Kristina Donnelly, Pacific Institute
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California Water Projects
All Water Projects

[map from CDWR 2002]
5 minutes

= 60-W light bulb for 14 hours
Water Efficiency Improvements Can Reduce Energy Use at Lower Cost...

<table>
<thead>
<tr>
<th></th>
<th>Energy Efficiency Programs</th>
<th>Water-Use Efficiency Programs</th>
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</thead>
<tbody>
<tr>
<td>Energy Savings</td>
<td>6.8</td>
<td>6.5</td>
</tr>
<tr>
<td>(billion kWh; annualized)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost ($ million)</td>
<td>$1,500</td>
<td>$826</td>
</tr>
<tr>
<td>Cost per kWh; annualized</td>
<td>$0.22</td>
<td>$0.13</td>
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95% of the savings at 55% of the cost

Source: California Energy Commission, California’s Water-Energy Relationship, final staff report, 2005.
Why are Coordinated Energy Efficiency Programs so Uncommon?

- Identify barriers
  - 9 in-depth interviews with staff from water and energy utilities, state agencies, consulting firms, academic institutions, and NGOs
  - Literature review
- Evaluate barriers
  - Online survey – 76 respondents
  - 4 case studies – 13 interviews
Water sector has limited or inconsistent funding available for combined programs

Limited staff time

Insufficient guidance about how to equitably allocate costs and benefits among project partners

Water related pricing policies

Lack of established relationship between potential partners

Insufficient guidance on how to quantify water, energy, and cost savings

Poor quality or insufficient data to quantify water and energy savings

Inability to share customer data/customer privacy concerns

Significant temporal and spatial variability in determining water, energy, and cost savings

Too much emphasis on getting perfect information before starting programs

Energy sector has limited or inconsistent funding available for combined programs

Difficult to account for trade-offs that may occur

Customers are unaware or do not care about water-energy connection

Large number of water utilities within the energy utility’s service area

Service area boundaries do not match
Case Studies

• High-Efficiency Clothes Washer Rebate Program

• WaterSmart Landscape Efficiency Program

• Cash for Kitchens Program

• Master Inter-Utility Agreement
Recommendations

• Designate a staff member as the lead for pursuing water-energy program opportunities.
• Discuss how existing programs and offerings might be coordinated.
• Consider using a third-party to administer the program to reduce the burden on staff time.
• Adopt standard agreements to facilitate coordination of existing programs and new programs.
• Use trade organizations, non-governmental organizations, and other partners to reach out to customers.