

League of California Cities  
**Water Policy Guidelines**

**February 2010**

TABLE OF CONTENTS

I. CALIFORNIA WATER: GENERAL PRINCIPLES .....

II. WATER CONSERVATION.....

III. WATER RECYCLING.....

IV. WATER QUALITY .....

V. AREAS OF ORIGIN.....

VI. WATER STORAGE .....

VII. CONVEYANCE SYSTEMS .....

VIII. FLOOD MANAGEMENT.....

IX. GROUNDWATER.....

X. FISH AND WILDLIFE.....

XI. DRAINAGE .....

XII. RECREATION.....

XIII. NEW TECHNOLOGY .....

XIV. FINANCIAL CONSIDERATIONS.....

XV. APPENDIX A:  
WATER QUALITY IMPROVEMENT INITIATIVE (2008) .....

XVI. APPENDIX B: GLOSSARY

## *Introduction*

The *California Water Guidelines* were first adopted by the League of California Cities (The League) in 1988. The League and the County Supervisors Association of California (CSAC) developed the guidelines. Together, at the time, the two organizations represented 58 counties and 449 cities.

Much has changed in the realm of water policy in the more than 20 years that have passed since the Guidelines were first adopted. The number of counties has remained at 58, but California has gained an additional 31 cities and the population of the state has increased to more than 38 million people, creating increased demands on water supply. There is growing recognition that there are better ways of managing the flow of water within California's many watersheds and through the Delta, to prevent harmful environmental impacts while still ensuring a reliable supply of water to its citizens. Climate change is seen as having an increasingly important impact on water supply and water quality. Water shortages place renewed emphasis on the importance of water reclamation, water recycling and other means of nurturing and protecting an essential resource.

In 2003, the League Board created the League Water Quality Task Force to identify and evaluate waste water and storm water regulatory issues of concern to cities and to recommend steps that the League should take to address those concerns. The Task Force drafted new League policy on water quality and the League's Board of Directors adopted their report on July 18, 2003.

In 2008, the League formed a new Water Task Force to consider updates and revisions to the Water Guidelines the League drafted and adopted 20 years earlier. The League's 16 Regional Divisions designated voting members; but membership on the Task Force was open to all interested city officials, and meetings were open to all interested parties.

The Task Force first met in Sacramento in April 2009 and organized three working groups (Water Use, Water Supply and Water Discharges). Members of the working groups held numerous meetings by conference call over the next two months. Subsequent meetings of the full Task Force were held in June and September 2009 before the revised Guidelines were submitted to the League policy committees in January 2010, for review and approval. The Guidelines were formally approved by the League Board of Directors in February 2010.

The California Water Guidelines are designed to be used by policy makers at all levels of government in developing future water policy for the state of California. The League encourages city, county and state officials, as well as representatives from other organizations, to review the guidelines as water policies and programs are developed.

## **I. CALIFORNIA WATER: GENERAL PRINCIPLES**

1. Water needs are projected to increase significantly in the future. While water is a renewable resource, it is also a finite one.
2. The League supports the development of additional groundwater and surface water storage, including proposed surface storage projects now under study if they are determined to be feasible, including but not limited to: environmentally, economically, and geographically relating to point of origin. Appropriate funding sources could include, but are not limited to user fees, bonds and federal funding.
3. Local, state and federal agencies should prepare plans for short-term water emergencies as well as long-term cooperative water management plans and policies, such as the Integrated Regional Water Management Plan (IRWMP) process.
4. All water development projects must be economically, environmentally and scientifically sound.
5. Critical California water issues cannot be solved without the cooperation of the state and federal governments. Communication and cooperation among policy groups with emphasis on finding statewide consensus is supported.
6. Adequate water quality requirements for wastewater discharge into surface water and groundwater to safeguard public health and protect beneficial uses should be supported. Beneficial water quality is fundamental to the health and welfare of California and all of its citizens.
7. The long-term viability of rivers and streams for instream uses such as fishery habitat, recreation and aesthetics must be protected.
8. The League encourages all cities to work with counties, water agencies, and special districts to facilitate water conservation, recycling and reuse efforts.
9. The League supports state water policy that allows undertaking aggressive water conservation and water use efficiency while preserving, and not diminishing, public and constitutional water rights.
10. The League supports land use as an important strategy for water supply and water quality benefits.

## **II. WATER CONSERVATION**

1. **Statewide Goal.** The League supports the development of a statewide goal to reduce water use by 20% by 2020 through the implementation of fair and equitable measures consistent with these principles.
2. **Statewide Effort.** Accomplishing water conservation and water use efficiency goals will require statewide action by all water users, including residential, commercial, industrial and agricultural water users, local and regional planning agencies, state and federal agencies, chambers of commerce, and business, commercial and industrial professional and trade associations.
3. **Comprehensive Solutions.** Water conservation and water use efficiency must be part of a

comprehensive solution that includes local resource development and infrastructure improvements, including storage and conveyance, as part of a statewide system that promotes economic and environmental sustainability.

4. **Monitoring, Reporting, and Accountability.** The League supports the implementation of programs to assure prudent measurement and monitoring of water use to provide accountability and transparency toward the accomplishment of water conservation and water use efficiency goals.
5. **Protect Water Rights.** Implementation of water conservation and water use efficiency programs must be consistent with existing state law in that the act of conservation cannot be allowed to undermine the water rights of the entities implementing the water conservation or water use efficiency program, or interfere with existing water conservation or water use efficiency projects.
6. **One Size Does Not Fit All.** Water conservation and water use efficiency programs must have the flexibility to adjust to widely varying local circumstances recognizing that one size does not fit all. The League encourages each city to develop its own ordinance outlining its conservation plan.
7. **Urban Water Conservation and Water Use Efficiency.** In urban areas, the League advocates for the implementation of residential and commercial retrofit programs, innovative pricing strategies, water efficient landscaping, including implementation of urban Best Management Practices (BMPs).
8. **Agricultural Water Use Efficiency.** In agricultural areas, the League advocates incentive based programs.

### **III. WATER RECYCLING**

1. Wherever feasible, water recycling should be practiced in urban, industrial and agricultural sectors. This includes increasing the use of recycled water over 2002 levels by at least one million acre-feet/year (afy) by 2020 and by at least two million afy by 2030.
2. Potable water should include as much use of reclaimed water and water conservation by 2030 as possible.
3. Increased recycling, reuse and other refinements in water management practices should be included in all water supply programs.

### **IV. WATER QUALITY**

#### **1. General**

- a) The League supports the development of objectives and standards to assure high quality water throughout California. Surface and groundwater should be protected from contamination.
- b) The League supports the development of economic protocols and guidelines to assist local governments and water boards in determining reasonably achievable, cost effective and environmentally sound regulations.
- c) The League supports the ability of cities to enact discharge and water quality requirements or standards that are stricter than state or federal standards, and opposes efforts to restrict such authority.

- d) When addressing contamination in a water body, water boards should place priority emphasis on clean-up strategies targeting sources of pollution, rather than in stream or end-of-pipe treatment.
- e) The League encourages water boards to address cross-media pollution of water, including but not limited to the problems of atmospheric deposition of water pollutants.
- f) The League encourages all state offices, departments and boards to comply with state policy for water quality control, including compliance with the Basin Plans.

## **2. Water Board Reforms**

- a) The League generally supports the concept of water board reform.
- b) Any water board reforms should recognize the inherent differences between cities and regions in California.
- c) Water board reform should recognize the symbiotic relationship between regional water quality control boards and local governments.
- d) The League supports the retention of designated local government representatives on the regional boards and inclusion of a designated local government representative on the State Water Board.
- e) The League supports streamlining the board process, including delegating permit authority to the executive officers, with rights of appeal, and giving greater authority to the State Water Board over regional board policies and decisions.

## **3. Basin Plan Updates**

- a) The League supports the option of local agencies developing funding for basin plan updates.
- b) The League supports comprehensive updates to the basin plans that recognize the unique and varied nature of stormwater. Basin plans need to recognize the unique and varied nature of stormwater, both wet weather and dry weather runoff.
- c) Basin plan updates should comply with the Porter-Cologne requirements to recognize economic impacts, local drainage conditions and scientific consensus, including source control and atmospheric deposition strategies.

## **4. National Pollutant Discharge Elimination System (NPDES) Permits**

- a) The League supports reform of the States Water Board's administration of the federal NPDES program.
- b) The League encourages the water boards to issue permits that are reasonably achievable, based on the unique conditions of a city or region.
- c) The League supports regulations and legislation that promotes watershed management, that appropriately spreads the responsibility for clean water beyond the requirements that apply to point-source dischargers, municipal storm drain systems and publically-owned treatment works.
- d) The League generally opposes legislation that requires the use of numeric limits in waste discharge permits, especially in storm water permits, because of the difficulties in meeting them, problems with exceeding them, and the cost and potential enforcement impacts.

- e) The League supports development of a standard definition of “maximum extent practicable.”

#### **5. Total Maximum Daily Load (TMDL)**

- a) The League supports development of reasonably achievable, environmentally sound and cost-effective TMDL's based on monitoring and sound science and addressing local water conditions.
- b) Although the League is supportive of local agency development of TMDL funding, greater emphasis needs to be given to state and federal funding of the TMDL program, including providing increased funding to local government for implementation.
- c) The League supports implementation of TMDLs through alternatives to the NPDES permits, consistent with the Clean Water Act and policy, such as Memorandums of Agreement between local governments and the water boards.

#### **6. Water Quality Recommended Legislation/ Policies**

- a) Ex-Parte Communication
  - The League supports public access to decision makers, including during the time that new proposed permits and permit terms are being proposed. The League also supports access to pending permittees, outside of the administrative process.
- b) Maximum Extent Practicable (MEP)
  - The League supports legislation to define MEP.
- c) Safe Harbor
  - The League supports legislation that provides immunity from fines or third-party litigation for a local government that is in compliance with maximum extent practicable iterative best management practices requirements and NPDES stormwater permit conditions.
- d) Mandatory Minimum Penalty (MMP)
  - The League supports legislation to modify the MMP provision of the existing law to make them fair and equitable for local governments. This would include eliminating the provisions relied upon to compound penalties for single violations and providing economic hardship exemption for small cities (50,000 in population or less) where there has been no significant adverse impacts on the public or the environment from the alleged violation.
- e) Economic Analysis
  - The League supports legislation to develop economic protocols and guidelines to assist local government and the water boards in determining reasonably achievable, cost effective and environmentally sound regulations, as outlined in Porter-Cologne Sections 13000 and 13241.
- f) Basin Plans
  - The League supports legislation allowing local agencies to participate in funding basin plan updates.
- g) Water Softeners

- The League supports the right for cities to enact ordinances that restrict the use of water softeners.
- h) Local Discharge Prohibitions
- The League supports legislation that would enable cities to adopt ordinances that limit or regulate industrial discharges into local sewers and storm drains, based on limits in municipal discharge permits.

## **7. General Water Quality Guidelines**

- a) Protection and maintenance of objectives and standards to assure high quality water throughout California is essential. Beneficial uses of surface and groundwater should be protected from contamination, even when treatment methods are available to meet drinking water standards.
- b) Local, state and federal governments and the private sector should provide for the safe management of hazardous materials, including mining leachates, to avoid pollution and degradation of both surface water and groundwater.
- c) Adequate research funding to determine appropriate public health standards for water should be supported.
- d) Additional research and education in the application and use of herbicides and pesticides and alternatives to their usage as well as research to reduce industrial and household hazardous wastes should be supported.
- e) The importance of water quality of bays, estuaries, groundwater, and other bodies of water important to municipalities, including the problem of salt water intrusion, should be recognized.

## **V. AREAS OF ORIGIN**

1. Ultimate reasonable and beneficial water needs of all areas of origin should be assured. State law should continue to provide that only water surplus to the reasonable and beneficial needs of the areas of origin may be exported. The League supports preserving the principle of protecting the water rights of areas of origin.
2. Areas of origin protections should apply to all water sources, including groundwater.
3. Reasonable and beneficial water needs of the areas of origin should include instream needs or uses, including recreation and sediment flushing.
4. Areas of origin should be afforded financial assistance, such as the Davis-Grunsky type bonds, in developing new water facilities.
5. Projects that export water from areas of origin should not increase the cost of new local water development projects.
6. Those features of new projects that are required by state and/or federal agencies to enhance area of origin recreation, fish, wildlife, and water quality should be the financial responsibility of the state and/or federal government.
7. New policies and programs should not undermine or alter the water rights of the entities implementing the policies or programs.

## **VI. WATER STORAGE**

1. The League believes that California needs to develop additional water storage and therefore believes that the construction and retention of economically feasible and environmentally sound flood control, storage and multi-use projects that will meet present and future needs should be supported.
2. The development of additional surface facilities and use of groundwater basins to store surface water that is surplus to that needed to maintain State Water Resource Control Board (SWRCB) Bay-Delta estuary water quality standards should be supported.
3. The League encourages project developers to mitigate the negative impacts of water storage projects on fishery and wildlife resources, adjacent lands, water quality and recreation.

## **VII. CONVEYANCE SYSTEMS**

### **1. Statewide**

- a) Conveyance facilities including, but not limited to, the Sacramento River, whether man-made or natural, should be constructed and/or operated to minimize seepage and erosion problems and, where practicable, to restore or maintain river functions and to protect previously existing riparian habitats. They should be constructed to mitigate these problems and other adverse impacts on adjacent lands.
- b) The owner or purveyor of the water conveyance system should be responsible for correcting adverse impacts, i.e., erosion, seepage and sediment problems upon waterways, either anthropogenic or natural.
- c) Environmentally-sound methods of erosion-control should be encouraged along river banks to protect adjacent lands from flood or other erosive flows provided any adverse impacts on fish and wildlife habitat are mitigated.
- d) Local distribution systems should be interconnected with regional systems, where feasible, to assist in maximizing the use of local ground and surface waters during droughts and emergencies.
- e) Solving the water quality, levee stability and fishery problems in the Sacramento-San Joaquin Delta is a primary step in developing any plan to meet the state's water needs.
- f) The League acknowledges that the use of the Sacramento River as a conveyance system presents problems of erosion and seepage which must be addressed in the operation of existing projects and the design of future projects.

### **2. Delta**

- a) Conveyance of water across the Delta should be through existing channels wherever possible. Delta transfer system improvements should be constructed and operated so as to minimize or, if possible, eliminate reverse flows in the lower San Joaquin River.
- b) Construction of Delta transfer facilities should not proceed until the Department of Fish and Game and the Department of Water Resources have entered into an agreement to implement measures to offset the State Water Project's impacts on the Delta fisheries and other ecological concerns in the Bay-Delta estuary, which are shown to be adversely affected by the proposed transfer facilities.
- c) Implementation of an integrated program of rehabilitation and maintenance of Delta



levees involving federal, state, local and user interests for the purposes of protecting the islands, waterways and other features including, but not limited to, highways, railways, water conduits, natural gas storage, etc., should be supported. Costs and responsibilities should be fairly allocated among beneficiaries of such a program.

- d) Until an integrated Delta levee program is initiated, the Delta levee maintenance program, (by former California Sen. Howard Way), California Water Code Sections 12980-12991, should be funded and implemented.
- e) Any Delta governance and/or water management structure should include local government representation from the Delta region.
- f) When assessing conveyance projects, the League encourages cities to consider the guidelines outlined in other areas of this document.
- g) Protection, as well as enhancement where practicable, of Delta water quality, while providing adequate future supplies for all segments of the state, should be required.
- h) Standards balancing the protection of all beneficial uses of Bay-Delta waters, including water flowing into or exported from the Delta, must be adopted by the SWRCB and enforced to protect the environmental health of the Bay-Delta system. Pollution from point and non-point sources into the Bay and Delta shall be controlled as stringently as practicable.
- i) Programs and facilities to assure safe drinking water for importing regions dependent on the Delta should be supported.
- j) The SWRCB should assure the continued monitoring for contaminants in the Delta.

## **VIII. FLOOD MANAGEMENT**

1. The League believes that our citizens have a reasonable expectation that their federal, state and local governments will work to protect them from flooding.
2. The League believes that flood protection and management is a statewide issue, involving flood infrastructure issues related to levees, urban/suburban/rural creeks, streams and rivers, and alluvial fans.
3. The League believes that it is important to recognize that levee failures in the Sacramento-San Joaquin River Delta have water quality, water supply and economic impacts that may have statewide effects beyond the local or regional levee break situation.
4. Flood control issues require cooperative planning, evaluation and solutions that utilize a regional and statewide perspective, such as the state IRWMP process.
5. In assessing problems and proposing solutions, it is important to consider the differences between infill development and new, greenfield development.
6. The public safety and health of California citizens and the economic health of California communities and our state depend upon good flood protection. This includes the potentially devastating impacts of floods on homes and businesses.
7. The League supports efforts to improve communication, cooperation and better coordinated planning between different government agencies involved in flood management. The League believes that there must be a genuine partnership between state and local agencies in addressing flood control issues.

8. The League believes cities must ask the right questions and have the means to obtain accurate information prior to approving development in floodplains. This involves educating elected officials and staff about whether their city is located in a floodplain, the local flood control infrastructure, the agencies that are responsible for providing flood protection, the status of levees and other structures that provide flood protection, emergency response and evacuation protocols, and how their city would be impacted by flooding.
9. The League believes that city officials should understand that a 100-year flood zone does not mean a low, once-in-100-years risk of flooding. The designation actually means that there is a 1 percent chance of flooding in any given year. This translates to a 26 percent chance of flooding over the life of a typical 30-year mortgage.
10. The League supports a 200-year flood standard for cities in the Sacramento-San Joaquin and Central Valleys.
11. The League generally endorses the recommendations of the State's Flood Control Task Force, especially those recommendations involved in updating the CEQA Checklist and General Plan Guidelines and building codes.
12. The State, Army Corps of Engineers (ACOE) and Federal Emergency Management Agency (FEMA) should work collaboratively with state and local governments regarding flood issues.

## **IX. GROUNDWATER**

1. The SWRCB, through the regulatory process of its regional boards, should ensure the highest possible quality and safety of groundwater by preventing contamination from point and non-point sources, especially for usable water.
2. Local drilling, sealing and abandonment ordinances for water supply and monitoring wells for the protection of groundwater and public health should be supported.
3. The principle that local entities within groundwater basins (i.e., cities, counties, special districts, and the regional water quality control boards) working cooperatively should be responsible for and involved in developing and implementing basin wide groundwater, basin management plans should be supported. The plans should include, but not be limited to: a) protecting groundwater quality; b) identifying means to correct groundwater overdraft; c) implementing better irrigation techniques; d) increasing water reclamation and reuse; and e) refining water conservation and other management practices.
4. An active state and federal role in cleaning up contaminated groundwater basins should be supported.
5. State and federal involvement, if requested, in developing groundwater management plans should include technical assistance for defining the characteristics of groundwater resources.
6. Financial assistance from state and federal governments should be made available to requesting local agencies to develop and implement their groundwater management plans.
7. Planned, joint use of surface and groundwater and development of incentives for such conjunctive use for increased efficiency should be encouraged.
8. Early development of a cost-sharing formula among all beneficiaries to fund groundwater replenishment projects should be supported.

9. The importation of additional supplemental water, consistent with Section VI Conveyance Systems, as one means of eliminating groundwater overdraft in the critically overdrafted basins should be supported.

## **X. FISH AND WILDLIFE**

1. Protection, maintenance, and restoration of fish and wildlife habitat and resources and their beneficial uses including recreational and commercial uses, should be supported. Where feasible, enhancement of fish and wildlife habitats should be provided.
2. Water projects shall mitigate for adverse impacts on fish and wildlife resources. Mitigation measure shall be on-site, if feasible; otherwise, as close as practicable to the area of adverse impact. Where practicable, such projects should incorporate programs designed to eliminate unnecessary barriers or impediments to fish migration, to stabilize areas of streambank erosion, to increase spawning and rearing habitat for fish, and to maintain riparian vegetation for cover and temperature control.
3. Protection and restoration of documented fish habitat should be supported.

## **XI. DRAINAGE**

### **1. Agricultural Drainage**

- a) Finding long-term, economically feasible and environmentally sustainable solutions to agricultural drainage problems is essential and in the public interest. Solutions must be safe and environmentally acceptable in order to protect:
  - Viability of agricultural lands;
  - Rivers, estuaries and groundwater from potential degradation from agricultural drainage; and
  - Water quality for public consumption. Drainage of agricultural lands must be part of current and future agricultural water project planning and implementation.
- b) Both state and federal funding should be provided to investigate: a) further improvement in irrigation and drainage management 'practices and conservation; b) evaporation ponds; c) deep-well injection; and d) desalination and other treatment technologies. An equitable cost-sharing formula for implementing solutions to existing and future drainage problems shall include state and federal governments and irrigation project beneficiaries.

### **2. Other (Run-Off)**

- a) Finding safe and environmentally acceptable solutions to problems caused by run-off from non-point sources is essential and in the public interest.
- b) Similarly, finding safe and environmentally acceptable solutions to other drainage and run-off problems, such as those caused by mining, dairying and forest practices, is essential and in the public interest.
- c) Equitable cost sharing among appropriate public and private bodies for implementing solutions to urban and other run-off problems should occur.

## **XII. RECREATION**

1. Water development projects should minimize adverse impacts to existing recreational uses, and provide new recreational opportunities where feasible.
2. The state and federal governments and the recreational users should bear the recreational development costs of water projects.
3. Operation and maintenance costs of recreational facilities developed in conjunction with water projects should be provided from on-site user fees and other applicable sources. Other costs incurred as a result of these recreational activities, such as law enforcement and emergency rescue, should receive appropriate assistance from state and federal sources.

## **XIII. NEW TECHNOLOGY**

Development of new technology in water use, reuse, desalination, detoxification and so forth is encouraged. This should be primarily funded by the federal and state governments. Public-private partnerships in this research also should be encouraged. A high priority should be given to the protection of public health. New technology should be evaluated based on sound science.

## **XIV. FINANCIAL CONSIDERATIONS**

1. It is recognized that:
  - a) The development and operation of water supply, water conveyance, flood control and stormwater management, water storage, and wastewater treatment facilities is frequently beyond the capability of local areas to finance;
  - b) Since most facilities have widespread benefits, it has become traditional for federal, state, and local governments to share their costs; and
  - c) It is necessary that such sharing be continued and that different institutional arrangements including cost sharing formulas among all beneficiaries, public-private partnerships, and user fees should be explored.
2. The requiring agency (whether it be state, federal, or otherwise) should pay for the features of projects or programs that are required that agency.
3. The League supports legislation to provide funding for stormwater, water and wastewater programs, including a constitutional amendment which would place stormwater fees in the category of water and wastewater fees, for the purposes of Proposition 218 compliance.
4. Any agency that regulates water with regard to local governments needs to be involved in the appropriate city with regard to how the city will pay for the new regulatory burden imposed by the agency.

## **APPENDIX A**

### **State Water Resources Control Board Water Quality Improvement Initiative (2008)**

1. WQI 1: The League supports applying the 10% rule “One Per Region Basis”
2. WQI 2: The League supports staggering the regional water board terms
3. WQI 3: The League has no recommendation on reducing the size of the regional water board from nine members to seven, with the exception that at least one person on the regional board should have local government experience.
4. WQI 4: The League supports delegating permitting authority to the regional water board executive officer and that the executive officer should take his or her direction from the State Water Resources Control Board (SWRCB).
5. WQI 5: The League is opposed to regional water board’s having full time chairs.
6. WQI 6: The League is opposed to the creation of a statewide council of full-time regional water board chairs. (Note: Water Discharge Subcommittee members believe that it may be helpful to combine a number of regional boards into larger regional boards to address areas that are similar (ex: Los Angeles and Orange County). A large regional board could bring more consistency to basin plan management. Any inconsistencies between the regional boards should be addressed by the state Board.)
7. WQI 7: The League supports the implementation of biennial priority setting based on the Strategic Plan, with six month updates by the regional water boards.
8. WQI 8: The League is opposed to allowing the SWRCB to make the TMDL environmental process subject to NEPA instead of CEQA.
9. WQI 9: The League supports requiring a TMDL to be affirmatively approved by the State Water Board or upon petition.
10. WQI 10: The League supports requiring the regional water board to consider costs of TMDL compliance.
11. WQI 11: The League supports authorizing the SWRCB to make changes to TMDLs, rather than remanding these decisions back to the regional water boards (Note: Subcommittee members believe that this policy should be tied into WQI#9).
12. WQI 12: The League has no position on confirmation of regional water board conflict of interest rules with the Political Reform Act – (Note: the Subcommittee asked for a legal opinion. The question is: what are the current conflict of interest rules pursuant to AB 1234. Staff and members believe that this provision is similar to what already exists for other state boards [example: Waste Board].)
13. WQI 13: The League has no position on the establishment of civil penalties for fraudulent information with regard to reporting by permittees.
14. WQI 14: The League is generally opposed to any removal of notice and hearing requirements prior to the SWRCB referring a case to the State Attorney General for additional action.
15. WQI 15: The League has no recommendation on additional authorization of district and city attorneys to pursue civil violations (for cities over 750,000 in population).

16. WQI 16: The League believes the state should limit the number of mandatory minimum penalties (MMP) to one violation, and the population limit to qualify under the MMP law as a small, disadvantaged community for a single missing report should move from 10,000 to 50,000 (in accordance with federal law).
17. WQI 17: The League has no recommendation on early payment of MMP violations.
18. WQI 18: The League supports enhanced ability of the Regional Water Boards to administratively enforce state Underground Storage Tank (UST) Requirements.
19. WQI 19: The League supports enhanced oversight of UST testers.
20. WQI 20: The League supports moving the SWRCB Enforcement Report deadline to July 1.
21. WQI 21: The League supports the SWRCB developing and implementing performance measures
22. WQI 22: The League supports improved data management systems for the SWRCB.
23. WQI 23: The League generally has no recommendation on the standardization of NPDES permits and believes that this issue should be worked out with the individual regional water boards.
24. WQI 24: The League generally has no recommendation regarding the update of SWRCB Strategic Plan.
25. WQI 25: The League supports SWRCB conducted training of regional water boards, provided the SWRCB both conducts the training and sets consistent standards statewide.

## **APPENDIX B**

### **GLOSSARY**

**Affordable:** A word used increasingly to express concern whether recipients of water will be able to meet the cost. Whether people view water as affordable will depend on many factors.

**Agricultural Drainage:** Usually refers to installed drains to permit removal of water which accumulates within plant root zone. May be essential to maintain favorable salt balance for plant growth. May contain selenium, salinity, pesticides, herbicides, etc.

**Area and County of Origin Protections:** Refers to legislative provisions for protecting water rights of these areas.

**Area of Origin Law:** Applies to a watershed or area wherein water originates, or an area immediately adjacent thereto which can be conveniently supplied with water there from. Because this law was enacted as part of the Central Valley Project Act, it applies to the Sacramento River watershed. The Burns- Porter Act subsequently defined the Sacramento-San Joaquin Delta to be part of the watershed of the Sacramento River. Gives area of origin preferential rights regarding operation of federal Central Valley Project and to contract for State Water Project water and to certain rights to construct projects or make diversions, provided use is reasonable and beneficial. (California Water Code Sections 11128, 11460-11463).

**County of Origin Law:** Prohibits State Water Resources Control Board from assignment of rights which will deprive a county in which the water originates of such water necessary for the development of the county. (California Water Code Section 10505).

**Delta Protection Act:** Establishes that an adequate supply of water in the Delta is necessary

to the peace, health, safety and welfare of the people of the state, except that delivery of such water is subject to County of Origin and Area of Origin laws. (California Water Code Sections 12200-12220).

California Wild and Scenic Rivers Act and Federal Wild and Scenic Rivers Act: Establish certain rivers or sections of rivers are to be preserved in their free-flowing condition. The California law (California Public Resources Code Sections 5093.50-5093.65) allows domestic water diversion for residents of counties through which the river flows, provided there is no adverse effect upon the free-flowing character of the river. California law finds that the free-flowing state of such rivers is a reasonable and beneficial use within the meaning of the state constitution.

Atmospheric Deposition: The transfer of pollutants suspended in the air to the earth's surface. Pollutants move directly from the atmosphere into water bodies through precipitation, falling particles, or the absorption of gases into water. They also may be deposited over land and transported to water bodies via runoff. Atmospheric deposition is believed to be a significant source of various pollutants to many water bodies.

Basin Plan: The Regional Water Quality Control Plan adopted by a regional water quality control board for that board's area of responsibility in California. (See Cal. Water Code Section 13240). The basin plan establishes water quality standards, uses and other criteria for surface and ground waters.

Best Management Practices (BMPs): Methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges, including urban runoff. BMPs include structural and nonstructural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

California Toxics Rule (CTR): A federal rule adopted by the U.S. EPA on May 19, 2000, which established numeric criteria for various priority pollutants for California. The rule can be found at 65 Federal Register 31682-31719, and was codified in the Code of Federal Regulations at 40 CFR 131.38.

Characteristics of Groundwater Resource: Include quality, quantity, rate of renewal and yield.

Clean Water Act (CWA): A comprehensive water quality statute (33 USC 1241 et seq.). The CWA was first adopted by Congress in 1972 and later amended in 1987 to apply to stormwater/urban runoff. The CWA was designed to restore and maintain the chemical, physical, and biological integrity of the nation's waters to support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

Coliform: A group of related bacteria that are generally benign to humans. They are natural and common inhabitants of the soil and ambient waters (e.g., lakes, rivers, and estuaries), as well as the gastrointestinal tracts of animals.

Compensation: Full replacement for unavoidable fish and wildlife resource losses in terms of habitat area and long term renewability of the quality and quantity of such resources. In the interest of clarification, compensation does not mean monetary payment as a substitute for replacement of resources losses.'

Conjunctive Use of Surface and Groundwater: Planned joint use of surface and groundwater. This usually involves maximizing use of surface water in wet years (with minimum groundwater pumping) and using any surplus surface water to recharge groundwater, and in dry years

augmenting surface supplies by drawing on the stored groundwater.

Conservation: Fish and wildlife resource loss prevention, mitigation and compensation.

Conservation (of Water): Means efficient use of water. Also means reducing water losses, or eliminating waste; storing water for water use; preserving water quality.

Contamination: An impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. (California Water Code Section 13050) (See "Pollution").

Contamination Sources:

Point Discharge: Source is identifiable, as from a pipe or drain ditch.

Non-Point Discharge: Sources are more diffuse and not easily identified with well defined outlets; includes runoff from agricultural or forested land, general urban runoff, except where collected in identifiable drains.

Cross-Media Pollution: The contribution or "flux" of pollution from one environmental medium to another. (For instance, the transfer of pollutants from the atmosphere to water.)

Davis-Grunsky Bond: This legislation established a bond fund to facilitate financing of projects in counties with limited financial resources.

Demand/Need: "Demand" usually refers to a statement of water requirements which may be projected on the basis of past water use practices. In contrast, "need" is intended to refer to water that is truly needed to satisfy purpose if water is efficiently utilized.

Delta: Refers to the Sacramento-San Joaquin Delta. 700,000 acres of islands, waterways, levees and lands into which the natural runoff flows from the Sacramento, San Joaquin, Mokelumne and Consumnes river systems before either being exported or entering the San Francisco Bay and, then, the Pacific Ocean.

Desalination: A process designed to treat brackish or sea water to make it useful for potable or non-potable use.

Enhancement: Development or improvement of fish and wildlife resource values of the area affected by a project beyond that which would occur without the project.

Enterococcus: A non-coliform bacteria group used as an indicator of the presence of fecal material in drinking and recreational waters. USEPA believes that enterococci have a better correlation with swimming-associated gastrointestinal illness in both marine and fresh waters than coliform organisms, and "die off" more slowly in saltwater.

Environmentally Safe: Not a precise technical term, but used to mean actions which have little or no adverse impact.

Economically Sound/Feasible: Not a precise technical term, but one that refers to a balance of costs and benefits. Formerly emphasis was placed on calculating benefit-cost ratios. Uncertainties and possible abuses in such calculations have raised questions concerning usefulness of such calculations. Problems include what types of benefits to involve as well as what costs to involve. Many, including environmentally related benefits and costs, cannot be adequately quantified.

Fish and Wildlife Issues: See Compensation, Conservation, Enhancement, Fish and Wildlife resources, Instream uses, Loss prevention measures, Mitigation, Preservation, Protection, and Restoration.



**Fish and Wildlife Resources:** Birds, mammals, fishes, amphibians, reptiles, invertebrate animals, endangered, threatened or rare native plants, their habitat area and all types of aquatic and land vegetation and other factors of the environment upon which resources are dependent. (See Fish and Game Code Section 45 for definition of fish).’

**Flood Irrigation:** Used to describe what is more appropriately called basin and border irrigation in which land prepared as basins or land bordered by small levees is irrigated with relatively large streams of water.

**Groundwater Management:** The process of controlling extraction of groundwater and/or planned recharge to manage the supply and/or quantity of groundwater. Objectives of groundwater management may include minimizing (or preventing) adverse effects such as groundwater overdraft or quality degradation. (Also see conjunctive use and water management practices).

**Groundwater Overdraft:** Where, over a period of time, groundwater extraction exceeds natural or artificial recharge.

**Indicator Bacteria:** Bacteria that are used to assess the microbiological quality of water because, although not typically disease causing themselves, they may indicate the presence of several waterborne disease-causing organisms. The concentration of indicator bacteria is used as a measure of water safety for body-contact and for consumption of water.

**Instream Uses:** Include fish, wildlife, recreation, aesthetics, hydro-power production, dilution of contamination, waste discharge, and sediment transport.

**Local Entities:** Includes cities, counties, water districts, joint powers, etc.

**Lass Prevention Measures:** Designing and implementing measures to avoid immediate and long term impacts to fish and wildlife resources.’

**Maximum Extent Practicable (MEP):** The vaguely defined standard set forth in the CWA to be included in Municipal NPDES Permits to be complied with by municipal dischargers in order to reduce the discharge of pollutants from their municipal separate storm sewer systems. CWA Section 1342 (p)(3)(B)(iii) requires that permits for discharges from municipal storm sewers “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.”

**Mitigation:** Measures to lessen or reduce adverse effects on fish and wildlife resources through use of structural and non-structural loss prevention measures in project design and operations. (See CEQA Guidelines Section 15370)<sup>1</sup> NEPA regulations have a functionally similar definition. NEPA definition includes restoration as a mitigation measure, however.

**National Pollutant Discharge Elimination System (NPDES):** The program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing wastewater and stormwater discharge permits, and imposing and enforcing pretreatment requirements, under CWA.

**Non-Point Source Discharge:** Pollution caused by rainfall or snowmelt moving over and through the ground. As the water moves, it picks up and conveys natural and human-made pollutants, depositing them into water bodies and groundwater. Atmospheric deposition and hydromodification are also nonpoint sources of pollution.

**Numeric Limits:** Numeric or numerically expressed narrative restrictions on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an NPDES permitted location or outfall.

**Pathogens:** Disease-causing bacteria, viruses, and protozoans that are transmitted to people when they consume contaminated water.

**Pollution:** An alteration of the quality of the waters of the state by waste to a degree which unreasonably affects: (1) such waters for beneficial uses, or (2) facilities which serve such beneficial uses. Pollution may include contamination. (California Water Code Section 13050: Please see “Contamination”).

**Porter-Cologne Water Quality Control Act (Porter-Cologne):** The California equivalent of the federal Clean Water Act. This legislation established that the State Water Resources Control Board (State Water Board) has the ultimate authority over state water rights, water quality policy, and the nine regional water quality control boards (regional water boards) which oversee water quality on a day-to-day basis in their geographic regions.

**Preservation:** Maintenance and protection of fish and wildlife resources at levels that existed prior to the commencement of a (the current) project. Preservation is achieved through mitigation for avoidable resource losses and/or compensation for unavoidable resource losses and/or compensation for unavoidable resource losses. The term “preservation” is synonymous with “conservation” as used in the U.S. Fish and Wildlife Coordination Act. Preservation does not assume that restoration will occur, but it could.

**Project Beneficiaries:** Those who gain value in some fashion from any of the following: water supply, flood control, power generation, recreation, salinity repulsion, wildlife.

**Protection:** Department of Fish and Game appears to use this term when referring to legal enforcement by wardens. (See Preservation and Conservation).

**Real Water Savings:** Simply means there is an “actual” savings of water which could be put to other use.

**Reasonable and Beneficial:** Depends on facts and circumstances of each case. What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time. (Tulare Irrigation District v. Lindsay-Strathmore Irrigation District). The courts have determined the law requires an evaluation of the ascertainable facts in view of the increasing need for water conservation within California.

Beneficial uses include: storing water underground if thereafter to be applied to beneficial purposes; use of water for recreation and preservation and enhancement of fish and wildlife resources.

**Reclaimed Water:** Wastewater that has been cleaned so that it can be used for most purposes except drinking.

**Recycled Water:** Municipal and/or industrial wastewater that has been treated to a sufficiently high level that it can be reused usually for non-potable purposes such as irrigating landscape and refilling aquifers.

**Restoration:** Means to return to “original” conditions. (Selection of “original” or base condition is often source of debate.)

**Reverse Flows:** Where direction of flow in a channel is reversed, as in the case of channels in South Delta which normally drain towards San Francisco Bay, but where pumping for export

may cause flow reversal, drawing more saline water further into the Delta.

**Sediment Transport:** Sediment of various particle sizes may be carried by moving water. The size of particles transported by water increases as velocity rises.

**Stormwater:** Water that accumulates on land as a result of storms, and can include runoff from urban areas such as roads and roofs.

**Surplus Water:** When used as a technical term in water contracts, this is the water that is available after entitlement water has been delivered. The amount of surplus water varies from year to year, generally according to amounts of runoff. Surplus water ordinarily is less expensive to the user than entitlement water. Reference is also made to water which is surplus to reasonable and beneficial uses of area of origin and Bay/Delta.

**System Expansion:** Extension of existing infrastructure exclusively to serve new customers in presently unserved areas and/or increase in water supply exclusively for the same purpose.

**Total Maximum Daily Load (TMDL):** A calculation of the maximum amount of a pollutant that an impaired water body can receive and still meet applicable water quality standards. A TMDL is to include allocations for the maximum load a particular source of a pollutant may discharge to the subject water body. TMDLs are required pursuant to Section 1313(d) of the CWA for water bodies that have first been listed as being impaired for the particular pollutant or pollutants at issue.

**Triennial Review:** A review of water quality standards in basin plans that is required at least once every three years by Section 1313(c) (1) of the CWA and periodically under Section 13240 of the Porter-Cologne Water Quality Control Act.

**Ultimate:** Imprecise meaning. Depends on time frame.

**Usable Groundwater:** Refers to groundwater which can be pumped within the cost and technical constraints appropriate to the situation.

**Water Banking:** Not a precise term. Generally refers to storing presently surplus water in groundwater basins or in surface storage facilities.

**Water Management Practices:** Relate to the varied objectives of irrigation, municipal and industrial use. These objectives may not be compatible. In general, management practices are developed to maximize economic returns and/or to minimize (or prevent) adverse environmental impacts including water quality degradation. Conservation of supply, reuse, treatment for use and waste disposal, and the planned conjunction use of surface and groundwater are all aspects of water management. (Also see Conjunctive use and Groundwater management).

**Water Quality Standards and Objectives:** The regional water quality boards set “objectives” in their basin planning process which are equivalent to what EPA calls “standards”. The “standards” include numerical narrative criteria and plans to implement these criteria.

**Water Reclamation:** Usually refers to removing contaminants in water so that the water can be discharged into a receiving water without creating problems for fish, wildlife and other aspects of environment. Also, refers to water which has been treated to remove contaminants as required to permit its reuse particularly for irrigation of landscaped or agricultural areas.

**Way Bill (Program):** Delta Levee Maintenance Program. Declares the Sacramento-San Joaquin Delta, characterized by islands and meandering waterways, as a unique resource of major statewide significance. Reasons are stated. Declares the system of levees is the key to preserving the physical characteristics of the Delta. Finds there is an urgent need for a higher degree of

levee maintenance and rehabilitation throughout the Delta and 'that the state has an interest in providing technical and financial assistance. Establishes that local agencies maintaining non-project (private) levees shall be eligible for reimbursement from the General Fund. Reimbursement shall be at 50% of cost. (California Water Code Sections 12980-12991).

**303(d) List of Impaired Waterbodies:** The State is required to prepare a list of water bodies that are polluted, under Section 303(d) of the CWA. Inclusion of a water body on the 303(d) list generally leads to the development of a total maximum daily load (TMDL) for the water body.

*Prepared by Robert M. Hagan, Extension Water Specialist, Marcia Kreith, Program Representative, University of California Cooperative Extension, July 1987 and Ken Farfsing, City Manager, City of Signal Hill, October 2009.*

## Sources:

### **Some of the preceding definitions were derived from the following sources:**

California Wetlands Information System Website: Porter-Cologne Act

Los Angeles MS4 Permit: Basin plan, best management practices, maximum extent practicable, NPDES permit

RWA: Cross-media pollution

Southern California Coastal Waters Research Project (SCCWRP) Website: Atmospheric deposition

State Water Board Website: Numeric Limits, Triennial Review,

U.S. EPA Website: California Toxics Rule, Clean Water Act, coliform, enterococcus, TMDLs

U.S. Geological Service (USGS) Website: Indicator bacteria, pathogen