

CLIMATE ACTION TEAM

Water-Energy (WetCAT) Working Group

Near-Term Implementation Plan

Preserve, Upgrade and Increase Monitoring, Data Analysis and Management-Climate and Water Use Monitoring

Working Group Overview:

The Water-Energy Team of the Climate Action Team (WET-CAT) focuses its efforts on both green house gas (GHG) emission reduction and adaptation actions affecting the portion of the energy sector that supports the storage, transport and delivery of water for agricultural, residential and commercial needs. The Energy Commission estimates that approximately 19% of all electricity and 30% of non-power plant natural gas (i.e. natural gas not used to generate electricity) used in California is for the conveyance, treatment, distribution, and end use of water.

Working Group Agencies:

Department of Water Resources, State Water Resources Control Board, California Energy Commission, California Public Utilities Commission, and the California Urban Water Conservation Council.

Measure / Strategy

- A) Description: The focus of Part 1 of this measure is linked in part to the passage of SB7x 7 (2009) and SB7x 8 (2009) which call for development of water use and water diversion measurement reporting, including conservation, water recycling, stormwater, and water rights use. Part 2 seeks to expand high elevation and wilderness area monitoring of critical variables, such as temperature, precipitation, evapotranspiration, wind, snow level, vegetative cover, soil moisture and stream flow to observe and track changes in the rain and snow transition zone.
- B) Agencies Involved: The departments or agencies involved in implementing this measure/strategy are the Department of Water Resources, State Water Resources Control Board, the California Public Utilities Commission, and the California Urban Water Conservation Council.
- C) Scoping Plan/Adaptation Plan Reference: This plan is important to the implementation of measures W-1, W-2, and W-4 of the AB32 Scoping Plan and for State adaptation recommendations from the Water Chapter.
- D) Metrics: The basic metrics that will be used to define the success of part 1 of this measure is the posting of an on-line database in 2010 or early 2011 for stakeholders to use to report the quantity of potable water saved through conservation measures, and/or replaced by

water recycling, and stormwater capture and use. Parallel to this, WET-CAT agencies are working to develop a methodology that will measure GHG reduction from increased reliance on these local water supplies.

E) Cross-cutting Issues: See subtasks below.

F) Tasks and Deliverables:

Part 1: Measurement of conservation, water recycling, and storm water capture/use. Develop a database for collecting stakeholder information on conservation, water recycling, and stormwater capture and use as a precursor to quantifying GHG savings from increased reliance on local water supplies.

Task 1:

- 1) Description: develop and post a database for collecting the information from stakeholders
- 2) Deliverables: database
- 3) Agency Roles: Department of Water Resources has the lead with a staff person detailed from the State Water Resources Control Board and the California Urban Water Conservation Council.
- 4) Timeline: a database to collect conservation information was posted in March 2010. The expanded database will be developed in 2010 and posted in 2011.
- 5) Crosscutting issues: provides information on adaptation recommendations.

Task 2:

- 1) Description: Develop a methodology for determining GHG reductions from increased reliance on local water supplies.
- 2) Deliverable: A preferred methodology or options for measuring the energy saved by increased use of conservation, water recycling, and/or stormwater capture and use.
- 3) Agencies: California Public Utilities Committee, California Energy Commission, State Water Resources Control Board, and the Department of Water Resources.
- 4) Timeline: This activity should be completed by December 31, 2010.
- 5) Crosscutting issues: Because water is accounted for in the AB32 energy measure, this activity is important to verifying GHG reductions in the energy sector for water activities

Part 2: High Elevation and Wilderness Area Monitoring

Observe and track changes in the rain and snow transition zone in order to inform state planning and water managers on adaptation priorities.

Task 1:

- 1) Description: Determine monitoring options to quantify the spatial extent and snow water equivalent (SWE) of California's snowpack and measure changes to the snowpack associated with climate change
- 2) Deliverables: Options for augmenting California's current snow monitoring network to better quantify the spatial extent and snow water equivalent of California's snowpack and to track changes in the snowpack associated with climate change

- 3) Agency Roles: Department of Water Resources
- 4) Timeline: Options completed and initial network augmentation started by December 31, 2011
- 5) Crosscutting Issues: California's snowpack is the State's largest natural surface reservoir and is the foundation for the State's water supply and flood management infrastructure. This activity will help water managers and planners track changes and inform adaptation strategies.

Summary Table:

Task	Agencies	Deadline
Develop and post a database for stakeholder information on conservation, water recycling, and stormwater capture/use	Department of Water Resources State Water Resources Control Board, California Public Utilities Commission	December 2010
Develop a methodology for determining GHG reductions from increased reliance on local water supplies	CPUC, CEC, SWRCB, DWR	December 2010
Determine options to observe and track changes in the rain and snow transition zone to inform state planning and water managers on adaptation priorities	Department of Water Resources	December 2011