Water and Energy Efficiency Partnerships

Al Dietemann, Seattle Public Utilities
EPA Water and Energy Meeting March 5, 2008
WATER USE DECLINED 26% SINCE 1990 EVEN WHILE POPULATION INCREASED 16%
Program Examples from Western Washington

Residential

- WashWise Single Family Clothes Washers
- WashWise Multi-family Clothes Washers (Coin Op)
- 1.8 gpm Showerheads (code = 2.5 gpm)
- 1.0 gpm Faucet Aerators (code = 2.2 gpm)

Commercial

Laundries
- Steam Condensate Recycling or Reuse (Drywall)
- Medical Air Compressors
- Cooling Towers

- Pre-Rinse Spray Heads
- Commercial Dishwashers
- Food Steamers

Comm. Kitchens
OVER 70,000 CLOTHES WASHER REBATES TO DATE

Get Loads of Savings

Saving energy and water together! That is exactly what the WashWise program is all about. Your local energy and water utilities listed below have joined together to offer you a rebate on the purchase of qualified resource saving clothes washers. This is the perfect opportunity for you to be part of the savings team which is focused on conserving natural resources, protecting habitat and maintaining a healthy environment for the Puget Sound region and beyond.

WASHWISE

Clothes Washer Rebates up to $100

Water & Energy Savings Tips

- Repair leaks - Fix and fill faucet and toilet leaks right away.
- Wash full loads of laundry and dishes to save water, energy and time.
- Research shows that many people under-fill their clothes washer by 20%. Try adding a few more items to the load and see if you’re satisfied with the results.
- Reduce shower flow - Install water-efficient showerheads and shorten your showers by a minute or two and save up to 1,000 gallons per person each year.
- Reduce faucet flow - Avoid letting the water run while brushing teeth, washing dishes, or shaving. Installing faucet aerators will save even more.
- Install a low flush toilet - Toilets installed before 1994 use water washers using 3.5 to 5 gallons per flush. New toilets only use 1.6 gallons per flush.
- Improve landscape watering practices - If you water the lawn, water only once or twice per week for most soils, and no more than an inch per week. Take recent rainfall into account when watering. For planting beds, use drip irrigation such as soaker hoses instead of sprinklers.
- Set your water heater’s thermostat to 120 degrees Fahrenheit. Lowering it from a higher setting will save you money and reduce the risk of being scalded.
- Lower your home’s thermostat at bedtime or while you’re away during the day. Setting the thermostat to 55 degrees during these times could reduce your heating bill by up to seven percent. Install a programmable thermostat for home heating. It can save a lot of energy while you’re sleeping or away from home — and will re-warm your house shortly before you wake up or return home.
- Thoroughly pre-washing dishes may be unnecessary. Most new dishwashers do not require pre-rinsing.
- Weatherstrip your home by sealing leaky drafts around doors and windows with weather-stripping, caulking, and door sweepers.
- Purchase a premium-efficiency ENERGY STAR® qualified furnace, clothes washer, refrigerator, dishwasher and high-efficiency water heaters when it’s time to replace worn-out models.

1-866-632-4636
WashWiseRebate.com

PLEASE COMPLETE ENTIRE APPLICATION. (Incomplete application will delay payment.)

Customer Information

Full Name:

Daytime Phone:

Full Installation Address:

City:

State:

Zip:

Full Mailing Address (optional):

City:

State:

Zip:

Email Address:

My Electric Provider is:

My Water Provider is:

My Water Heater Fuel Type is required:

Electric

Natural Gas

Propane

My Clothes Dryer Type is required:

Electric

Natural Gas

Propane

Product Rebate Information

Date Purchased:

Serial Number:

Date installed:

Model Number:

Acceptance of Terms

By signing this form, you acknowledge:
- The clothes washer rebate has been fulfilled at the address indicated above.
- All information supplied on this form is true and correct.
- WashWise staff may enter any of the information on this form, and inspect the clothes washer installation upon request.
- You must return a rebate check to the home on or before January 1, 2021.
- This form must be returned by the WashWise program within 30 days of the clothes washer purchase.
- The model number and serial number are required by law.
- The information made available and rebate levels may change without prior notice.
- All information must be complete and a copy of a signed consent must be completed for payment.

Participating utilities have the right to inspect or remove warranties or certifications with regard to these products or energy savings or water savings from these installations. This offer ends December 31, 2020 if water funds are exhausted.

Customer Signature:

Date:

This information can be made available on request to accommodate people with disabilities and those who need language assistance.
WashWise (Clothes washers)

Tiered rebates: $25, $50, or $100

70,000 rebates, 50% market share

14 – 20 gpd saved per washer
Free Showerhead & Aerator Distribution: Water and Energy Utility Partnership

- Over 100,000 customer requests
- 33% of all Regional Single Family Households
- 20% more efficient than code requires
- Savings per Household:
  - 4 gallons/day & 181 kWh per year
- All Households: 7.5 million pounds of greenhouse gases & 400,000 gallons per day
- Low cost: 20 times per gallon cheaper than new supply & waste treatment
Medical Air Compressor

- 40 HP replaced with 10 HP units
- Saved 6,050 gpd by air cooling
- Univ. of Wash Medical Center

Medical Vacuums

- More energy efficient at partial loads, used 7500 gpd of water to generate vacuum
Korry Electronics Manufacturer

• Replace Chiller with Cooling Tower at full loads tower uses 82% less energy
• Saved 8,000 gpd of water and sewer
Don’t let your profits go up in $team!

• New Boilerless Steamers Save Money
• Incentives of up to $1,250

For more information contact a Saving Water Partnership advisor at (206) 343-8505 or a PSE Energy Advisor at 1-800-562-1482.
Partnership Elements

• Working collaboratively with other **partners**
• Focusing on the **most cost effective** programs
• Ensuring **equity** among partners
• Reducing costs by **avoiding lost opportunities**
• Ensuring program success by monitoring and **evaluating** program savings and costs
• Testing program design with **pilot projects**
Drivers for Efficiency Partnerships

• Leveraged Costs and Mutual Benefits for Utilities

• Public Trust (united utilities, not isolated utilities)

• Regional Goals (climate change & environmental concerns)

• Improved private partnerships (vendors, service providers)

• Multiple Partners:
  Energy Utilities
  Solid Waste - landscape and hazardous waste reduction
  Wastewater - reducing use
  Surface Water/Drainage – runoff

Business: Private Partnership with vendors and service providers

Community and Environmental Groups
Future Partnerships?

- Water & Wastewater Utility Energy Use (flow reduction benefits)
- Industrial Equipment Cooling
- Residential Dishwashers
- Exergy with water/wastewater components

- Combo Ovens
- Commercial Dishwashers
- Waste Disposals
- Thawing
- Woks

Comm. Kitchens
Exergy Concept
Clearwater: buildings without cooling towers

*near-zero energy building*
The Insignia, a massive residential complex planned for the Seattle South Lake Union neighborhood will utilize over a thousand heat pumps and circulate water through a million tons of earth below its full-city-block footprint.

FUTURE DINOASURS:
ROOF MOUNTED COOLING TOWERS
REJECT “WASTE” HEAT FROM AIR CONDITIONING BY EVAPORATING THOUSANDS OF GALLONS OF DRINKING WATER PER DAY

The Insignia Courtesy of Embassy Development

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Saving Water Partnership

Seattle Public Utilities & Wholesale Water Providers

www.savingwater.org