

Sustainability Accomplishments for 2013

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.

2013 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.

Conservation

Chelan PUD customers taking advantage of energy-efficiency programs saved 20,761,200 kilowatt hours of energy in 2013 – enough to power about 1,000 homes in Chelan County.

The savings helped Chelan County PUD surpass its 2013 conservation goal by about 40 percent.

Some 1,890 homeowners took advantage of programs to save energy and money including rebates on appliances, windows, insulation and ductless heat pumps; duct sealing for manufactured homes; and refrigerator/freezer recycling. Thirty-five businesses installed energy-efficiency improvements with help from the PUD. And 94 low-income households received weatherization help using PUD funding through the Chelan-Douglas Community Action Council.



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 last year showed high satisfaction with their products and PUD customer service.

2013 Accomplishments

- Acquired approximately 2.37 average megawatts¹ (aMW) of conservation from customers, exceeding the target of 1.71 aMW.
- Introduced residential rebate programs for ENERGY STAR refrigerators, freezers, clothes washers, electric storage water heaters, heat pump water heaters and LED retrofit kits.
- Introduced free duct inspection and sealing for manufactured homes.
- Introduced 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

Plans for the Future

- Introduce rebates for residential heat pump conversions and upgrades, super-efficient windows and exterior doors, energy-efficient manufactured homes and surge suppressors for electronics.
- Introduce rebates for commercial heat pump water heaters, clothes washers, dishwashers and ductless heat pumps
- 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 2014 compliance target is 1.29 aMW. We will target 1.49-2.19 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 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.

2013 Accomplishments

- Achieved No Net Impact (NNI) status for Rock Island and Rocky Reach Habitat Conservation Plans (HCP's). Accomplishing NNI meets the first 10-year check-in period of the 50 year agreement to satisfy the three primary elements of the HCP protecting salmon and steelhead: survival; hatchery funding and capacity; and habitat protection and improvements.
- Successfully raised and out-planted 7,979 juvenile sturgeon in Rocky Reach reservoir satisfying a significant annual goal of the sturgeon management plan of the Rocky Reach FERC operating license.
- Finalized an agreement supporting the operation and evaluation of the Chief Joseph fish hatchery and initiated construction of a sockeye fry hatchery in Penticton, B.C. to satisfy the District's sockeye obligation under the HCP's.
- Observed record number of adult spawning summer Chinook in the lower reach of the Chelan River and habitat channel. Summer and fall Chinook use continues to increase each year to levels that now exceed what has been observed in historically productive natural stream environments.
- Continued to manage 22 osprey nesting sites and successfully relocated 2 osprey nests from District Distribution structures to artificial nesting platforms. This on-going effort effectively protects nesting osprey and reduces the likelihood of interrupted service to customers.
- Continued to fund the conversion of 1,400 acres of previously managed agricultural lands to natural upland habitat as part of the Rocky Reach Wildlife Management Plan.
- Continued to document and monitor the status of a rare and threatened plant on Rocky Reach reservoir; Ute ladies' tresses, a small native orchid. Completed a five-year monitoring and status report addressing the population trends observed.
- Established CFL recycling facilities for District employees and the public.
- Continue to successfully reduce the volume of hazardous waste generated at the Projects through employee education and recycling.

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.

2013 Accomplishments

- Replaced HVAC equipment and added Building Automation System (BAS) technology at the Chelan Office and Fleet Services. BAS was added to Leavenworth and Hawley St. Water-Wastewater Buildings in late 2012. BAS technology and equipment allows for unoccupied HVAC programming during evening and weekend “unoccupied” hours, resulting in energy savings for the District.
- Worked with Energy Conservation and the CTC to evaluate HVAC control settings. Adjustments to the BAS system at the CTC Building have resulted in an approximate reduction of 25% of the annual energy use (or about \$28,000/year).
- Energy efficient lighting upgrades were completed in the Hawley St. Water-Wastewater Building offices; the Hawley St. Fiber Building; and at Wenatchee HQ in the Office Services and Print Shop areas. The upgrades not only result in energy efficiency savings, but also reduce the number of fluorescent light bulbs that enter the waste stream. The new fixtures use fewer, longer lasting light bulbs.
- Continued focus and adjustments to the HVAC operating controls to improve energy efficiency, and the results from the energy efficient lighting upgrades (pilot project) in the Wenatchee HQ Building, have resulted in energy use being on track for an additional 2% reduction (projected for year-end 2013) or about an additional \$1,700/year.
- Annual energy savings, cumulative of all the “Facilities’ buildings” are on track to be about \$60,000/year less than they were in 2010.

Land and Water Conservation

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

2013 Accomplishments

- Completed Land Management Plans for Rock Island and Rocky Reach reservoirs. These plans provide for consistent management of environmental programs associated with the District’s FERC operating licenses and allow those interested in conducting activities or projects within the project area to review the District’s obligations and role in managing environmental resources.
- Parks continue to enhance customer service and staff coordination through electronic media thus reducing paper and printing material needs; intently manage operations to support sustainable actions such as recycling old mower blades; mulch leaves into turf rather than sweep and haul; chip and compost tree trimmings for ground cover material to reduce herbicide application.
- Designed bank and shoreline stabilization projects to protect District properties and sensitive resources on Lake Chelan, Rock Island and Rocky Reach Reservoirs.

- Continue to fund bank stabilization and erosion repairs of 58 sites on U.S. Forest Service and National Park lands as part of the Lake Chelan FERC operating license.
- Continue to monitor and evaluate best-management practices for water use at Eastbank Hatchery.
- Continue to perform annual control measures for invasive and noxious weeds on identified parcels of District lands and project waters.
- Performed annual monitoring of Rocky Reach project waters for any initial presence of zebra or quagga mussel larvae.
- Upgraded hydraulic hoses and fittings associated with operation of Rocky Reach juvenile fish bypass system as a preventative measure to increase operation reliability and reduce likelihood of inadvertent oil release.
- Identified Distribution power poles that are located close to surface water sources and initiated a regular interval inspection program to assess the pole's structural integrity and stability as a preventative measure to enhance reliability and protect surface water sources.

Material Use and Disposal

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

2013 Accomplishments

- Continued all recycling programs.
- Continued expanding the PowerPay program participation, reaching more than 8,100 participants.
- Continued expansion of the eBay surplus auction program to resell District surplus personal property, improving efficiency and cost-effectiveness of our overall surplus program.

Plans for the Future

- Streamline our disposal/tracking processes for surplus oils, lubricants etc.

Vehicles and Fuels

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

2013 Accomplishments

- Concluded synthetic oil study and determined the cost did not outweigh marginal benefits – decision not to continue with use of synthetic oil.
- Reduced overall fleet fuel usage from 2012 level by approximately 12,600 gallons (about 5% reduction which exceeded our goal of 2.5%)
- Reduced the overall fleet size by 4 vehicles.
- Completed analysis and determined to extend oil change intervals on light duty vehicles from 4000 miles to 5000 miles, reducing oil consumption.
- Installed diesel cab/bin heaters on 4 new service/foreman trucks to reduce engine idle time required for cab heating during cold weather.

Plans for the Future

- Continue ordering factory installed idle reduction technology on all new diesel trucks to reduce fuel usage and emissions.
- Continue to research and monitor technology development, costs, and availability of new alternative fuels such as propane autogas and liquid natural gas.
- Install six additional idle reduction kits in existing diesel trucks.