOregon.com.

Coupons and discounts online

If you like the coupon you receive with this newsletter, you'll love what's available at

GreenPowerOregon.com. As a renewable power customer, you will find coupons and special offers just for you from other PGE renewable-powered businesses.

Current coupons include Burgerville, Elephants Delicatessen, Oregon Mountain Community and Schoolhouse Electric. Simply register on GreenPowerOregon.com and print the coupons found in the "Benefits" section. It's our way of thanking you for your support of renewable energy and bringing together our growing green community.



Join us on Facebook

Become a fan of your renewable power program on Facebook. We'll post reminders about the latest coupons and discounts for you, as well as updates on the nationwide EPA Green Power Challenge. You can find our page by visiting PortlandGeneral.com/GreenFB. See you there!



Nationwide green challenge

Your hometown could be a national leader

If you live in Hillsboro, Portland, Beaverton, Gresham, Salem or Lake Oswego, you just might help your city win national "green" bragging rights.

The U.S. Environmental Protection Agency announced a nationwide Green Power Challenge, running through Sept. 2011, to encourage more than 30 communities to use renewable energy and fight climate change.

The Oregon cities listed above have already become EPA Green Power Partners through previous renewable challenges and are eligible to win this national challenge. One of these cities has a good chance of coming out on top. The winning community will receive national recognition from the EPA.

Although you've already done your part by signing up for renewable energy, now's a good time to encourage your friends, relatives and neighbors living in the cities listed above to join you. Ask them to visit GreenPowerOregon.com for more information.

