Association of California Water Agencies
Leadership Advocacy Information *Since 1910*

12/4/07 Bd. Mtg.
Water Recycling Policy
Deadline: 10/26/07 Noon

October 25, 2007

Tam Doduc, Chair
and Members of the
State Water Resources Control Board
P. O. Box 100
Sacramento, CA 95812-0100

Subject: Comment Letter - Water Recycling Policy

Dear Chair Doduc and Members of the Board:

The Association of California Water Agencies (ACWA) is pleased to provide comments on the draft Water Recycling Policy (Policy) proposed by the State Water Resources Control Board (SWRCB). ACWA is highly supportive and thankful for the personal leadership shown by Board members on this matter. We also support the expressed intent of the Policy to provide a clear, consistent, positive statement of policy that will encourage and guide substantially increased use of recycled water statewide. ACWA's comment letter dated March 27, 2007 (attached) describes our reasons for supporting a Water Recycling Policy, its importance for advancing statewide water policy, and the acute need to reduce regulatory barriers to greater future use of recycled water statewide.

ACWA is a trade association of nearly 450 public water agencies that supply over 90 percent of the water delivered in California for domestic, agricultural and industrial uses. ACWA member agencies operate municipal, industrial and agricultural water supply, treatment and delivery systems, waste water and storm water treatment systems, and water recycling and reuse facilities throughout the state. Our member agencies are integrally involved in the management of surface water and groundwater resources statewide to ensure that public water supply needs are adequately addressed, acceptable water quality is maintained, and that beneficial uses of water resources are optimized in an environmentally balanced manner.

As ACWA indicated in our testimony to the SWRCB at its workshop on October 2, 2007, we have been working very closely with the California Section of the WateReuse Association (WateReuse) and California Association of Sanitation Agencies (CASA) to develop a consensus approach to our response to the draft Policy. During our extensive review and analysis of the draft, and based on input from a workgroup of seasoned water management professionals, we have identified a number of considerations and administrative concerns that were raised by the draft Policy. We believe that most of these concerns may be a result of the way the draft Policy was formatted and organized.

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These concerns and reasons for our proposed changes are identified in some detail in the comment letter submitted by WateReuse (submitted under separate cover, but hereby incorporated by reference). Rather than attempting to edit the proposed Policy text, we determined that a revised version of the Policy would be a more useful method to convey how we believe these concerns might be best addressed. Each organization believes these revisions will help achieve the widely-shared goals of the water community for the Policy.

ACWA asks that these comments be read together with those submitted by WateReuse, along with the attached revised version of the Water Recycling Policy that incorporates the suggestions described in the WateReuse comment letter.

The attached revised version of the Policy incorporates changes that are intended to advance the following key public policy objectives:

1. A clear statement that recycled water is a valuable resource, not a waste product. We believe the Policy should state the Board's support for recycled water use clearly and emphatically, based on SWRCB Resolution No. 77-1.

2. The use of recycled water should provide the maximum benefit of the people of the State of California. In view of California's immediate water supply reliability crisis, and in support of long-term water planning goals expressed in the California Water Plan and local regional plans, increased use of recycled water is not only prudent, but imperative.

3. When appropriately managed, recycled water is safe. For both groundwater recharge and irrigation projects, compliance with the provisions of the Water Recycling Policy and Title 22 of the California Code of Regulations constitutes best practicable treatment and control for purposes of the anti-degradation policy.

4. Locally driven, collaborative, basin-wide planning for management and sustainable use of groundwater is the correct and appropriate way to ensure long-term preservation of groundwater quality. It is essential to incorporate the water supply benefits of recycled water into this planning process while providing mechanisms to protect the groundwater basin.

5. The interim salt management "backstop" limit of 300 mg/L for TDS for irrigation projects is a one-size-fits-all solution that alone will not facilitate recycled water use. We encourage you to consider the alternative approach described by WateReuse and contained in the attached revised Policy. We stand ready to work with the SWRCB to refine this approach to determine how the TDS "backstop" limitation can be best resolved.

6. For groundwater recharge projects, we support the Board's intent to rely on good science as determined by the California Department of Public Health under the framework contained in the attached revised Policy.

7. Incidental amounts of recycled water runoff that occur as the result of normal irrigation operations should be managed and permitted using existing mechanisms in the same manner as other types of irrigation runoff, including, but not limited to, municipal separate storm sewer system permits, general permits, and/or master reclamation permits.

8. The Policy should explicitly state that it does not alter liability under existing law, as stated in the attached revised Policy.

We believe that the Water Recycling Policy with our proposed revisions will result in immediate and longer-term water management benefits for Californians. We hope that SWRCB will remain open to assessing how this Policy is implemented and refining it as needed, as well as tackling other difficult issues that may be impeding widespread use of recycled water.

ACWA appreciates the way that the Board and staff have approached this important effort. We stand ready to work with you and all the responsible parties to finalize and implement a Water Recycling Policy that will rapidly move the State into a future of improved water resource stewardship through substantially increased water recycling.

Sincerely,

Timothy Quinn
Executive Director

TQ:deb

Enclosures

State Water Resources Control Board
Resolution No. 2007-___

Water Recycling Policy (Policy)

WHEREAS:

1. The Legislature has declared its intent that the State undertake all possible steps to encourage the development of recycled (reclaimed) water facilities so that recycled water will help meet the existing and increasing water requirements of the State. The use of recycled water for irrigation, industrial and commercial processes, salt water barriers and drinking water augmentation provides benefits to the people of the State including:

(a) Expanding the State's limited water supply by providing an additional supply source for beneficial uses;

(b) Reducing diversions of surface water, particularly diversions from the Sacramento-San Joaquin Delta and the Colorado River, by providing an alternative water supply source for beneficial uses;

(c) Reducing environmental conflicts as a result of diversions because the amount and timing of diversions can be more flexibly managed;

(d) Reducing the use of groundwater by providing an additional supply source for beneficial uses;

(e) Improving water supply reliability because, as a locally produced supply, recycled water is not as vulnerable to some of the risks associated with imported water supplies such as droughts, delivery system failures by earthquakes or levee breaks, pumping restrictions to protect endangered species, and uncertain precipitation changes caused by global climate change; and

(f) Reducing energy use and corresponding reduction in greenhouse gas emissions because the recycled water source is locally produced using significantly fewer energy resources than those required to divert, pump, convey and store fresh water imported from the Sacramento-San Joaquin Delta or Colorado River.

2. The State Water Resources Control Board (State Water Board) adopted Resolution No. 77-1 as a policy statement to implement the Legislature's declaration that the people of the State have a primary interest in reclaiming (recycling) water.

3. The Legislature has also declared its intent that waters of the State shall be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the State. The State Water Board adopted Resolution No. 68-16 as a policy statement to implement this legislative intent. Resolution No. 68-16 requires that:

(a) Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality water will be maintained until it is demonstrated to the State that any changes will be consistent with the maximum benefit to the people of the State, will not unreasonably affect beneficial uses of such water, and will not result in water quality less than prescribed in the policies;.

(b) Activities involving the disposal of waste that could impact high quality waters are required to implement best practicable treatment or control of the discharge necessary to ensure that: (a) pollution or nuisance will not occur, and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

4. All waters (recycled water, groundwater and surface water) may contain unregulated constituents and contaminants of emerging concern or microbiological agents as a result of anthropogenic sources, atmospheric deposition, non-point source discharges, agricultural practices and treated wastewater discharges.

5. Some groundwater basins in the State contain constituents that exceed or threaten to exceed water quality objectives established in the applicable Water Quality Control Plans (Basin Plans), and not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives or beneficial uses. These conditions can be caused by natural soils/conditions, discharges of waste, irrigation using surface water, groundwater or recycled water and water supply augmentation using surface or recycled water. Regulation of recycled water alone will not address these conditions.

6. When recycled water, surface water, or groundwater is used for irrigation, some constituents in the water may be concentrated in the percolate from the surface of the irrigated site to groundwater because much of the water applied evapotranspires, thereby leaving most of the constituent in the soil. However, certain constituents readily attenuate in soils, the vadose zone or groundwater, either by biodegradation, adsorption onto particles, chemical precipitation or dilution thus reducing but not necessarily eliminating leaching to the groundwater in the percolate. Under certain circumstances, this can cause an aquifer to become degraded and polluted.

7. Groundwater recharge using recycled water or surface water may contribute salts or change the geochemical equilibrium in an aquifer, thereby causing the dissolution of constituents, such as arsenic, from the geologic formation into groundwater. This can cause an aquifer to become degraded and polluted.

8. Water Code section 13242 requires a program of implementation for achieving water quality objectives. The program of implementation must include, but is not limited to: (a) a description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate actions by any entity, public or private; (b) a time schedule of

actions to be taken; and (c) a description of the surveillance to be undertaken to determine compliance with the objectives.

9. The California Department of Public Health (CDPH) (formerly known as the Department of Health Services or DHS) is responsible for establishing maximum contaminant levels (MCLs) for constituents in drinking water to protect the health of the public who drink water supplied by water utilities. These MCLs are adopted through an extensive scientific and public review process.

10. Water Code section 13550 requires that CDPH also establish uniform statewide recycling criteria for each type of use of recycled water where the use involves the protection of public health.

11. The California Code of Regulations, Title 22, Division 4, Chapter 3, Water Recycling Criteria (Water Recycling Criteria), prescribe specific treatment requirements based upon the proposed reuse and protection of public health.

(a) The Water Recycling Criteria address uses ranging from irrigation in areas with limited public contact through indirect potable reuse of water.

(b) The Water Recycling Criteria also specify use area, design, operational, personnel, maintenance, reporting and reliability requirements.

(c) For recycled water irrigation projects, the use area requirements included in the Water Recycling Criteria in combination with irrigation practices that result in irrigation in amounts that do not exceed the quantity needed for landscapes or crops, taking into account evapotranspirative demand, the distribution uniformity of the irrigation system, plant uptake and leaching needed to prevent the buildup of salts in soil, which creates a substantial delay in or mitigates pollutants reaching groundwater.

(d) For groundwater recharge reuse projects, the Water Recycling Criteria require recycled water to be of a quality that protects public health, whereby CDPH makes recommendations for a project to the Regional Water Board on an individual case-by-case basis. CDPH is also required to hold a public hearing prior to making the final determination regarding the public health aspects of each project, taking into consideration State Board Water Resolution No. 68-16. Per Water Code section 13540, projects can only proceed if CDPH determines that that the proposed recharge will not degrade the quality of the water in the receiving aquifer as a water supply for domestic purposes. In advance of the public hearing, project proponents are required to provide a completed Engineering Report to CDPH and the Regional Water Board that consists of a comprehensive investigation and evaluation of the project, its impacts on existing and potential uses of the groundwater basin, and the proposed means for achieving compliance with CDPH and Regional Water Board requirements. After the public hearing, CDPH issues findings of fact and conditions that constitute its recommendations to the Regional Water Board in establishing permit requirements. The findings of fact and conditions address source control, recycled water treatment, and operation of these projects, which for the purposes of State Water Board Resolution No. 68-16 are deemed to be consistent with best practicable treatment or

control. MCLs and other requirements or recommendations provided by CDPH provide reasonable protection of groundwater quality for the beneficial use of municipal supply.

12. Minor amounts of recycled water that escape use areas that are managed in a manner consistent with the Water Recycling Criteria and landscape or crop needs constitute incidental irrigation runoff. The State Water Board has developed a range of regulatory schemes for assuring federal Clean Water Act compliance for irrigation runoff, including the Municipal Separate Storm Sewer System (MS4) permitting system.

13. Certain constituents readily attenuate in soils, the vadose zone, or groundwater, either by biodegradation, adsorption onto particles, chemical precipitation or dilution. Hence, for groundwater recharge reuse projects, when hydrogeologic conditions are appropriate, it is not necessary to establish constituent levels for these constituents. Groundwater limitations, along with groundwater monitoring, provide adequate water quality protection.

14. Water Code section 13540 requires, in part, for any waste well that injects waste into a subterranean water bearing stratum, when a Regional Water Board finds that the water quality does not preclude controlled recharge by direct injection, and CDPH finds, after a public hearing and consideration of State Water Board Resolution No. 68-16, that the proposed recharge will not degrade the quality of the water in the receiving aquifer as a water supply for domestic purposes, recycled water may be injected into the aquifer.

15. In 1996, CDPH and the State Water Board signed a Memorandum of Agreement on the use of recycled water that describes procedures for issuing water reclamation requirements and for resolving conflicts between CDPH and the Regional Water Boards.

16. For recycled water irrigation projects, irrigation designed and operated in an amount or manner to prevent salt buildup and as needed for landscape or crops, and in conformance with the Water Recycling Criteria, represents best practicable treatment or control and ensures prevention of pollution and nuisances for the purposes of State Water Board Resolution No. 68-16.

17. The use of recycled water for groundwater recharge in accordance with CDPH requirements and recommendations for the protection of municipal supply beneficial uses is consistent with best practicable treatment or control and ensures prevention of pollution and nuisances for the purposes of State Water Board Resolution No. 68-16.

18. Recycled water irrigation projects and groundwater recharge reuse projects provide benefits to the people of the State. These benefits include extending the State's limited water supply to provide water to its growing population, reducing diversions of surface water, and reducing use of groundwater supply. These benefits outweigh the costs associated with limited potential for lowering of water quality, as mitigated through best practicable treatment or control, that would be caused by a recycled water project.

19. Recycled water irrigation projects and groundwater recharge reuse projects that comply with this Policy and the Water Recycling Criteria, are consistent with the requirements of State Water Board Resolution No. 68-16.

20. A statewide approach that fosters a consistent application of requirements to the use of recycled water is desirable in order to encourage and broaden its usage. Although some variation throughout the state is desirable because of differing climatic and hydrologic conditions and differences in water recycling projects, much of this variation is due to differing interpretations of similar requirements in the Regional Water Quality Control Board's (Regional Water Board) Water Quality Control Plans (Basin Plans). Uniform interpretation of these requirements is needed to reduce uncertainty in the design requirements for recycled water projects. This uncertainty has created an obstacle to achieving the full potential for water reuse.

21. To comply with the California Environmental Quality Act, the State Water Board adopted a certified regulatory environmental program study on December 4, 2007.

THEREFORE BE IT RESOLVED:

1. *General Policies*

(a) It is the policy of the State of California to encourage strongly the use of recycled water. Recycled water is a valuable resource for the people of the State and is not "waste" for purposes of Water Code section 13050(d).

(b) The State Water Board readopts the policies contained in recitals 1-4 and 6 of Resolution No. 77-1 as the basic framework to guide decisions relating to the use of recycled water.

(c) The State Water Board and Regional Water Boards will, to the greatest extent feasible, rely on technical expertise within CDPH in evaluating recycled water projects. In reliance on such expertise, the State Water Board and Regional Water Boards shall presume that the use of recycled water in a manner or for a purpose that complies with the regulations adopted by CDPH is safe.

(d) This Policy is to be liberally construed to facilitate the use of recycled water and thereby expand the available water supply within the State to the greatest extent feasible.

2. *Definitions*

(a) For the purpose of this Policy, "distribution uniformity" is the ratio of the average irrigation volume applied to the driest quarter of the field (or grid) and the average volume applied across the whole field (or grid). Distribution uniformity measures how uniformly an irrigation system applies water to a crop or landscape.

(b) For the purpose of this Policy, a "groundwater recharge reuse project" means a project that uses recycled water and that has been planned and is operated for the purpose of recharging a groundwater basin for use as a source for domestic or agricultural supply or for the purpose of controlling salt water intrusion.

(c) For the purpose of this Policy, "incidental runoff of recycled water" means minor amounts of recycled water that escape use areas that are managed in a manner consistent with the Water Recycling Criteria and landscape or crop needs.

(d) For the purpose of this Policy, "nutrient management practices" are measures implemented to manage the amount, source, placement, form and timing of the application of plant nutrients and soil amendments. The purpose of nutrient management practices is to budget and supply nutrients for plant production, properly use manure or organic by-products as a plant nutrient source, minimize degradation of surface and ground water resources, protect air quality by reducing nitrogen emissions (ammonia and NOx compounds) and the formation of atmospheric particulates, and maintain or improve the physical, chemical and biological condition of soil.

(e) For the purpose of this Policy, "recycled water" has the same meaning as in Water Code section 13050(n).

(f) For the purpose of this Policy, "recycled water irrigation projects" are defined as those projects that use recycled water in accordance with the Water Recycling Criteria and in order to meet agronomic needs. A single recycled water project includes any incremental additions or modifications made in conformance with the associated recycled water program for which the provisions of the California Environmental Quality Act (commencing with Public Resources Code section 21000) have been satisfied. Such additions or modifications include, but are not limited to, the use of recycled water pursuant to the provisions of this Policy for newly established or existing playgrounds, parks, median strips, and other landscapes or crops.

(g) For the purpose of this Policy, "salts" are chemicals that contain the cations sodium, boron, calcium, magnesium, and potassium and the anions bicarbonate, carbonate, chloride, nitrate, phosphate, sulfate, and fluoride. Salts are commonly measured by water quality parameters that quantify combinations of ions, such as total dissolved solids (TDS), electroconductivity, and hardness.

3. *Salinity Management Plans*

By January 1, 2018, save in regions where a regional salt implementation plan has been developed as of the date of this Policy, the Regional Water Boards shall adopt revised implementation plans, consistent with Water Code section 13242, for those groundwater basins within their regions where water quality objectives for salts are being, or are threatening to be, exceeded. Such plans shall address and implement provisions, as appropriate, for all sources of salt to groundwater basins, including recycled water irrigation projects and groundwater recharge reuse projects. Such plans shall be developed through a locally driven, collaborative basinwide planning process that is open to all stakeholders.

4. *Provisions that Apply to All Recycled Water Projects*

(a) In implementing this Policy, the State Water Board and Regional Water Boards shall use TDS as the surrogate for regulating salts from projects using recycled water.

(b) Because recycled water projects meet a water supply need and do not constitute a discharge of waste, these types of projects shall generally be regulated under water recycling requirements rather than waste discharge requirements.

5. *Additional Provisions that Apply to Recycled Water Irrigation Projects*

In addition to the provisions of paragraph 4 above, recycled water irrigation projects shall meet the following requirements:

(a) In the absence of an adopted regional salt management plan, a Regional Water Board shall require the following in water reclamation requirements for recycled water irrigation projects:

(i) The development and implementation of nutrient management practices;

(ii) Compliance with the California Code of Regulations, Title 22, Division 4, Chapter 3, Water Recycling Criteria;

(iii) The recycled water to be applied in an amount or manner that does not exceed the quantity needed for the landscape or crops, taking into account evapotranspirative demand, plant uptake, the distribution uniformity of the irrigation system, and leaching needed to prevent the buildup of salts in soil;

(iv) Limitations on TDS concentrations in recycled water established as follows: [TO BE DETERMINED BASED ON DATA IN CONSULTATION WITH STATE WATER BOARD]

(v) The use of recycled water not to cause or contribute to exceedances of groundwater quality objectives for non-salt related constituents or cause the impairment of a designated beneficial use of groundwater.

(b) In the event that an irrigation project cannot comply with all of the requirements set forth in subparagraph (a) above, a Regional Water Board may allow the project to be implemented and may establish other appropriate requirements for the project, including a requirement for groundwater monitoring if the Regional Water Board determines that site conditions such as shallow groundwater could cause an increased potential for the irrigated site to adversely affect beneficial uses or surface water quality.

(c) For recycled water irrigation projects, a Regional Water Board shall not require salt management measures other than those listed in subparagraphs (a) and (b) above prior to January 1, 2018, unless such measures are part of a salt implementation plan adopted pursuant to paragraph 3 above or included within an existing regional groundwater management plan already in place at the time of adoption of this Policy.

(d) Incidental recycled water runoff shall be managed and permitted using existing mechanisms in the same manner as other types of irrigation runoff, including, but not limited to, municipal separate storm sewer system permits, general permits, or master reclamation permits.

(e) The Regional Water Board shall defer to CDPH with regard to requirements for the protection of human health. If CDPH and the Regional Water Board disagree on proposed permit requirements for a water recycling project, the Regional Water Board shall follow the conflict resolution process prescribed in the 1996 "Memorandum of Agreement between the

Department of Health Services and the State Water Resources Control Board on the Use of Reclaimed Water."

6. *Additional Provisions that Apply to Groundwater Recharge Reuse Projects*

In addition to the provisions of paragraph 4 above, groundwater recharge reuse projects shall meet the following requirements:

(a) Notwithstanding the terms of subparagraph (b) below, for constituents for which CDPH has established an MCL, with the exception of color, when interpreting a narrative objective to develop a numeric constituent level for the constituent for protection of public health for a groundwater recharge reuse project, the Regional Water Board shall establish the constituent level at a concentration equivalent to the MCL. A Regional Water Board may establish a groundwater limitation that is more stringent than the MCL, if necessary to protect a designated beneficial use other than municipal or domestic use, such as agricultural use.

(b) For constituents for which CDPH has not established an MCL, a Regional Water Board shall defer to CDPH with regard to recommendations for constituent levels for groundwater recharge projects when interpreting a narrative objective for protection of human health. Upon the recommendation of CDPH to establish a constituent level at a specific concentration for a specific constituent, a Regional Water Board may establish a constituent level for that constituent at the concentration(s) recommended by CDPH only if it finds that: (a) the constituent can be reliably measured in the recycled water and groundwater using approved analytical methods; and (b) the constituent is present in groundwater at concentrations as determined by CDPH, after public hearing and comments, that would impair the municipal drinking water supply beneficial use as a result of using recycled water for groundwater recharge.

(c) If CDPH recommends establishing a groundwater or vadose zone limitation for constituents that are attenuated in the soil, vadose zone or groundwater, in lieu of establishing a recycled water constituent limitation, the Regional Water Board shall establish a limitation for the constituent based on the CDPH recommendation. If a vadose zone or groundwater limitation is established, the Regional Water Board shall require monitoring of the constituent at the specified monitoring points for determining compliance with established limitations. The groundwater shall comply with the limitation at specified monitoring points. If CDPH recommends creating a protection area between the point of recharge by injection or surface spreading, and the point of extraction of groundwater for use of a drinking water supply, the Regional Water Board shall include a requirement in the permit that the discharger take appropriate actions to prevent the use of groundwater for drinking water within the protection area.

(d) If a salt implementation plan adopted pursuant to paragraph 3 above is adopted prior to January 1, 2018 or a regional salt management plan is already in place at the time of adoption of this Policy, then a Regional Water Board shall only require the salt management measures included in those plans. Before January 1, 2018 in regions where a comprehensive salt implementation plan has not yet been developed, the Regional Water Boards shall require the following for groundwater recharge reuse projects.

(i) Compliance with the California Code of Regulations, Title 22, Division 4, Chapter 3, Water Recycling Criteria;

(ii) [TO BE DETERMINED BASED ON DATA IN CONSULTATION WITH STATE WATER BOARD]

(iii) The use of recycled water not to cause or contribute to exceedances of groundwater quality objectives for non-salt related constituents or cause the impairment of a designated beneficial use of groundwater.

(e) For groundwater recharge reuse projects, after a public hearing, CDPH issues findings of fact and conditions for each project, including whether a proposed recharge will or will not degrade the quality of water in the receiving water pursuant to Water Code section 13540. CDPH provides such findings of fact and conditions as recommendations to the Regional Water Board for issuing the permit for a project. The Regional Water Board shall defer to these recommendations of CDPH. If the Regional Water Board disagrees with other CDPH recommendations regarding the project, the Regional Water Board shall follow the conflict resolution process prescribed in the 1996 "Memorandum of Agreement between the Department of Health Services and the State Water Resources Control Board on the Use of Reclaimed Water."

(f) For the purpose of this Policy, for groundwater recharge projects, the CDPH findings of fact and conditions, which address source control, recycled water treatment and project operation, are deemed to be best practicable treatment or control for protection of public health for the purposes of State Water Board Resolution No. 68-16.

7. *Liability*

(a) Nothing in this Policy is intended to expand or limit liability under existing law for contamination of groundwater.

(b) For groundwater recharge reuse projects, Regional Water Boards may only include permit requirements based on recommendations provided by CDPH with regard to response actions that must be taken should the use of recycled water cause a producing potable water well to be degraded so that it can no longer be used as a safe source of drinking water.

8. *Revisions of Basin Plans to Conform to Policy*

Within two years from the effective date of this Policy, each Regional Water Board shall review its Basin Plan and revise that Basin Plan as necessary to conform to this Policy. Each Regional Water Board shall submit any revisions of its Basin Plan to the State Water Board no later than January 30, 2010.

9. *Updates to Policy*

It is the intent of the State Water Board to periodically review and revise this Policy as appropriate.

10. *Consistency with Resolution No. 77-1*

To the extent of any conflict between State Water Board Resolution No. 77-1 and this Policy, this Policy supersedes any conflicting provision contained in State Water Board Resolution No. 77-1.

Association of California Water Agencies
Leadership Advocacy Information *Since 1910*

March 27, 2007

Tam Doduc, Chair
and Members of the
State Water Resources Control Board
P. O. Box 100
Sacramento, CA 95812-0100

Subject: Statewide Water Recycling Policy

Dear Chair Doduc and Members of the Board:

The Association of California Water Agencies (ACWA) appreciates the opportunity to submit written comments on development of a Statewide Water Recycling Policy by the State Water Resources Control Board. As indicated in these comments, and as presented in our oral testimony at the Board workshop on March 20, 2007, ACWA supports the development of a recycling policy.

As you know, ACWA is a trade association of nearly 450 public water agencies that supply over 90% of the water delivered in California for domestic, agricultural and industrial uses. ACWA member agencies operate municipal, industrial and agricultural water supply, treatment and delivery systems, waste water and storm water treatment systems, and water recycling and reuse facilities throughout the state. Our member agencies are integrally involved in the management of surface water and groundwater resources statewide to ensure that public water supply needs are adequately addressed, acceptable water quality is maintained, and that beneficial uses of water resources are optimized in an environmentally balanced manner. As you may also know, many ACWA member agencies are also members of the California Section of the WateReuse Association. We anticipate working closely together to advance our mutual interests in promoting more widespread use of recycled water in California.

ACWA believes that the development of Statewide Water Recycling Policy is timely and extremely important. ACWA supports the idea of optimizing all feasible water supply methods to broadly diversify the "mix" or "portfolio" of water resources at a regional scale. Water recycling (or water reclamation or reuse) has proven to be a reliable, economically feasible and environmentally sound means by which some communities are able to increase their water supply reliability. Recycling programs treat wastewater so that it can be safely used to irrigate landscape, golf courses, crops and freeway medians,

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replenish groundwater basins, and act as a barrier to seawater intrusion. Recycled water is increasingly being used by industry in cooling processes and for other purposes.

Water recycling projects are becoming an increasingly important component of comprehensive regional water management plans. It is clear that the untapped potential for beneficial use of recycled water is enormous and should increasingly contribute to securing California's water future.

Overall, state policy already seems to be quite clear on the importance of water recycling:

- In 1977 the SWRCB has adopted its strongly worded Resolution 77-1, noting in part that "The California Legislature has declared that the State shall undertake all possible steps to encourage the development of water reclamation facilities so that reclaimed water may be made available to help meet the growing water requirements of the State"
- The Legislature has adopted statewide goals for the recycled water supply: 700,000 acre-feet by 2000 and 1,000,000 acre-feet by 2010.
- In 2003, the state's Recycled Water Task Force filed its report to the Legislature that included recommendations that, "the State should create uniform interpretation of State standards in State and local regulatory programs by taking...steps...to oversee uniformity within the SWRCB and the Regional Water Quality Control Boards" and "the State should investigate within the current legal framework alternative approaches to achieve consistent, less burdensome regulatory mechanisms affecting incidental runoff of recycled water from user sites."
- The California Water Plan (Bulletin 160-2005) clearly indicates an increasingly significant role for recycled water as part of a diverse water supply "portfolio". Regions of the state are charged with optimizing the various water supply elements to address California's current and future water needs in an environmentally responsible manner.

Yet, there have been inconsistent and, at times, overly conservative regulation by some regional boards over the years that are seen as hindering the development of otherwise sound recycled water projects. We believe it is important that consistent statewide policy encourages the use of recycled water, while allowing for management that takes into account the needs and protections needed for the specific basin in which the recycling project occurs.

Over-arching Principles

While the considerations raised and the questions listed in the staff's report of March 20, 2007 identify several important issues that need to be addressed, we believe that these and other technical issues need to be approached keeping in mind three over-arching principles.

1) Recycled water is a resource, not a "waste discharge." Although the current state and federal water quality regulatory tools are designed to control sources of water pollution and protect water quality, water that is being recycled is fundamentally an extremely valuable natural resource, the beneficial use of which needs to be actively promoted. Water management policy needs to be articulated and water quality regulations administered with this end in sight.
2) Environmental risk and public benefit must be properly balanced. Good science and sound public policy objectives need to be advanced together to inform a useful and responsible recycled water policy.
3) The need for state government agencies and local governments to work collaboratively with a stakeholder-oriented approach. We support the SWRCB taking the lead to formulate this policy, but it needs to be done in constant consultation and collaboration with the Department of Health Services, the Department of Water Resources, and with the assistance of the Regional Boards, the U.S. Environmental Protection Agency and with local government water agencies, associations, and non-governmental organizations. We encourage the SWRCB manage this process inclusively, and take the time needed to formulate a draft policy that can be well-supported by all of these interests.

Issue Considerations

Although ACWA's Water Recycling Subcommittee has not yet addressed the issues posed in the staff's report, we do have the following preliminary thoughts for consideration.

Protecting Groundwater Basins from the Accumulation of Salt
It is important to protect groundwater basins from the accumulation of salt. However, it is important to realize that recycled water is not the only source of salt that impacts groundwater basins. Salt from potable water irrigation (which can be higher than ambient ground water) and from urban run-off and other sources also impact the basin. We support the idea of managing salt comprehensively on a basin-wide scale using a mass-balance approach, accounting for local conditions and water management objectives.

Groundwater Monitoring for Recycled Water Projects
Generally, groundwater monitoring should not be imposed on recycled water irrigation projects unless it can be demonstrated that the groundwater basin underlying those projects is of such special quality that specific monitoring is required. The treatment used to produce recycled water under California Department of Health Services Standards, Title 22, has been proven safe after many decades of implementation. If there is any concern that recycled water could affect the groundwater basin, the parameters of concern should be addressed in the waste discharge permit for the recycled water project.

Groundwater Recharge Reuse Projects
Groundwater recharge projects for indirect potable reuse are a particularly sensitive topic given public perception of this issue. There are many water quality parameters of concern

that are only now being identified (emerging contaminants). But water recycling project permits should not be unnecessarily burdened with monitoring and reporting requirements to collect basic scientific information about unregulated contaminants. It is more appropriate to address research and basic science needs through water quality monitoring programs (such as GAMA).

Anti-Degradation Policy

The anti-degradation policy (Resolution 68-16) can be administered to reduce the potential that it would be an impediment to water recycling. Uniform guidance and policy across the State about how to interpret the anti-degradation policy at local levels would help the implementation of recycled water projects.

Definitions of Maximum Benefit and Best Practical Treatment

Finally, the SWRCB should develop clear, usable and practical definitions of what constitutes "Maximum Benefit to the People of the State" and what is "Best Practical Treatment or Control" for water recycling projects. Having consistent definitions for these phrases will ensure that requirements for recycled water projects are consistently developed and applied throughout the State.

Thank you for soliciting comments on the development of this important policy. ACWA anticipates working cooperatively with the SWRCB, WateReuse and our mutual member organizations, other water industry segments, and other interested representatives of state agencies and non-governmental organizations to advance our collective interest in managing and protecting our precious water resources.

Sincerely,

original signed by

Chris Kapheim, Chair
Water Management Committee

original signed by

Bert Michalczyk, Chair
Recycled Water Subcommittee