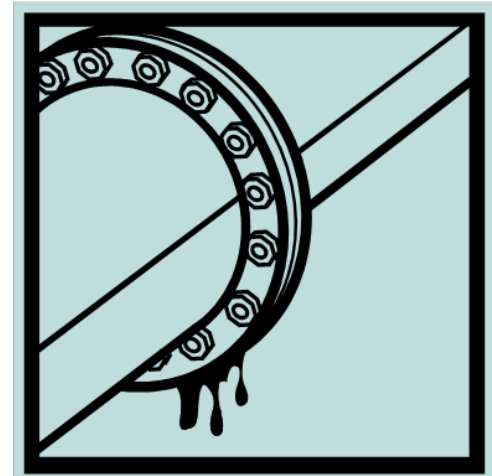




Demand Side Programs and the Water-Energy Nexus



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How the current Demand Side Portfolio addresses water-energy

- Energy Efficiency programs:
 - “Industrial” Custom projects for water agencies/utilities/districts
 - Target savings in water/wastewater treatment, pump efficiency
 - Local Government and Institutional Partnerships
 - LGPs work with municipal water utilities
 - Institutional Partnerships with large water supply agencies: joint project implementation
 - Agricultural projects for Irrigation Districts
- Integrated Demand Side Management
 - Encouraging DR and DG simultaneously with EE improvements
- Continuous Energy Improvement
 - Helping water agencies to create and implement strategic energy management plans





Past Efforts on Water-Energy

- Three comprehensive studies regarding the water-energy nexus
- Water-Energy Pilot Projects (2007-2011)
 - Leak/loss detection and pressure management
 - Landscape irrigation efficiency
 - High efficiency toilets
 - Ozone laundry
 - More
- All materials can be downloaded via:
<http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Water-Energy+Nexus+Programs.htm>





New Energy Efficiency Activities

- Commission Guidance Decision on Energy Efficiency (May 2012)
 - directed IOUs to implement expanded water-energy efficiency programs, including:
 - » leak/loss detection and pressurization studies at water utilities
 - » Joint water/energy programs for industrial and agricultural customers





New Energy Efficiency Activities, Cont.

- Commission Guidance Decision on Energy Efficiency (May 2012)
 - directed staff to develop a method for analyzing cost effectiveness of programs/measures that save energy by saving water
 - Need to quantify embedded energy in water to calculate potential energy savings
 - Programs for embedded energy cannot be fully analyzed using current tools





Next Steps for Water-Energy Cost Effectiveness

- 1) Project Coordination Group formed
- 2) Develop Cost Effectiveness Calculations
- 3) Propose cost effectiveness framework to Commission for consideration and potential adoption

