Objective #1
Promote, improve, and expand Integrated Regional Water Management to build regional partnerships that have a central role in California water resources planning, sustainable watershed and floodplain management, and increasing regional self-sufficiency.

Related Actions
3. By 2011, all IRWM plans should include the following elements to help the region adapt to a changing climate: …
   - Strategies for substantial water conservation and higher use efficiency (see Objective 2).

Objective #2
Increase water use efficiency, recycling, and reuse to help meet future water demands and adapt to climate change.

To minimize the impacts of water management on California’s natural environment and ensure that our state continues to have the water supplies it needs, our cities and farms must use water more efficiently to get maximum utility from existing and future supplies. Californians are already leaders in water use efficiency measures such as conservation and recycling. Because competition for California’s limited water resources is growing, we must continue these efforts and be innovative in our pursuit of efficiency. Urban and agricultural water use efficiency will continue to be a primary way that we meet future water demands and Update 2009 goals.

In the future, we must broaden our definition of efficient water use to include other ways of getting the most utility out of our groundwater and surface water resources and water management systems. Related management strategies are noted in this and other Update 2009 objectives and described in Volume 2.

The California Constitution explicitly prohibits the waste and unreasonable use of the state’s water. Using water efficiently is a foundational action, one that serves to mitigate and adapt to climate change. Further, water conservation reduces not only water demand but wastewater loads as well, and can reduce energy demand and greenhouse gas (GHG) emissions. Efficient water use can help communities cope with water shortages that may be induced by climate change, thus reducing economic and environmental impacts of water shortages. Water use efficiency must be a key part of every water agency’s water portfolio.

Related actions:
1. As directed by Governor Schwarzenegger, DWR in collaboration with the State Water Resource Control Board (Water Board) and its nine Regional Water Quality Control Boards (Regional Boards), California Energy Commission, the California Public Utilities Commission, the California Department of Public Health, and other agencies will implement strategies to increase regional water supply self-sufficiency and achieve a statewide 20 percent reduction in per capita urban water use by 2020.
   - By 2010, all Urban Water Management Plans must include provisions to implement all cost-effective, feasible, and legal urban best management practices established by the California Urban Water Conservation Council and California Energy Commission’s standard procedures for landscape equipment (in preparation for end of 2008).
   - Local and regional water use efficiency programs—residential, commercial, industrial, institutional, and agricultural—should emphasize those measures that reduce both water and energy consumption, notwithstanding other water management objectives.
2. By YYYY, agricultural water agencies should fully implement Efficient Water Management Practices to reduce unit water demand, improve the quality of drainage water and return flows, and to report on EWMP implementation in their agricultural water management plans.
3. By XXXX, the Legislature should authorize and fund new incentive-based programs to promote the widespread and mainstream adoption of substantial and aggressive water conservation, recycling and reuse, and related water use and reuse monitoring programs, by urban and agricultural water systems and their users.

4. (recycled water)

5. (landscape water conservation)

6. (stormwater reuse)

7. DWR and other State agencies will provide technical assistance and financial incentives to agricultural water agencies and growers to increase the percentage of California agricultural lands that are irrigated with highly efficient irrigation systems and management practices.

8. The Water Board and Regional Boards and the CPUC will exercise their authority to require water conservation measures in permitting and other proceedings. Additional State Legislation may be needed to further ensure attainment of these conservation efforts. Prior to any new measures, State government will evaluate the impacts on housing costs, including affordability to low and moderate income families and workers.

**Objective #4**

**Protect and restore surface water and groundwater quality to safeguard public and environmental health and secure California’s water supplies for their intended uses.**

*Related Actions*

3. Increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate flows for fish and wildlife habitat.
   
   o Promote implementation of best management practices, and improve compliance with requirements, for water conservation consistent with the Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and other relevant State and regional efforts.

**Objective #7**

**Practice sustainable management of the California Delta with the Delta ecosystem and a reliable water supply for California as co-equal goals and by recognizing the Delta as a unique and valued area.**

*Related Actions*

7. Reduce urban, residential, industrial, and agricultural water demand through improved water use efficiency and other means.
Objective #9
Reduce the energy consumption of water and wastewater management systems to mitigate greenhouse gas emissions.

Related Actions
1. Water use efficiency reduces not only water demand but, in many instances, reduces energy demand as well, which in turn can lead to reductions in GHG emissions. (See Objective 2 for related actions).
2. Local agencies and governments should implement cost effective, energy efficiency measures in water system infrastructure projects. …
   o By XXXX, the California Energy Commission, in collaboration with the WETCAT, will develop tools and protocols to evaluate, measure, and verify the energy impacts of water system and end use conservation and efficiency activities/programs.
3. By XXXX, State government will establish a public goods charge for funding investments in water efficiency (and potentially other IRWM management strategies) that will lead to reductions in greenhouse gases. As noted by the Economic and Technology Advancement Advisory Committee, a public goods charge on water can be collected on water bills and then used to fund end-use water efficiency improvements, system-wide efficiency projects and water recycling. Depending on how the fee schedule is developed, a public goods charge could generate $100 million to $500 million annually to invest in further efficiency improvements.

Objective #11
Identify and fund focused research on new water technology to help carry out water programs and better manage water systems.

Related Actions
2. State government will invest $XXXX per year in pilot projects to help local agencies and governments and regional partnerships implement promising water technologies to improve water use efficiency, water recycling and reuse, water supplies and quality, water and wastewater treatment, stormwater capture and reuse, desalination, and others more cost effectively with knowledge and experience specific to each region.