Chapter 13. Recommendations

Since this report provides findings at the end of each chapter, and these findings are summarized in the executive summary, the report will conclude instead with several policy recommendations, which are suggested by this study.

Federal/State

*Standards for Outdoor Water Irrigation Devices*

1. Invest in technological innovations to reduce urban outdoor water irrigation and in field testing of irrigation fixtures. In order to accelerate conservation in outdoor water use, we need a comparable set of standards as the 1992 Energy Policy Act required for indoor water devices. California already passed a law (AB 1881 2006) requiring the California Energy Commission to set standards, but the CEC suspended the process in 2009 due to insufficient evidence of the effectiveness of current devices.

2. Once in-field testing demonstrates effectiveness of devices, set standards.

State

*State Water Planning*

3. Develop a coordinated strategy for water management in the State that incorporates the State Water Project/Bay Delta Conservation Plan, climate change adaptation, water conservation, water quality, and regional groundwater and other water supply strategies. All of these elements require substantial investment to ensure a sustainable water supply future for the State. Some investments, such as the SWP proposed tunnels will preclude others due to financial constraints. Trade-off analysis and full-accounting (including energy and emissions intensity of options) should be included in such analyses.

4. Develop a Southern California Regional Groundwater Strategy, which incorporates IRWMP efforts, to determine the federal, state, and local actions required to fully benefit from existing groundwater resources in the region and to plan and finance a coordinated set of groundwater remediation to improve water quality and new regional supply projects, including, stormwater capture, conjunctive management, recycling and groundwater desalination projects. Such a strategy should also examine the contributions that water banking and water markets can play in Southern California’s future water supply.
5. Recommend ways to integrate water, land use, energy and climate change mitigation and adaptation planning in other state, regional and local planning processes. For example, the State could consider adding a water conservation element to the Sustainable Communities Strategies required by SB 375. SB 375 already aims to integrate regional land use and transportation planning with climate change mitigation. Incorporating water conservation in the SB 375 planning process would add the water savings (and associated energy and emissions) of higher density development to their transportation savings.

6. Determine the feasibility of public-private partnerships and other financing mechanisms for new water supply projects. With increasing investment in new water resources, some Southern California water agencies may face debt ceiling in the future, and could benefit from the use of other promising financing mechanisms.

**20 X 2035 Water Conservation Plan**

7. In the next water conservation plan, provide fewer choices on methods to determine water agency baselines, and future method(s) should ensure more challenging targets.

8. Require outdoor metering for residential uses

9. Require more effective conservation pricing

10. Identify suites of conservation strategies suitable for different types of institutional structure. For example, a municipal retailer, such as Huntington Beach’s water utility, without direct management of supply, could benefit from more specific guidance on which BMPs it should target.

**Revise UWMP Requirements**

11. Plans should be required to show quantifiable outcomes of their activities in terms of water saved or added, connect these to projected demand and supply, and include a quantified strategy to get to their target.

12. Provide more specific guidelines for agencies to address climate change impacts on their sources of supply.

**Climate Change**

13. Continue supporting research on the impacts of climate change on California’s water resources. Although there is wide agreement on the impacts of climate change on snowpack, the impacts of climate change on the amount of precipitation are currently
uncertain, especially for Northern California. As the climate warms over the next two decades and models and inputs are improved, we can expect the uncertainty to decrease.

14. Provide ongoing education for the water management community, especially for smaller water agencies, on the impacts of climate change on water resources.

Water Agencies

**Pricing and Metering Outdoor Water Use**

15. Meter outdoor water use for all accounts.

16. Improve existing pricing structures to more fully realize reductions in water use.

17. Adopt higher inclining block conservation pricing for outdoor accounts than for indoor accounts.