



# Water-Energy Team

## Climate Action Team

WET CAT is State Government Agencies and Divisions with responsibilities for water and energy working together to mitigate and adapt to climate change. WET CAT is supported by USEPA, universities and others working on responses to climate change. WET CAT focuses on climate change mitigation and adaptation through water and energy efficiency and greenhouse gas reductions, risk minimization, integrated management, and renewable power development.

WET-CAT TEAM



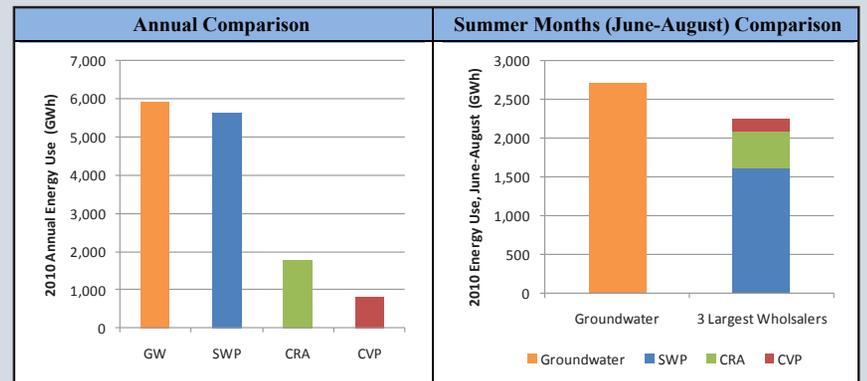
## Facts about energy and water and wastewater in California

- Total Statewide Electricity Use for Water >19%
- Use of water by residents, businesses, and agriculture likely accounts for at least 11.5% of statewide electricity use.
- Pumping and treatment of water and wastewater for use by residents, businesses, and agriculture accounts for at least 7.7% of statewide electricity use.
- Total statewide natural gas use for water >30%



# Facts about energy and water and wastewater in California

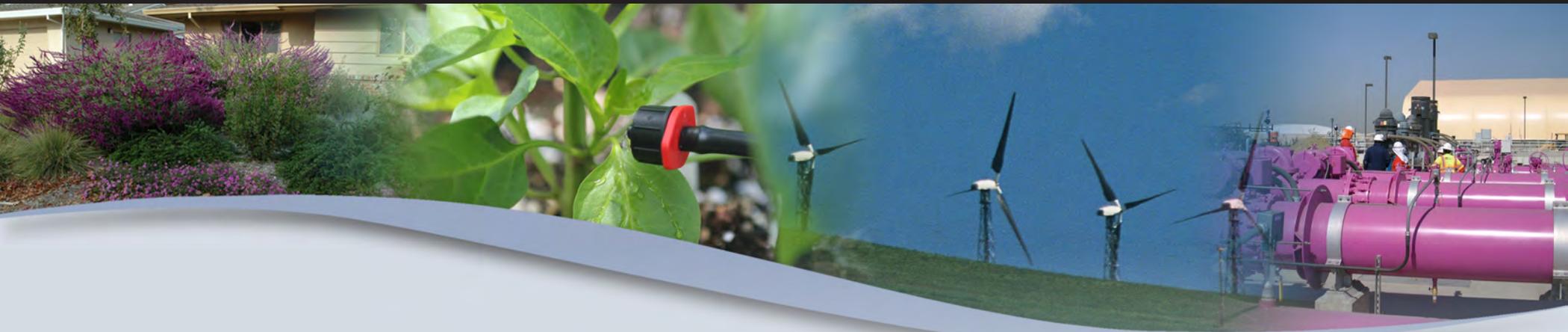
- Groundwater pumping accounts for 2% of state electricity use.
- Groundwater pumping during the summer uses more electricity than the State Water Project, Colorado Aqueduct, and Central Valley Project combined.





## Facts about energy and water and wastewater in California

- Leaks in urban water systems result in the loss of 283 billion gallons per year.
- Those leaks result in over 2.5 million MWh of wasted energy, enough energy to power 370,700 homes for a year.



## Facts about energy and water and wastewater in California

- 4,600 gallons of water are used for every MWh generated in California.
- Solar parabolic plants need 800-1,000 gallons per MWh produced.



## Facts about energy and water and wastewater in California

- In 2010, hydropower provided 12.5% of California's electricity, the state's largest source of renewable energy.
  - 10.8% from large facilities
  - 1.7% from small facilities
- Hydropower enables the integration of more variable renewable energy resources into the grid.
- The AB 32 Scoping Plan depends upon hydroelectricity to meet the State's GHG reduction mandate.



## AB 32 Created a Mandate to Address Human Actions Causing Climate Change

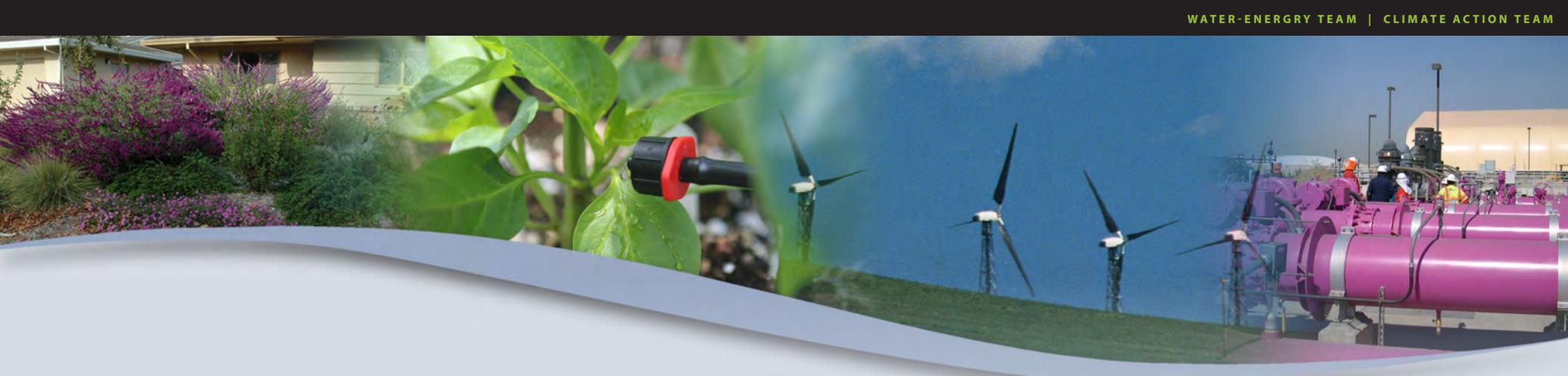
### The AB 32 Scoping Plan Includes Six Water Sector Action Areas:

1. Water Use Efficiency (CEC, CPUC, DWR, SWRCB)
2. Water Recycling (CPUC, DWR, SWRCB)
3. Water System Energy Efficiency (CEC, CPUC, DWR, SWRCB)
4. Reuse Urban Runoff (SWRCB)
5. Increase Renewable Energy Production from Water Sector (CEC, CPUC)
6. Funding (CARB, CPUC, DWR, SWRCB)



## Our mandate to be proactive in adapting to climate change

- Climate change will be one of the major challenges facing water resources in this century, along with increased population growth.
- Because climate change impacts will vary by region, adaptation should be regionally-based, emphasizing a diverse portfolio of strategies.
- Water sector adaptation strategies must be integrated with other sector adaptation strategies for overall community adaptation.



## Actions Underway to Reduce Greenhouse Gas Emissions, Increase Resiliency and Mitigate Risk

- 20x2020 (SBX7-7)
- SWRCB water recycling policy
- CPUC water recycling rulemaking
- CPUC energy efficiency 2013-2014 funding proceeding
- DWR implementation of Integrated Regional Water Management strategies (Prop 84)
- DWR 2013 Water Plan Update
- SWRCB stormwater Permits
- USEPA energy and water use assessments
- CEC vulnerability assessments
- Resources Agency 2012 Adaptation Plan update
- OPR workshops to assist local governments with adaptation strategies