

Sustainability Accomplishments for 2014

Public Utility District No. 1 of Chelan County

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Compliance Management

Our goal is to closely monitor regulations regionally and nationally to ensure our sustainability principles are consistent with those regulations. Maintain programs and procedures to ensure compliance.

2014 Accomplishments

- Monitored regulations for requirements applicable to the District;
- Conducted ongoing compliance activities including, but not limited to energy conservation, renewable resources, the environment, system reliability, protection of cyber assets and physical infrastructure;
- Worked with external auditors and regulators on a regular basis to ensure good communication and understanding of requirements

Plans for the Future

- Fully comply with new directives that emerge.

Energy Efficiency

Chelan County residents taking advantage of energy-efficiency programs saved 13,052,400 kilowatt hours of energy in 2014 – enough to power about 504 local homes.

The savings helped Chelan County PUD surpass its mandated 2014 conservation target by 40 percent and meet a “stretch” goal of 1.49 average megawatts of savings.

Some 1,490 residents took advantage of programs to save energy and money including rebates on appliances, windows, insulation, ductless heat pumps and air source heat pumps; duct sealing for manufactured homes; and refrigerator/freezer recycling. Thirty-one businesses installed energy-efficiency improvements with help from the PUD.

Saving energy is a winning proposition for everyone. Customers save money with lower electric bills, reduce energy waste and in many cases, improve the comfort of their homes. When customers save energy, more power is available to sell at wholesale rates on the open market; those revenues help keep local retail rates low. Customers also help the PUD meet state-mandated targets under the [Energy Independence Act](#).

Surveys of customers who participated in programs in 2014 showed high satisfaction with their products and PUD customer service.

2014 Accomplishments

- Acquired approximately 1.49 average megawatts¹ (aMW) of conservation from customers, exceeding the target of 1.09 aMW.

¹ Megawatt is the standard term of measurement for bulk electricity. The output of power plants usually is described in terms of megawatts. One megawatt is equal to 1 million watts or 1,000 kilowatts. One megawatt is

- Introduced rebates for residential heat pump conversions and upgrades, super-efficient windows and insulated entry doors.
- Introduced rebates for commercial ductless heat pumps.
- Continued residential rebate programs for ENERGY STAR refrigerators, freezers, clothes washers, heat pump water heaters and LED retrofit kits begun in 2013.
- Continued free duct inspection and sealing for manufactured homes.
- Continued a refrigerator/freezer recycling and rebate program.
- Continued the ductless heat pump rebate program begun in 2012.
- Continued the Simple Steps/Smart Savings program that reduces the cost of CFLs, LEDs and low-flow showerheads to consumers at local retailers.
- Sponsored a three-day Performance Tested Comfort Systems training for local HVAC contractors.

Plans for the Future

- Introduce rebates for commercial heat pump water heaters, clothes washers, and dishwashers and ductless heat pumps
- Introduce duct inspection and sealing for stick-built homes (spring 2015).
- Introduce direct-install programs for residential lighting and simple home energy audits.
- Focus on helping local governments increase energy efficiency in their buildings through the Local Government Initiative.
- Introduce a commercial lighting incentive program.
- Train local building operators in energy-efficiency standards and controls.
- Evaluate electricity use in District facilities and use continuous improvement methods to reduce facilities' electric consumption where practicable.
- Continue work with Facilities to reduce energy use by improving the energy efficiency of our generation, transmission, distribution and other facilities.
- Continue and expand the ResourceSmart program which helps pay for customer facility improvements in the industrial, commercial and agricultural sectors.
- The 2015 compliance target is 1.09 aMW. We will target 1.8 aMW.

enough for 16,666 60-watt light bulbs. In the Pacific Northwest, it also is enough electricity to power about 600 homes. An average megawatt is the amount of electricity produced by the continuous production of one megawatt over a period of one year. The term, sometimes also called average annual megawatt, defines power production in megawatt increments over time. Because there are 8,760 hours in a year, an average megawatt is equal to 8,760 megawatt-hours.

Environmental Stewardship

Continue our efforts to maintain and protect the environmental resources that have been entrusted to our care.

2014 Accomplishments

- **Achievement of No-Net-Impact.** After a decade of working with state and federal fish agencies and two Northwest tribes under innovative Habitat Conservation Plans (HCPs) for Rocky Reach and Rock Island dams, the parties to the agreements confirmed Chelan PUD reached no-net-impact at its 10 year check in **2013**.
- Reduced the generation of hazardous waste at Rock Island Dam therefore eliminating the requirement to file a Pollution Prevention Report to Department of Ecology.
- Negotiated with Ecology to file for a National Pollutant Discharge Elimination System (NPDES) permit for stormwater generated at District facilities. The program will include an education component, outline best management practices and spell out operation and maintenance procedures with the intent of protecting our state waters.
- Finalized Spill Prevention, Containment, and Countermeasure (SPCC) plans for all applicable District facilities with the goal of preventing oil discharges to navigable water and adjoining shorelines.
- Completed shoreline stabilization that resulted in the protection of important cultural resource sites along the Rock Island reservoir.
- Ensured that cultural and historic resources were protected during the Wanapum draw down and the Alcoa Area Fire.
- Reduced our carbon footprint and optimize the value of energy resources.
- Improved the accuracy of the tracking program for Sulfur Hexafluoride (SF₆) gas.
- Performed cart and breaker maintenance/replacement that resulted in decreased greenhouse gas emissions. (The Environmental Protection Agency (EPA) has identified SF₆ as a greenhouse gas with a global warming potential 22,800 times the effect of an equal mass of Carbon Dioxide and an atmospheric lifetime of 3,200 years.)

Eastbank aquifer – protecting and preserving water resources for the Eastbank Hatchery

- Coordination with the Water Resources team, holding internal meetings to update the team
- Coordination with the sub-group or technical team regarding the management of the water quality monitoring and modeling of the Eastbank Aquifer (EBA)
- Coordination with the contracted consultant regarding deliverables and contract activities
- Met with the Regional water district, so that they may provide their water quality and quantity data for our modeling efforts

Facilities

We coordinate and facilitate operation and maintenance of District facilities while creating and sustaining a quality and safe environment for our customers and employees.

2014 Accomplishments

- Completed an Energy Audit of District Facilities including the following:
 - Wenatchee HQ
 - Fish and Wildlife Building
 - Tech Shop
 - Utility Services Building
 - Fleet Services Building
 - Hawley St. Water/Wastewater Building
 - Leavenworth HQ
 - Chelan HQ
- Replaced old metal halide lighting on the Service Building dock area with energy efficient lighting.
- Replaced old T-12 lighting fixtures and controls in the Fiber Building with energy efficient lighting.
- Replaced old T-12 lighting and controls in Wenatchee HQ: Engineering Services; Office Services; and west stairwell with energy efficient lighting.
- Replaced old T-12 lighting with energy efficient lighting in the (office space only) Hawley St. Water/Wastewater building.

Water/Waste Water

2014 Accomplishments

- Replaced an aging steel water main on Austin Court with a history of leaks
- Performed a leak detection analysis of portions of the District's Wenatchee and Dryden Systems and the Chelan Falls system and repaired identified leaks
- Replaced water meters serving large industrial customers with more accurate and modern meters.
- Participated as a member of the Regional Water System and identified the need and budgeting for electrical system improvements to the Regional supply pumps in 2015.
- Participated as a member of the Regional Water System in conducting a source and reliability analysis and identification of future alternatives

Land and Water Conservation

Encourage water conservation and explore ways to protect and enhance our lands and facilities in a responsible manner.

2014 Accomplishments

Operating agreements with state parks/Entiat - Ray

- In 2014 work to improve the PUD's ramp and dock in downtown Chelan with handrails, slip-resistant decking and structural upgrades was completed. In addition, decking and handrails on the boardwalk that is part of the Chelan Riverwalk trail along Lake Chelan's south shore was replaced. The original boardwalk, railings and the deck of the promontory was replaced with longwearing and smooth ipe, a Brazilian hardwood.
- Enhancement projects include the upgrades to Entiat Park currently underway and scheduled for completion by Memorial Day 2015, the new cabin camping loop at Lincoln Rock State Park, extension of the Rocky Reach Bike Loop, and new playgrounds at Beebe Park and Chelan Falls Park.
- Both Lincoln Rock and Daroga State Parks boat docks received needed upgrades. The existing docks were more than 30 years old. With the new materials being used, the docks and piles will last the full term of the Rocky Reach Federal Energy Regulatory Commission (FERC) license, approximately 40 years.

Wanapum Drawdown Response

Fishway passage extension at Rock Island

- Chelan PUD installed two 80-foot denil baffled extensions to the Rock Island fish ladders on the Chelan County side and a third ladder extension on the Douglas County side to provide for fish migration during low river flows in late summer.
- April 7 river stakeholder meeting. Natural Resources played an integral part in participating in pro-active discussions related to the 2014 juvenile and adult migration issues in response to the Wanapum Drawdown at the Rock Island Hydro Project. Staff presented response strategies to river operators, tribal communities, agency and political interests that directly influence mid-Columbia River fisheries.

Boat launch extension

- In response to the Wanapum drawdown, Chelan PUD worked to extend the boat launch at Kirby Billingsley Hydro Park by 38 feet to ensure access to the Columbia River in late summer and fall as water flows decreased and river levels dropped.

Assistance with irrigators to sustain local farming operations

- Held several meetings with irrigators and stakeholders to discuss concerns and issues
- Coordinated with the Washington State Departments of Ecology, Fish & Wildlife, Agriculture, irrigation districts, United States Army Corps of Engineers, the Governor's

Office, and Grant PUD regarding assistance with irrigator issues as well as environmental, cultural, and fish issues

- Hosted a community meeting with all interested stakeholders to assist in coordination with necessary state and federal regulations regarding irrigation issues and concerns

Chelan River

- Coordinated, facilitated, attended an Ecology, Environmental Protection Agency, Chelan PUD meeting to discuss progress on the studies regarding the Chelan River
- Assists in water quality monitoring and modeling on the Chelan River
- Participation in the Chelan River Fisheries Forum

Lake Chelan Lake Level issues - resolved

Material Use and Disposal

We encourage effective and efficient use of materials and the disposal of waste products.

2014 Accomplishments

- Scrap materials disposal/recycling efforts, including scrap metals, used vehicles, used electrical equipment and oils, used battery recycling, and sales of used/obsolete personal property sold to the public resulted in recycling and reuse of materials and netted \$550,908.13 to the District.
- Converted approximately 2225 additional customers (total customers now 10, 333) to electronic billing (PowerPay), saving the District an estimated 54 cents for each bill not mailed and reducing paper consumption.

Vehicles and Fuels

Reduce the District's use of fossil fuels and reduce vehicle air pollution considering current regulations and requirements.

2014 Accomplishments

- Continued ordering factory installed idle reduction technology on all new diesel trucks to reduce fuel usage and emission
- Continued to research and monitor technology development, costs and availability of new alternative fuels such as propane autogas and liquid natural gas.
- Replaced three gasoline powered parks work vehicles with all electric powered work carts.

- Formed a team to evaluate and make recommendations regarding the District role in leading the electrification transformation in Chelan County by converting fossil fueled vehicles and equipment, and becoming a regional clearing house to provide information to the public on electrification.