

Seattle Public Utilities Water Smart Technology

Water Conservation Program for Industrial/Commercial/Industrial Facilities

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Program Manager

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Saving Water Partnership

1% Program Commitment

Savings by 2010:

14 million gallons per day

Cost by 2010:

\$39 million

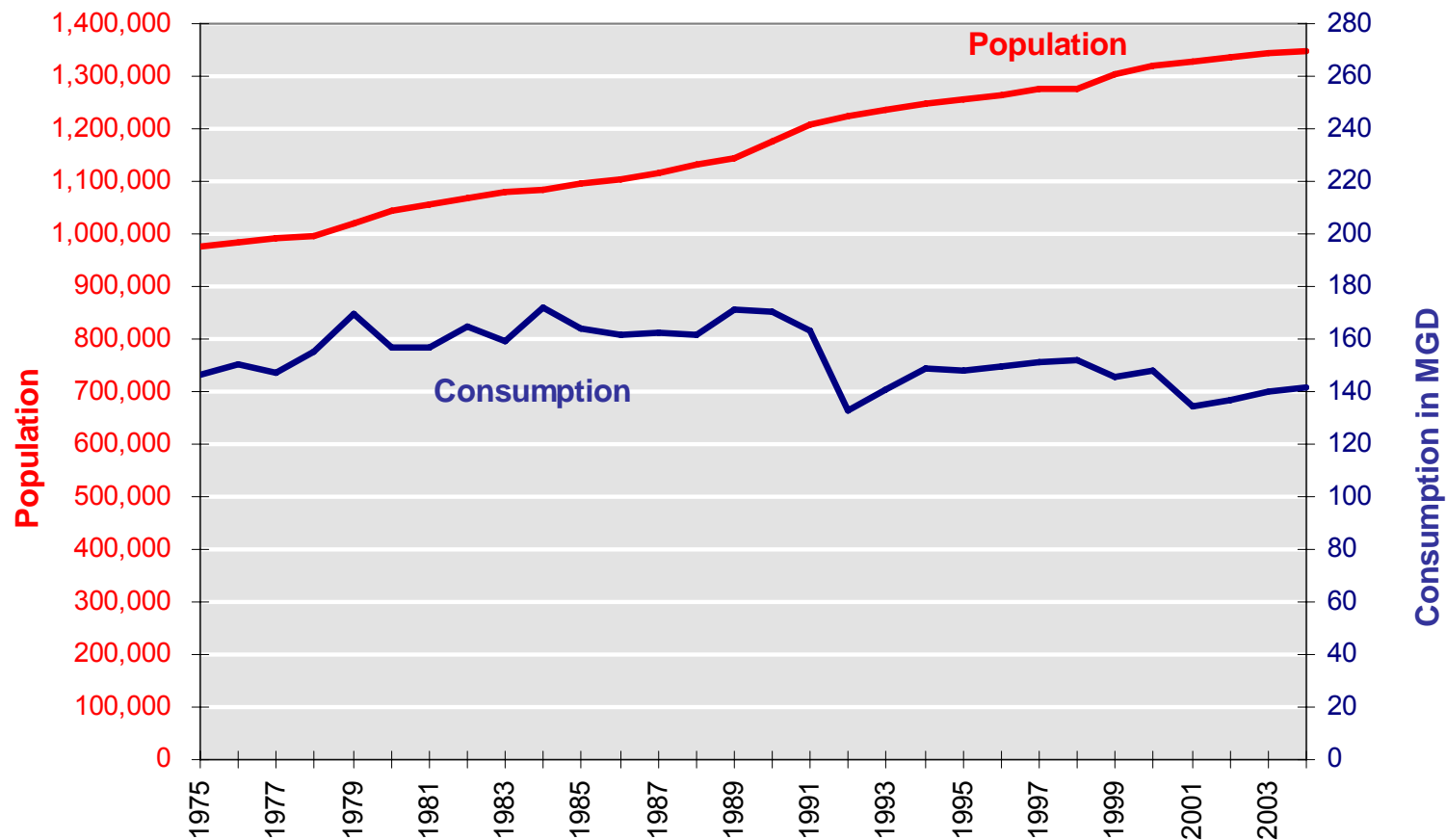
Seattle
 Public
Utilities



Saving Water Partnership

Seattle and Participating Area Water Utilities

Growth in Population and Water Consumption Seattle Regional Water System: 1975-2004



Saving Water Partnership

Seattle and Participating Area Water Utilities

NOW ORBITING

- Cost-effective
- Custom incentives – maximum 50% of project cost
- All proven technology
- Concentrate on peak-season savings
- Vendor driven



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Saving Water Partnership

Seattle and Participating Area Water Utilities

Types of Programs

- *Rebates* provide a pre-determined amount.
- *Financial Incentives* provide a percent of total cost.
- *Direct Install* covers all materials and labor. No cost to the customer.
- *Free* is materials only. Installation by customer.
- *New Construction* rebates and incentives.
- www.savingwater.org



**New Sloan Dual
Flush Valve**

(left)

**and Crown Valve
(above)**

Other New Technologies

- Wireless electronic faucets
- HET toilets
- Cooling Tower Treatments
- Below code showerheads
- Irrigation Controllers
- .5 or less GPM Urinals
- Lifetime water free urinal cartridges

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Seattle and Participating Area Water Utilities

Landscape/Irrigation

- Average in-ground irrigation system:
 - Waste 50% of water used
 - Water when raining – no rain sensor
 - Utilize inappropriate scheduling
 - Not adjusted for weather and changing plant needs

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Landscape/Irrigation

■ Rebates:

- \$100 rain sensor rebate
- \$200 - \$400 Weather-based controller rebate
- \$\$\$\$ for additional irrigation system upgrades that save water.
 - Drip irrigation
 - Pressure regulating
 - High distribution uniformity heads

Seattle Public Utilities Resource Venture 2007 Commercial Outreach Program

- Technical Services for Business to Reduce Utility Costs
- Concentrated Expertise Available with One Phone Call (206) 343-8505
- www.resourceventure.org





Commercial & Industrial

Conservation Resources

Division



Medium & Large Businesses Energy Conservation

Services Overview:

- ★ Financial Incentives
- ★ Technical Assistance
 - ★ Facility Assessment; Commissioning; Sustainable Building; Climate Wise; Lighting Design Lab
- ★ Energy Analysis Assistance
- ★ Commissioning



Financial Incentives

Simple Rebates

- ★ Flat per-unit funding amount for:
 - ★ Exit Signs
 - ★ Occupancy Sensors
 - ★ Vending Miser





Financial Incentives

Standard Incentives

- ★ Funding for installation of standard energy efficient equipment
 - ★ Lighting
 - ★ HVAC
 - ★ Variable Speed Drives
 - ★ Motors & Drives



Financial Incentives

Custom Incentives

- ★ Funding for non-standard energy conservation measures
 - ★ CO2 and CO controlled ventilation
 - ★ Compressors
 - ★ Fume Hoods
 - ★ Refrigeration
 - ★ Cooling Towers
 - ★ Transformers





Project Development Process

1. Submit application
2. Execute incentive contract
3. Install measure according to specs.
4. Inspection
5. Verify energy savings
6. Submit payment package



Thank You!

**Commercial & Industrial
Conservation Resources Division**





PUGET SOUND ENERGY

The Energy To Do Great Things

Business Energy Management Program Overview

David Landers
Sr. Energy Management Engineer

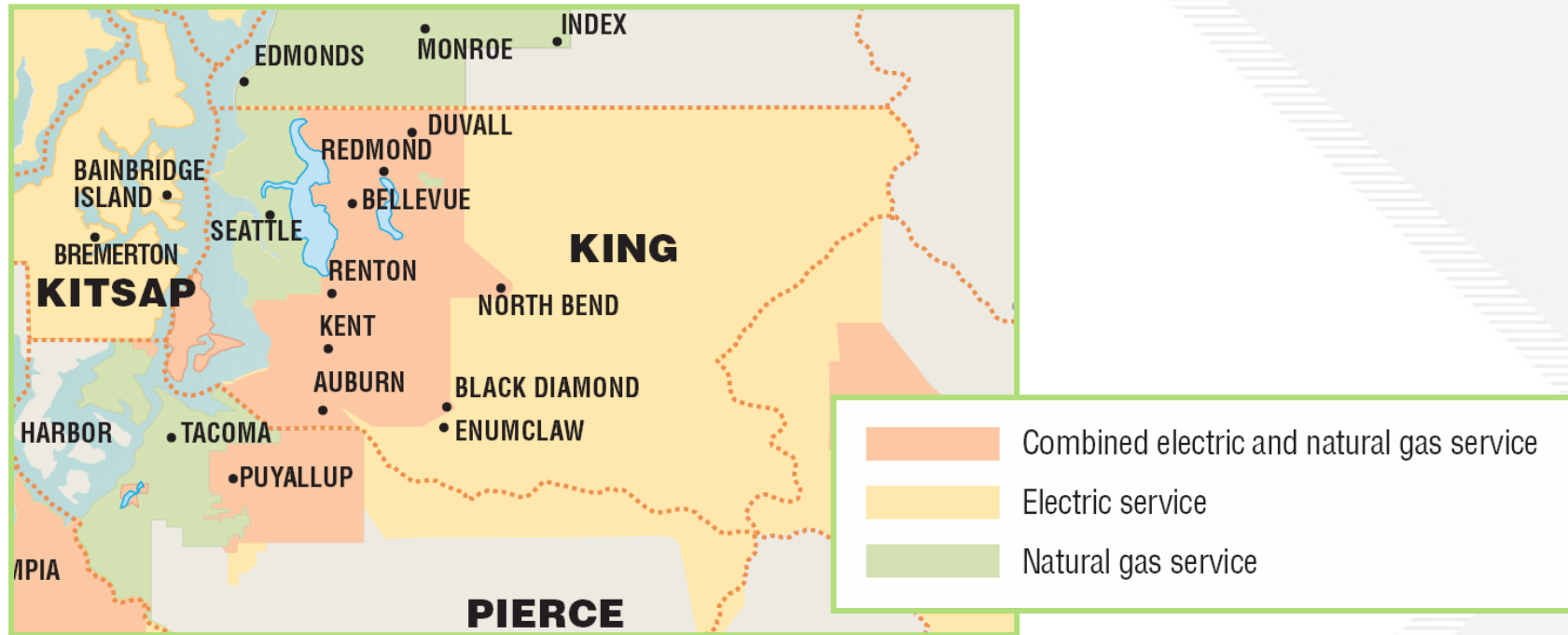
Frequently Asked Questions

- Why offer incentives?
 - ◆ Offset costs PSE would otherwise incur
 - ◆ Promote market transformation
- What is the source of funding?
 - ◆ Electric Conservation Service Rider
 - ◆ $\approx 0.14\text{¢}$ per kWh
 - ◆ Natural Gas Conservation Service Tracker
 - ◆ $\approx 0.49\text{¢}$ per therm

Frequently Asked Questions (cont.)

- How much funding is available?
 - ◆ 2006-07 Electric Programs (BEM)
 - ◆ ≈ \$29 million
 - ◆ 190 million kWh savings
 - ◆ 2006-07 Natural Gas Programs (BEM)
 - ◆ ≈ \$3 million
 - ◆ 2.4 million therms savings
- What programs are available?
 - ◆ Prescriptive Rebates
 - ◆ Custom Grants
 - ◆ New Construction Whole Building Approach
 - ◆ Resource Conservation Manager (RCM)

Program Eligibility



- Electric Incentive – Must be a PSE electric customer
- Gas Incentive – Must be a PSE natural gas customer

Prescriptive Rebates

Apply to retrofits and new construction

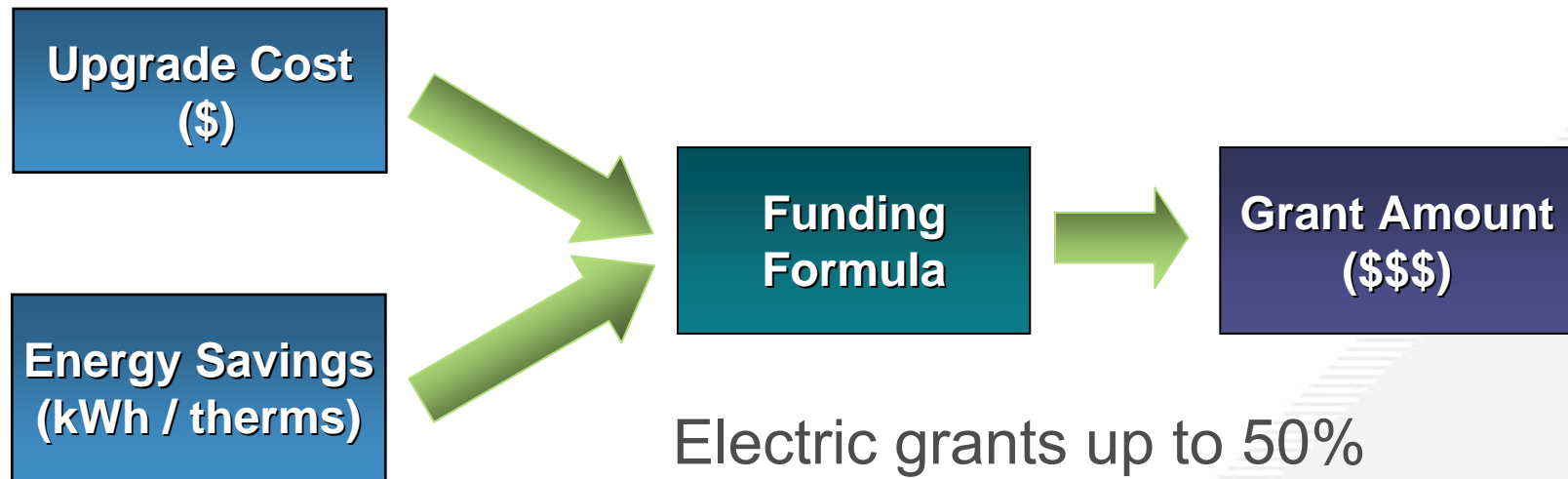
- “Self service” incentives
- Known funding amounts for specific upgrades
 - ◆ Examples:
 - ◆ \$30/ton High-Efficiency HVAC (units > 5 tons)
 - ◆ \$50/driven HP on fan variable speed drives
 - ◆ \$35/LED illuminated exit sign
 - ◆ \$60/occupancy sensor (> 200 watts controlled)
- Pre-authorization generally required



Custom Grants

Apply to retrofits and new construction

- Work with a PSE Energy Management Engineer
- Incentives calculated on case-by-case basis
- Pre-authorization always required



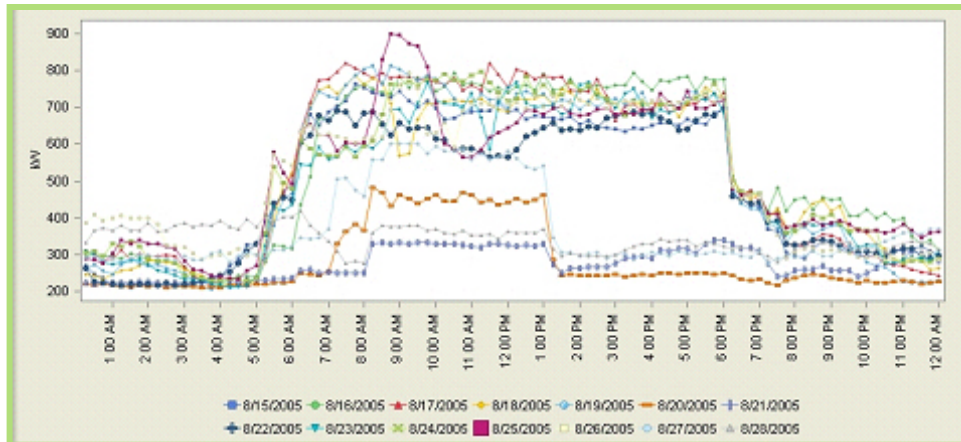
Electric grants up to 50%
Natural gas grants up to 70%

New Construction Whole Building Approach

- Improve efficiency beyond code in new facilities
- Incentives up to \$1.20 / sqft
- Requires building energy simulation
- Applicable to major remodels



Resource Conservation Manager



- Funding and assistance for program setup
- Resource accounting software and assistance
- 10-15% reduction in energy and resource use

For More Information

- www.pse.com
- 1-800-562-1482
- Please take a brochure

