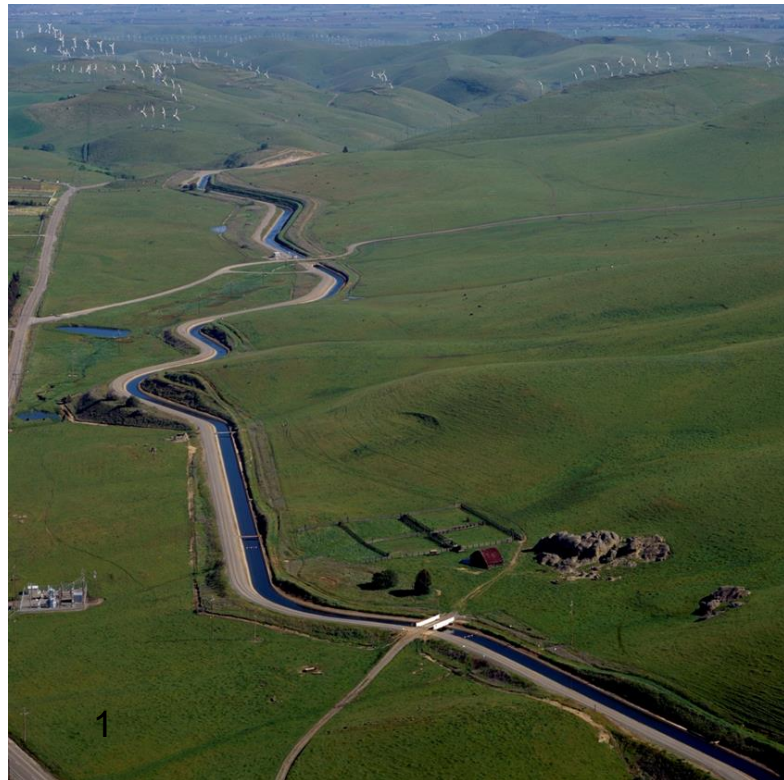




# Water/Energy Nexus Activities at the CPUC-Energy Division



Meredith Leigh Younghein, JD  
Water/Energy Analyst  
CPUC-Energy Division  
State Water Resources Control Board





## The Current Demand-Side Portfolio addresses Energy used for Water

- Energy Efficiency programs:
  - “Industrial” Custom projects for water agencies/utilities/districts
  - Local Government and Institutional Partnerships
  - Agricultural: pumping & irrigation efficiency
- Integrated Demand Side Management
  - Encouraging DR and DG simultaneously with EE improvements
- Continuous Energy Improvement
  - create and implement strategic energy management plans at water agencies



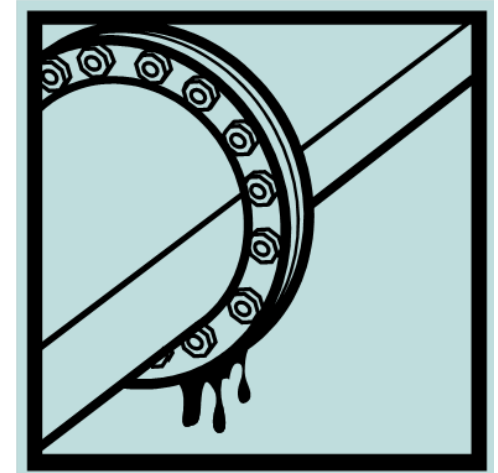


## Past Efforts on Water-Energy

- Three comprehensive studies (2009-2012)
- 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 Activities: Aimed at Embedded Energy Savings

- Commission Guidance Decision (May 2012)
  - IOUs to expand water-energy efficiency programs, including:



- » leak/loss detection and pressurization studies at water utilities
- » Joint water/energy programs for industrial and agricultural customers





# Water-Energy Efficiency Cost Effectiveness

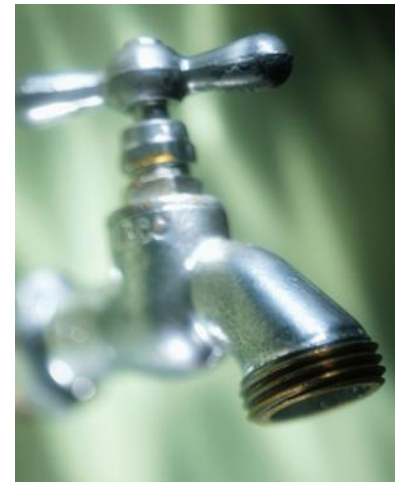
- Commission Guidance (May 2012)
  - develop a method for analyzing cost effectiveness of programs/measures that save energy by saving water
    - Need to quantify embedded energy in water to calculate potential energy savings
    - Programs for embedded energy cannot be fully analyzed using current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





## Examples of New Water/Energy Programs

- SoCalEdison: Leak/Loss Audits/Repairs and Pressurization Studies
  - South Bay Cities Council of Governments: Cities of: El Segundo, Lomita, Manhattan Beach, and Inglewood
  - City of Westminster
- San Diego: Commercial Landscape Irrigation Efficiency
  - New technologies: moisture sensors, weather prediction
- SoCalEdison: Continuous Energy Improvement Cohort
  - Public Water Agencies in Orange County





## Next Steps for Water-Energy Cost Effectiveness

- 1) Formalized Stakeholder Process (Ongoing)
- 2) Develop Cost Effectiveness Calculations (Fall 2013-Early 2014)
- 3) Propose cost effectiveness framework to Commission for consideration and potential adoption





Contact Info:  
Meredith Younghein  
[mly@cpuc.ca.gov](mailto:mly@cpuc.ca.gov)  
(415)703-5953

