Heal the Bay

1444 9th Street
Santa Monica CA 90401

ph 310 451 1550
fax 310 496 1902

info@healthebay.org
www.healthebay.org

February 15, 2008

Ms. Tam Doduc, Chair and Board Members
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814
Via Email: strategicplan@waterboards.ca.gov

Re: Strategic Plan Update 2008-2012

Dear Chair Doduc and State Board Members:

On behalf of Heal the Bay, we submit the following comments on the State Water Resource Control Board's ("SWRCB's") Draft Strategic Plan Update for 2008-2012 ("plan"). Over the past several months, we have been actively involved in the strategic planning process. We have reviewed each draft of the plan and have participated in the strategic plan workshops. The current plan contains significant improvements over previous drafts. In particular, we commend the SWRCB for including additional measurable goals and targets.

Despite these improvements, the draft plan still falls short of providing an adequate strategy for achieving the SWRCB's goals and overall mission. Heal the Bay identified a list of goals and actions we believe are critical additions to the draft plan (Attachment 1). To illustrate how these priorities fit into and enhance the current draft plan, we have incorporated our recommendations into a redlined version of the plan (Attachment 2). Although all of our comments and suggestions provided in the attachments would benefit the plan, we summarize our recommendations and concerns regarding TMDLs, stormwater, and updating the basin plans to address emerging challenges below.

TMDLs - The draft plan should include a comprehensive set of actions for restoring impaired waters. The TMDL goal and objective should be revised to apply to *all* impaired waters and to include an additional interim milestone. Any actions which inhibit or slow TMDL implementation should be removed from the plan.

Heal the Bay concurs with the SWRCB that restoring the state's impaired water bodies is a top priority (Priority 1 of the plan), and we strongly support the inclusion of measurable targets for cleaning up impaired water bodies (Goal 1). However, we have several recommendations for TMDL adoption and implementation, which we believe are necessary to ensure successful and timely restoration of the state's impaired waters.

Goal 1 should include all impaired water bodies in the state, not just those in 'priority' watersheds. Goal 1 states "Decrease the number of impaired water bodies in priority watersheds by 10 percent by 2015, working toward the target of all these water bodies fully supporting beneficial uses by 2030, focusing resources on TMDL adoption and implementation". The plan's narrative states that priority watersheds will be identified by the water boards. We believe prioritizing watersheds will be a highly

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay.org
www.healthebay.org

contentious and complex process, and would ultimately take agency resources away from TMDL adoption and implementation. The definition of "priority watersheds" will vary greatly among stakeholders. For instance, Heal the Bay would contend that Santa Monica Bay is a top priority watershed, as beachgoers continue to get sick from swimming in polluted waters. However, other stakeholders may have different priorities. Moreover, the plan does not include any actions to address the 'non-priority' watersheds. Revising Goal 1 to address all impaired waters will simplify the entire process and ensure that all impaired waters are addressed.

Goal 1 should include an interim milestone of 25% by 2015, an additional milestone of 50 percent by 2020, with a final target of 100% by 2025. Interim milestones are critical to ensuring the end target is met. As drafted, Goal 1 only includes one milestone of 10% by 2015. Seven more years to clean-up only 10% of impaired water bodies is extremely apathetic. Given the number of TMDLs currently being implemented, a much higher target should be readily attainable. Additionally, a 90% jump to the end target is too large without a check for progress. Finally, allowing another 22 years to pass before the state's waters are fully restored is far too long. The final target date should be no later than 2025.

Objective 1.1 should be revised to include measurable milestones and a final target for adoption of TMDLs for *all* impaired water bodies. Objective 1.1 states "Implement a statewide strategy to ……adopt and begin implementation of TMDLs for all 2006-listed water bodies in priority watershed by 2012". Again, the strategic plan must address all waters, not just those in priority watersheds, and multiple milestones and a clear final target are necessary components of a good strategic goal. We strongly recommend revising this to "Adopt TMDLS for 25% of the waterbody-pollutant combinations on the 2006 303(d) list by 2012, 50% by 2015, and 100% by 2020."

Add to the plan a statewide policy that requires incorporation of TMDL requirements into responsible party permits within two year of TMDL adoption. The plan's narrative acknowledges that a new challenge for the SWRCB and the water boards will be 'vigorous TMDL implementation' as more and more TMDLs are adopted. Currently, the plan does not include any actions that will help timely implementation of TMDL requirements once a TMDL is adopted. We recommend adding the following action to Goal 1: Action 1.1.5 Adopt a statewide policy by September 2008 that requires the incorporation of TMDL interim and final waste load allocations and all other implementation requirements into responsible party permits within 2 years of adoption of the TMDL.

Add an objective under Priority 1 that specifically addresses the state's impaired beaches. California beaches receive between 150-400 million visits to California beaches per year and generate billions of dollars in expenditures annually[i]. Yet, currently numerous beaches are impaired throughout the state. We recommend adding an objective for restoring beneficial uses to California beaches with interim milestones which employs a reference-based approach. (This approach is currently being implemented in several LA Region TMDLs, ensures cleanup is focused on human sources of fecal pollution and acknowledges that natural sources contribute to the

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay.org
www.healthebay.org

bacteriological quality of beaches.)

> Objective 1.2: Restore beneficial uses to California's beaches during dry-weather by 2013 and year-round by 2025.
>
> - Action1.2.1: Ensure 100% of all impaired beaches meet the state's marine beach bacteriological standards during year-round dry weather using a reference-based approach by 2013.
> - Action 1.2.2: 100% of all impaired beaches meet the state's marine beach bacteriological standards during wet weather using a reference-based approach by 2025 with interim targets of 25% of impaired beaches by 2015 and 50% of impaired beaches by 2020.

Actions that will inhibit TMDL implementation should be removed from the plan, including Objective 1.2 and corresponding Actions 1.2.1 and 1.2.2. The SWRCB has a legal obligation to implement TMDLs for all impaired water bodies. However, Objective 1.2 states "Develop and implement alternative regional or statewide strategies that result in water bodies meeting water quality standard without TMDLs by 2012." This objective appears to sanction no TMDL development for impaired water bodies if "alternative regional or statewide strategies" are being developed. While we agree that TMDLs should not be developed for water bodies that meet water quality standards, and we embrace efforts to develop new and successful strategies for water quality improvement, we strongly disagree with any strategy that slows or inhibits TMDL development or implementation. The SWRCB and regional water boards have had decades to implement "alternative strategies" to protect and cleanup the state's water bodies. As shown by the state's lengthy 303(d) list, there has been little progress toward successful development and implementation of these strategies. The SWRCB's strategic plan should not include actions which put legally required TMDL development on hold while unproven alternative strategies are pursued.

Action 1.2.1, the first action under objective 1.2, further promotes actions to derail the TMDL process by suggesting that water quality standards and beneficial uses can be changed to delist water bodies in lieu of cleanup. Action 1.2.1 states "When inappropriate impaired water body listings are identified, take actions to support delisting by 2012, such as revising standard when pollutants occur naturally or removing inappropriate designations of beneficial uses." "Inappropriate impaired water body listings" and "inappropriate designations of beneficial uses" are not defined anywhere in the plan and could be interpreted to apply to almost any listing or designation. Moreover, Action 1.2.1 seems to suggest that water quality standards can be easily changed. Obviously, no one supports the use of limited resources to develop TMDLs for water bodies that are not truly polluted, and listing errors should be corrected. However, delisting is not a significant action that will move the SWRCB toward achieving its goals and does not warrant an action within the agency's strategic plan.

<u>Stormwater - The strategic plan should include a specific goal for stormwater pollution, the largest source of pollution in the state, along with a comprehensive set of actions to support this goal.</u>

Objective 1.3 should be elevated to a goal and revised to include more aggressive interim targets and a final target. Clearly, aggressive cleanup of stormwater is a critical step toward

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay.org
www.healthebay.org

restoring impaired waters throughout the state. The strategic plan is inadequate without a specific goal aimed at stormwater pollution abatement. We recommend revising objective 1.3 to a comprehensive stormwater goal: Goal 2 "Manage urban runoff volume and reduce pollutant loadings by 25 percent by 2012 and 50 percent by 2020, and explore opportunities to augment localized water supply where applicable. Ensure stormwater discharges meet water quality standards by 2025".

The plan should call for actions to specifically address urban runoff BMP performance and the quality of stormwater from industry, construction, and municipal sources. The stormwater goal that we recommended should be supported by specific actions that will collectively achieve a significant reduction in stormwater pollution. At a minimum, we recommend the following actions:

- Action 1.3.4 Adopt guidelines for urban runoff BMP performance and design storm standards by December 2008, which apply to all new development and redevelopment and to BMPs.
- Action 1.3.5 Incorporate numeric effluent limits into the General Industrial Stormwater Permit this permit cycle.
- Action 1.3.6 Incorporate numeric effluent limits into the Construction General permit for pH, turbidity, and TSS.
- Action 1.3.7 Adopt a statewide policy by 2013 that requires regional boards to incorporate numeric effluent limits in municipal stormwater permits for nine priority pollutants including copper, lead, zinc, total phosphorus, total nitrogen, TSS, total PAHs, DDT and PCBs, and by 2018, incorporate numeric effluent limits for all priority pollutants.

<u>Basin Plan Update - The specific plan should include a specific objective (with supporting actions) to develop statewide policies that promote a high consistency bar and address arising challenges of water quality control.</u>

As discussed in the issue statement for Priorities 4 and 5, basin plans have not been revised to keep up with current scientific knowledge of water quality pollutants and impacts. In particular, toxicity is addressed inconsistently throughout the state, to the detriment of water quality in those regions with weaker requirements; impacts to biological community structure are typically neglected; impacts due to excess algae and nutrients are inadequately addressed; and the effects of emerging pollutants are largely unknown. To truly promote consistency throughout the state in a manner that improves water quality, rather than simply slow degradation, and to update the aging basin plans, we recommend adding the following to the strategic plan:

> Objective 5.3: Create policies to better address existing and arising challenges of water quality control in a manner that will enhance consistency among the regions in a way that will improve water quality throughout the state. The state will create policies that promote the type of consistency that builds on successful approaches adopted in other regions.

- Action 5.3.1 Adopt a statewide policy by September 2008 on toxicity that includes toxicity effluent limits for NPDES permits.
- Action 5.3.2 Adopt guidelines for the assessment of excess algal impairment, exotic species impairment, and biological communities structure impairment by the 2010 303(d)

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay.org
www.healthebay.org

data solicitation period.

- Action 5.3.3 Adopt a nutrient policy by 2010 that is based on chemical and biological factors (algal cover, chlorophyll-a, index of biological integrity, etc).
- Action 5.3.4 Adopt a policy to address emerging, endocrine disrupting, and pharmaceutical chemicals.

In conclusion, we believe the draft plan has been improved, however, significant additions are needed to transform the plan into a strong, comprehensive roadmap the SWRCB can follow to achieve its mission. In addition to the recommendations discussed in this letter, we have several other additions related to enforcement, marine waters, and other topics that have been included in Attachments 1 and 2. Please contact us if you have any questions or comments regarding our recommendations.

Sincerely,

Mitzy Taggart, D. Env.
Senior Staff Scientist

Kirsten James
Director of Water Quality

Attachment 1: Bulleted Priorities
Attachment 2: Redlines

[i] Given, S., Pendleton, L.H., Boehm, A. B. Regional public health cost estimates of contaminated coastal waters: A case study of gastroenteritis at Southern California beaches. 2006. *Environmental Science and Technology*. 40(16), 4851 – 4858

Attachment 1

Statewide Strategic Plan Goal Recommendations from Heal the Bay

TMDLs

- TMDLs adopted for 25% of waterbody-pollutant combinations on 2006 303(d) List by 2012
- TMDLs adopted for 50% of waterbody-pollutant combinations on 2006 303(d) List by 2015
- TMDLs adopted for 100% of waterbody-pollutant combinations on 2006 303(d) List by 2020
- Decrease the number of impaired water bodies by 25 percent by 2015.
- Decrease the number of impaired water bodies by 50 percent by 2020.
- Human health-related TMDLs should be prioritized
- All Basin Plan Amendments must include implementation plans with enforceable, numeric milestones for meeting final waste load allocations
- Interim and final waste load allocations and all other implementation plan requirements must be incorporated in the permits for responsible parties within 2 years of adoption of the TMDL.
- Eliminate the use of voluntary measures and waivers to control pollution to listed waters; all pollution to listed waters should be controlled by WDRs within two years of adoption of the TMDL.

Impairment Assessment

- Use of interim evaluation guidelines for excess algal growth and biological communities impairment using the "catastrophic impairment concept," as proposed in Heal the Bay's April 13, 2007 comment letter to EPA for the 2008 list.
- Adoption of guidelines for the assessment of excess algal impairment, exotic species impairment, and biological communities structure impairment by the 2010 data solicitation period.

Beach Water Quality Standards Attainment

- Year-round, dry-weather beach bacteria standards must be met at all beaches by 2013 using a reference-based approach.
- Wet-weather bacteria standards must be met at 25% of impaired beaches by 2015 using a reference-based approach.
- Wet-weather bacteria standards must be met at 50% of impaired beaches by 2020 using a reference-based approach.
- Wet-weather bacteria standards must be met by 2025 using a reference-based approach.

Water Quality Standards Attainment (Basin Plan, CTR and Ocean Plan constituents)

- Point sources must be in attainment of water quality standards
- Permits must prohibit discharges that cause or contribute to an exceedance of water quality standards, and enforcement must ensure that this prohibition is implemented.
- Stormwater discharges are required to be in attainment of water quality standards now. The State Board must ensure that this goal is actually met for all stormwater discharges by 2025.
- Non-stormwater discharges must meet water quality standards by 2025.
- The State Board must develop a process for exercising its own enforcement authority and begin to implement it by December 2008.

Enforcement

- Each Regional Board must have a full-time attorney on staff dedicated to enforcement.
- 100% of enforcement penalties should remain within the Region.
- A minimum of 20% of all penalties should be used to fund enforcement staff in the Region.

Toxicity Policy

- Adopt statewide policy on toxicity that includes toxicity effluent limits for NPDES permits by summer 2008.

Monitoring

- Standardized stormwater monitoring must be in place by December 2008.
- A self-funded, statewide water quality assessment program should be established that monitors ambient water quality and discharger impacts on water quality. The monitoring should be much more widespread (more locations) and frequent than current SWAMP efforts and should leverage existing monitoring programs at all agencies to the maximum extent possible as per SB 1070 (Kehoe 2006). The program should include bioassessment monitoring and toxicity monitoring. The program should also include monitoring of contaminants of concern that are not priority pollutants, including but not limited to emerging contaminants and Prop 65 contaminants.

Stormwater Performance Standards

- BMP performance and design standards in place by 2008 to move more quickly to water quality standards attainment
- Performance and design standards should apply to all new development and redevelopment and to watersheds where receiving water exceeds water quality standards.

- An example for trash would be a full capture device as defined in the LA River Trash TMDL.

Numeric Effluent Limits

- Stormwater permits must be modified as soon as possible to include numeric effluent limits based on the waste load allocations for all adopted TMDLs.
- The State Board should develop numeric effluent limits for pollutants associated with industrial sectors with the highest relative pollutant exposure and incorporate them into the Industrial General Permit. Specific recommendations can be found in Heal the Bay, NRDC, Lawyers for Clean Water, and Santa Monica Baykeeper September 1, 2006 letter to the State Board.
- The State Board should immediately include numeric effluent limits in the Construction General Permit for pH, turbidity, and TSS.
- After *5 years*, the Regional Boards should include numeric effluent limits in municipal stormwater permits for 9 Priority Pollutants that are major concerns and good indicators of other pollutants. Specifically, this initial set of numeric effluent limits should include copper, lead, zinc, total phosphorus, total nitrogen, TSS, total PAH, DDT and PCBs. Further, after *10 years*, the Regional Boards should incorporate numeric effluent limits for *all* Priority Pollutants.

Coastal Power Plants

- Phase out of once-through cooling by 2018

Water Reuse

- 25% of wastewater generated in California should be reused by 2020, consistent with state and federal clean water laws.
- Mandate the achievement of water reuse as part of the regulatory process.
- Include water reuse as a criterion for grand funding eligibility.

Marine Debris

- Develop a statewide Trash TMDL modeled after the Ballona Creek Trash TMDL.
- Coordinate and enforce upon any actions outlined in the OPC report that involve the State Board.

Nutrient Policy

- Adopt a nutrient policy by 2010 that is based on chemical and biological factors and not just human health standards.

Sediment

- 100% beneficial reuse of dredged contaminated sediments by 2020.

- Sediment quality objectives must be in place as soon as possible that identify hotspots and inform dredge/disposal management decisions.
- Prioritization of top 50 hotspots and remediation of at least 50 sites of which 20 are in the priority list by 2020.

On-site Sewage Treatment Systems

- Implement requirements of AB 885 as soon as possible.
- All on-site waste water treatment systems within 600 feet of an impaired water must meet advanced treatment requirements by 2012.

Attachment 2 – Heal the Bay suggested Redlines

Strategic Plan Update 2008-2012

D R A F T

January 25, 2008

Foreword

Since the release of the November 30, 2007 draft Strategic Plan Update: 2008-2012, extensive internal and external comment has been received on the content and the organization of the plan. In addition to board member discussion at the Water Quality Coordinating Committee meeting held on December 10-11, 2007, the draft plan has been posted for public review and comment and staff input forums have been held throughout the State. From minor wording recommendations to suggested "issue statement" rewrites, all of the comment was thoughtful and reflected a strong commitment to our water resource protection goals. We would especially like to thank the staff of the Water Boards for taking the time to review the draft plan and provide so many specific comments and solutions.

Based upon the comment received to date, we have restructured the draft plan to support a few, key environmental outcomes. This supports the Water Boards' use of a watershed framework and assists the Water Boards to focus on the results of our actions and not our programmatic structure. In addition to three identified environmental priorities, this draft plan highlights several planning priorities and organizational performance priorities.

As noted in the prior drafts, the proposed goals, objectives, and actions contained in this document were developed based on the input received at all of the various stakeholder forums held to inform the Water Boards on priorities for this strategic planning cycle. The input for this Update was extensive, including: a multi-day, statewide stakeholder summit; a statewide staff summit; and 10 Regional Public Forums designed to solicit local input and trends. All of this input is summarized in "Water Boards Strategic Planning: Summary of Stakeholder Input" and can be found at http://www.waterboards.ca.gov/strategicplan/January 17, 20082007update.html.

This update of the Water Boards' Strategic Plan (Update) is intended to cover the years 2008 – 2012. One year following the approval of the final Strategic Plan Update: 2008-2012, the Water Boards will initiate an annual assessment of progress to date under the goals, objectives, and actions of this update. This annual assessment will be used to identify any changes necessary to make the plan current and reflect lessons learned.

Opportunities for Public Comment

On February 6, 2008, the State Water Board will be holding a workshop to discuss the draft plan with the public. This workshop will be organized to facilitate small group discussion in lieu of time-limited testimony. If you are not able to participate in the February 6, 2008 workshop, comments and suggestions will be accepted through the close of the comment period on February 15, 2008.

For more information on the workshop, please follow this link: http://www.waterboards.ca.gov/strategicplan/docs/2008_2012/february_notice_strategicplan.pdf

California Water Boards' Strategic Plan Update – 2008-2012

TABLE OF CONTENTS

Drafts of the sections indicated by this arrow Included *are included in this document.*

California Water Boards' Strategic Plan Update – 2008-2012

Mission *[unchanged from 2001 Strategic Plan]*

To preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use, for the benefit of present and future generations.

Vision *[unchanged from 2001 Strategic Plan]*

A sustainable California made possible by clean water and water availability for both human uses and environmental resource protection.

Principles and Values *[new]*

Protection: We conduct analyses, make decisions, and take actions that ensure the protection, restoration, and enhancement of the public trust resources and beneficial uses of California's waters.

Integrity: We strive to earn the trust and respect of those we serve through commitment to truth, transparency, accountability, sound science in decision-making, and fairness, including a commitment to environmental justice.

Professionalism: We provide training and professional development opportunities for our staff and Board Members, support a work environment in which a highly capable staff can be innovative, and actively recruit, hire, and retain employees that further the Boards' mission.

Leadership: We strive to be a national and international leader in innovative approaches to water resource protection, and actively engage in collaborative partnerships to leverage funding, seek mutual solutions, and share information.

Collaboration: We share information and seek mutual solutions, including integrated approaches, to complex water challenges through collaboration, cooperation, data sharing, and partnerships within the Water Boards and with other agencies, jurisdictions, stakeholders, and the public.

Service: We serve the public as a whole through timely, efficient, and results-oriented regulatory approaches and processes, and providing assistance and support, including education and outreach.

Education/Outreach: We promote knowledge and awareness of the value of water resources, the importance of water rights and water quality protection, public engagement in the protection of water resources, and an understanding of the mission of the Water Boards.

Desired Conditions *[based on the goals from the 2001 Strategic Plan]*

The Water Boards' and Board organizations are effective, efficient, innovative, responsive, and transparent.

Surface waters are protected for drinking, fishing, swimming, and supporting healthy ecosystems and other beneficial uses, and groundwater is protected for drinking and other beneficial uses.

Water resources are fairly and equitably used and allocated consistent with public trust responsibilities, consideration of water quality and quantity, and the protection of beneficial uses.

The Water Boards, other agencies, organizations, stakeholders, and the public understand and contribute to each other's water resource protection efforts through collaboration, education, and outreach.

Water quality is comprehensively monitored to plan, carry out, and evaluate protection and restoration efforts.

Overarching Framework

The State and Regional Water Boards have broad responsibilities to protect water quality and balance competing demands on our water resources through programs that allocate water rights, adjudicate water right disputes, develop statewide and regional water quality control plans, and establish and implement water quality standards. The complexity of the Water Boards' programs is reflected in the shear number of mandated programs, the regional variation that exists throughout the State, and the fragmented nature of the regulatory oversight affecting water resources in general in the State. Water Board staff find themselves working on a wide range of concerns, such as the development of standards to protect water bodies, the approval of timber harvest plans, the approval of allowable corrective action reimbursements, and certifying whether or not hydropower plants meet water quality standards as they seek federal re-licensing. These are just a small number of the varied responsibilities of the Water Boards. This Strategic Plan Update 2008-2012 highlights a finite number of key actions that we will be taking, in addition to all of our ongoing program responsibilities, in response to the current state of our water resources and the trends that are affecting how we will manage this precious resource.

Our actions will continue to support the use of a watershed framework to most effectively manage and protect the State's water resources. Healthy watersheds, or drainage basins, that provide clean and adequate surface water and groundwater, and support healthy riparian and wetland habitat, are essential to support the State's resources and economic future. A watershed approach is hydrologically focused, recognizes the degree to which groundwater and surface water bodies are connected physically, recognizes the linkages between water quantity and water quality, and requires a comprehensive, long-term approach to water resources management that takes system interactions into account. State efforts alone cannot support a comprehensive watershed protection approach. Success depends on the integration of State, federal and local programs, most importantly local land use decisions made by local officials, stakeholder involvement, and the actions of millions of individuals, which, when taken together, can make enormous impacts.

In order to foster this approach within the Water Boards, we will use our staff and contract resources more effectively to leverage funding, encourage research and innovation, and enhance collaboration and partnerships with other agencies and stakeholders in order to achieve outcomes that are effective and long lasting. Our efforts will be challenged in the coming years by some trends that we can influence, and others that we cannot. Among them are the following:

1. Climate Change – It is widely recognized that changes in temperature and precipitation patterns will impact water availability and quality. Higher air temperatures lead to increases in water demand and changes in hydrologic conditions, resulting in drought and greater threats of wildfires, and reduced snow pack, earlier snowmelt, and a rise in sea level that may cause more seawater intrusion. Also, higher water temperatures reduce dissolved oxygen levels, which can have an adverse effect on aquatic life. Where river and lake levels fall, there will be less dilution of pollutants;

however, increased frequency and intensity of rainfall will produce more pollution and sedimentation due to runoff. In addition, more frequent and intense rainfall may overwhelm pollution control facilities that have been designed to handle sewage and stormwater runoff under assumptions anchored in historical rainfall patterns.

2. Demographic Trends – California continues to experience significant population growth, particularly in the Inland Empire and Central Valley. This growth places greater demands on groundwater supplies, impacts groundwater quality, and creates challenges for dealing with new or increased wastewater discharges, often to environments having limited assimilative capacity. Population growth also drives the need for new infrastructure or the updating of existing infrastructure. This need is particularly critical for small communities with very limited resources.

3. Decentralized Regulatory Framework – Protecting water resources has traditionally been addressed through separate programs and agencies. Many of the responsibilities involved, however, can only be met by examining the entire watershed, including the way that lands are managed and how they affect receiving waters. The absence of a shared watershed approach to decision-making can result in actions, within and among agencies, that do not address priority problems and their causes.

4. Aging Infrastructure – With a significant decline in funding to support the construction of publicly owned sewage treatment works, many facilities around the State are either failing or cannot provide adequate treatment of domestic and industrial waste-streams, let alone the management of non-conventional pollutants that may require advanced treatment levels. The U.S. Environmental Protection Agency's Clean Watersheds Needs Survey 2004 (released in January 2008) estimated California's wastewater infrastructure needs at $18.2 billion. Our aging sewer collection systems will eventually lead to failing sewer lines, reducing the ability of treatment facilities to adequately treat wastes and, more importantly, may result in raw sewage bypassing the treatment processes and/or overflowing the collection lines during peak flow and/or storm events. As water supply concerns increase throughout the State, there will be increased demand for water reuse and recycling to reduce the consumption of fresh water supply for non-domestic use. However, a significant volume of potential recycled water supply will not be available to our communities without improvements to our wastewater infrastructure to provide advanced treatment to wastewater.

5. Education – Over time, water management has become increasingly technical and complex. Some of the State's biggest water quality problems come from pollutants generated from everyday community activities. Public awareness of water management issues and their complexities can encourage changes in people's behaviors to improve and protect water quality. The Water Boards are committed to improving public awareness and building partnerships to promote grass roots efforts towards cleaner water.

Considering these trends and challenges, this Strategic Plan Update is designed to support functioning, sustainable watersheds where progress can be measured through

our basic environmental goals of healthy surface waters and groundwaters, and increasing reliance upon sustainable water supplies. We must consider the priority issues in each watershed to guide our efforts to properly allocate water, control discharges of pollutants, and protect watershed functionality. Furthermore, we have identified specific planning goals in response to fundamental water quality planning needs. Finally, to better achieve our environmental and planning priorities, we have established specific actions to improve our organizational performance.

Environmental Priorities *[new]*

1. Protect and Restore Surface Waters
2. Protect Groundwater
3. Promote Sustainable Water Supplies

Planning Priorities *[new]*

4. California Water Quality Plan
5. Basin Planning

Organizational Performance Priorities *[new]*

6. Transparency and Accountability
7. Consistency
8. Workforce Capacity

ENVIRONMENTAL PRIORITIES

The Water Boards' environmental priorities focus on strategies for achieving environmental outcomes associated with protecting the State's surface waters and groundwaters, and promoting sustainable water supplies. While the three environmental priorities are presented separately, we recognize the interrelationships between groundwaters and surface waters, and between water quality and quantity, and endeavor to address these priorities within a watershed framework.

PRIORITY 1. PROTECT AND RESTORE SURFACE WATERS

> Decrease the number of impaired water bodies ~~in priority watersheds~~ by 10 percent by 2015, working toward the target of all of these water bodies fully supporting beneficial uses by 2030, focusing resources on TMDL adoption and implementation.

Issue Statement

Issue Summary

The surface waters of the State, which include streams, lakes, wetlands, and coastal waters, support beneficial uses such as municipal supply for drinking, agricultural supply for crop irrigation, habitat for aquatic life and wildlife, and recreation. For a surface water body to support one or more beneficial uses, the water must be of sufficient quantity and meet established quality standards for pollutants. Pollutants can be from a single, discrete source (point source), such as a pipe or culvert, or be carried in diffuse runoff that covers a wide area (non-point source). Under the federal Clean Water Act, the Water Boards are required to identify water bodies that do not meet water quality standards and bring them into compliance. For these impaired waters, which the Water Boards identify on a Section 303(d) list, we must establish and implement a Total Maximum Daily Load (TMDL)[1]. A TMDL specifies the pollutant loading that a water body can receive and still meet water quality standards, allocates the pollutant loading that may be contributed by each source, and identifies strategies to return the impaired water body to compliance with standards. Compliance may be achieved by implementing the TMDL through existing Water Board regulatory programs, or by alternative strategies such as modifying inappropriate or outdated standards, or certifying local remediation programs.

Some water body impairments are due entirely or in part to a lack of adequate flows. The State Water Board's water rights system allows water to be diverted from a water source and be put to beneficial, non-wasteful use. Before issuing a water right, the State Water Board must find that "unappropriated" (unclaimed) water is available to supply the applicant, taking into account the water flows needed to remain in the stream (instream flows) for the protection of other beneficial uses, including fish and wildlife

[1] See Appendix _ for a status summary of TMDLs (July 2007). *[to be developed]*

habitat. Water right permits and licenses include terms that not only limit how much and during which season water can be diverted, but also require minimum flows to bypass the point of diversion to protect fish and wildlife habitat. A significant challenge for the State in ensuring that water is fairly and equitably allocated and used is that existing claimed water rights, in combination with current permitted water appropriations, amount to about five times California's average annual surface water supply[2]. Given that disparity, the problem facing the State is how to ensure that in stream flow requirements are met consistently, to the extent possible, with the needs of water rights holders. ~~equitably balance the needs of water rights holders and instream flow requirements.~~

Why this issue is so critical to the Water Boards and to our stakeholders

As California's population continues to grow and climate change impacts continue to occur, greater demands will be made on the available water supply, and threats to water quality from known and emerging pollutants will increase, potentially causing further impairments to the waters and their uses. When waters are impaired, the State is deprived of critical water supplies that it needs to support its growing population and vital economy. Shortages of water that supports all of its beneficial uses can have broad effects on a wide variety of stakeholders. Implementing a TMDL, which considers all sources and causes of impairment, and allocates responsibility for taking corrective measures, can have far reaching effects on a watershed and the involved stakeholders.

Water quality impairments are especially critical as current droughts and expected increases in climate change impacts further limit water supplies. Changes in hydrology, such as reduced snow pack and earlier snowmelt, result in less natural water storage, and more difficulties managing reservoirs and reservoir releases to maintain river temperatures that are cool enough for anadromous fish. Moreover, lower groundwater tables resulting from less recharge and/or more extractions can reduce or eliminate base flow in creeks, severely affecting aquatic habitat. The condition of California's fish populations reveals the need for action. Currently, 34 fish species are listed as threatened or endangered in California, including coastal and Central Valley runs of steelhead, spring-run and winter-run Central Valley Chinook salmon, a central coast population of coho salmon, Delta smelt, three species from the Colorado River, and several species from the Klamath Basin and southern deserts. Consequently, to ensure a reliable water supply and adequate aquatic habitat, California must manage water in ways that protect and restore the environment.

Long-range approaches to managing the problem

Ideally, all pollutants in a watershed would be addressed in a single TMDL and program of implementation. With this approach, a single process within an integrated watershed approach would inform the regulated community of their load reduction responsibilities for all pollutants at one time, and more effectively restore impaired water bodies.

[2] See Appendix _ for information on distribution of water rights by diversion amount (June 2007). *[to be developed]*

Where significant pollutant load reductions may not be adequate to achieve water quality standards because the water flows are too low, impairment may be best addressed by considering how much water is available. The nexus between water supply and water quality must be recognized when managing water and controlling pollution. For example, water right terms that provide additional stream flows for fish and wildlife usually improve water quality. Likewise, projects that detain non-point source runoff help protect stream water quality, but also decrease local stream flows. The State Water Board strives to use a collaborative watershed management approach to satisfy competing environmental, land use, and water use interests by taking advantage of opportunities within a watershed, such as joint development of local solutions to watershed-specific problems, cost sharing, and coordination of diversions. For example, instead of the State Water Board and other regulatory agencies establishing and enforcing stream flow standards through regulation of individual diversions, water users could agree to collectively manage their diversion schedules so that needed stream flows are maintained at particular points in a stream. They could also share costs associated with developing data and monitoring programs, and work together on projects to improve habitat at the most significant locations in the watershed. Extensive use of such approaches using coordination and collaboration, however, is currently beyond the Water Boards' resources.

To enhance successful surface water protection and restoration efforts, every violation should be met with a meaningful response from the Water Board and all significant violations should be addressed by formal enforcement action. Appropriate enforcement discourages violation of laws and instills public confidence. Within the Water Boards' regulatory framework, enforcement actions not only help to protect public health and the environment, but also help to create an "even playing field," ensuring that the regulated community and other water users who comply with the law are not placed at a competitive disadvantage by those who do not.

What the Water Boards can realistically do in the next five years

The complex nature of TMDL development and limited staff resources currently prevent the Water Boards from implementing a single TMDL solution. In addition, with TMDL adoptions already addressing one-third of the 2002 Section 303(d) listings (a listing is defined as a water body-pollutant pair, and therefore, a water body may have more than one listing), and efforts underway to address the remaining listings (updated in a 2006 list), a new challenge is vigorous TMDL implementation. While the science behind each pollutant may be unique, and the collection and evaluation of data to arrive at allocations for a myriad of sources is very complex, an integrated approach to TMDL implementation may be much more manageable. The Water Boards will continue to achieve economies of scale and scope by developing master implementation plans that accommodate a wide range of strategies for reducing loads (similar plans have already been developed in some regions). Development of these plans will be based on concepts that include implementation measures common to many TMDLs, methods to address multiple pollutants in a single watershed, and template components that can be used to address closely linked pollutants across multiple watersheds. Additionally, continuing to enhance more timely and effective use of our regulatory programs may

result in a significant improvement in water quality, potentially eliminating the need to develop a TMDL. The Water Boards will target priority watersheds for TMDL adoption and implementation taking into consideration court directives regarding TMDL development for specific water bodies.

Stormwater flows over urban landscapes, as well as dry-weather flows from urban areas, constitute a significant source of pollutants that contribute to water quality degradation in the State. Methods of reducing or mitigating stormwater/urban runoff need refinement to promote infrastructures that sustain water quality protection. The Central Coast Regional Water Board is leading our efforts to establish a Center that will provide interdisciplinary technical expertise in support of low-impact and other sustainable development techniques. Impediments associated with implementation of low-impact development and other sustainable development techniques will be evaluated.

When the State Water Board acts on a water right application, it must consider the minimum stream flow requirements recommended by the California Department of Fish and Game (DFG), which has the authority to conduct flow studies on priority streams. Because minimum stream flows have not yet been developed in many parts of the State, Governor Schwarzenegger signed Assembly Bill 2121 in 2004 (Water Code Section 1259.4), referred to as "North Coast Instream Flow Policy". This policy requires the State Water Board to adopt principles and guidelines for maintaining stream flows in north coast streams in the counties of Marin, Napa, Sonoma, Mendocino, and southern Humboldt. Currently, there are over 250 pending applications to appropriate water in these counties. The State Water Board will work with the Regional Water Boards, the DFG, and other watershed partners to develop minimum stream flow standards for priority water bodies. The principles and guidelines, along with estimates of water availability, will enable the State Water Board to determine whether to grant new permits for water rights.

The Water Boards will use all of its regulatory authorities and programs to address impaired water bodies, focusing on TMDL adoption and implementation that is consistent with the State Water Board's TMDL policy (Resolution 2005-0050). All of these approaches, combined with other elements of a revised TMDL implementation strategy and a focus on enforcement activities aimed at protecting and restoring surface waters, will maximize the effectiveness of available resources.

Priority 1. Protect and Restore Surface Waters – Goal, Objectives, and Actions

Goal 1. Decrease the number of impaired water bodies ~~in priority watersheds~~ by 25~~10~~ percent by 2015~~,~~ and 50 percent by 2020 working toward the target of all of these water bodies fully supporting beneficial uses by ~~2030~~2025, focusing resources on TMDL adoption and implementation.

Objective 1.1. Implement a statewide strategy to efficiently prepare, adopt, and implement TMDLs, which result in water bodies meeting water quality standards, to

adopt TMDLs for 25% of water body-pollutant combinations on the 2006 303(d) list by 2012, 50% by 2015, and 100% by 2020. ~~and begin implementation of TMDLs for all 2006-listed water bodies in priority watersheds by 2012.~~

Action 1.1.1. Document priority watersheds by December 2008**,** based on water issues of highest importance or concern, and focus resources to comprehensively address all impairment constituents in individual priority watersheds. The Bay-Delta and Klamath watersheds are recognized priorities and will continue to receive a high level of effort by the Water Boards and other agencies.

Action 1.1.2. Document by September 2008 the pollutants or groups of pollutants for which TMDLs can be developed and implemented on a watershed, regional, or statewide basis.

Action 1.1.3. Develop a standard, comprehensive TMDL implementation plan format by September 2008 that simplifies overlapping strategies for multiple pollutants and can be easily modified to incorporate additional implementation elements as new TMDLs are adopted.

Action 1.1.4. Where full TMDL implementation will not achieve water quality standards without flow augmentation in a given water body, consider water quantity factors in TMDLs and refer to State Water Board for consideration as a water rights issue by 2012.

Action 1.1.5 Adopt a statewide policy by September 2008 that requires the incorporation of TMDL interim and final waste load allocations and all other implementation requirements into responsible party permits within 2 years of adoption of the TMDL.

Action 1.1.6. Eliminate the use of voluntary measures and waivers to control pollution to listed waters; all pollution to listed waters should be controlled by WDRs within two years of adoption of the TMDL.

~~**Objective 1.2.** Develop and implement alternative regional or statewide strategies that result in water bodies meeting water quality standards without TMDLs by 2012.~~

~~**Action 1.2.1.** When inappropriate impaired water body listings are identified, take actions to support delisting by 2012, such as revising standards when pollutants occur naturally or removing inappropriate designations of beneficial uses.~~

~~**Action 1.2.2.** Document by 2009 implementation strategies with broad application that can be applied through policies and permits to restore water quality, and that may eliminate the need to develop a TMDL.~~

Objective 1.2 Restore beneficial uses to California's beaches during dry-weather by 2013 and year-round by 2025.

Action 1.2.1 Ensure 100% of all impaired beaches meet the state's marine beach bacteriological standards during year-round dry weather using a reference-based approach by 2013.

Action 1.2.2 Ensure 100% of all impaired beaches meet the state's marine beach bacteriological standards during wet weather using a reference-based approach by 2025 with interim targets of 25% of impaired beaches by 2015 and 50% of impaired beaches by 2020.

Objective 1.3. Manage urban runoff volume and reduce pollutant loadings by 2510 percent by 2012 and 50 percent by 2020, and explore opportunities to augment localized water supply where applicable. Ensure stormwater discharges meet water quality standards by 2025.

Comment [MT1]: This objective should be elevated to a goal since stormwater pollution is the biggest source of pollution in the state.

Action 1.3.1. Develop and adopt incentives and standard requirements, including monitoring, in stormwater permits, beginning with the general construction permit by December 2008, and in water quality certifications by December 2009 that encourage or require local jurisdictions to implement LID/Green Infrastructure and, as appropriate, infiltration, capture, and treatment of stormwater for reuse.

Action 1.3.2. Establish a Low-Impact Development Center in the Central Coast Region by July 2009 to develop, deliver, and adapt (as needed) LID information, and to provide expertise that can be tailored to the needs of site-specific projects in the Central Coast Region. The LID Center will assist the Water Boards in identifying impediments to stormwater reuse and will be a pilot for longer range expansion of centers throughout the State.

Action 1.3.3. Collaborate with interested stakeholders to identify, prioritize for action, and begin to address by December 2010 impediments associated with the implementation of LID and stormwater reuse techniques.

Action 1.3.4 As per AB 739 (Laird 2007) and bond measure provisions, leverage Prop 1E stormwater funding and other bond funding for construction (highways, roads, housing, schools) to minimize stormwater runoff, maximize stormwater capture and use low-impact development techniques.

Action 1.3.54 Adopt guidelines for urban runoff BMP performance and design storm standards by December ~~2008 which apply to all new development and redevelopment and to BMPs~~2008, which apply to all new development and redevelopment and to BMPs.

Action 1.3.65 Incorporate numeric effluent limits into the General Industrial Stormwater Permit this permit cycle.

Action 1.3.76 Incorporate numeric effluent limits into the Construction General permit for pH, turbidity, and TSS.

Action 1.3.87 Adopt a statewide policy by 2013 that requires regional boards to incorporate numeric effluent limits in municipal stormwater permits for nine priority pollutants including copper, lead, zinc, total phosphorus, total nitrogen,

TSS, total PAHs, DDT and PCBs, and by 2018, incorporate numeric effluent limits for all priority pollutants.

Objective 1.4. Ensure that adequate stream flows are available for the protection of fish and wildlife habitat by December 2012 while meeting the need for diversions of water for other uses.

Action 1.4.1. The State and Regional Water Boards will work with the DFG and other watershed partners to (a) develop by September 2008 a preliminary list of priority California streams for minimum stream flow standards development (taking into consideration the streams affected by the North Coast Instream Flow Policy), and (b) develop three minimum stream flow proposals that will be brought before the State Water Board for consideration by December 2010 and possible implementation by December 2011.

Action 1.4.2. The State Water Board and a Regional Water Board will develop a pilot water quality and water rights watershed management approach by December 2011 that will integrate the Regional Water Board's surface and ground water quality knowledge and data with the State Water Board's water rights permitting considerations and decisions.

Action 1.4.3. For priority streams where minimum flow standards have been developed and are not being met, determine by December 2012 what State Water Board-mandated actions (such as conservation, recycling, and limiting amount of water diverted) are necessary to protect the public trust by preventing waste or unreasonable uses or methods of diversion.

Objective 1.5. Take appropriate enforcement actions and innovative approaches as needed to protect and restore all surface waters.

Action 1.5.1. Reduce the backlog of facilities that are subject to mandatory minimum penalties by 20 percent annually beginning in calendar year 2009.

Action 1.5.2. The State and Regional Water Boards will work collaboratively to pilot enforcement programs and other innovative approaches to protect and restore surface water quality, initially focusing on the Central Valley region to deter non-compliance with the Irrigated Lands Regulatory Program by August 2008

Action 1.5.3~~2~~ Adopt a statewide policy that each regional board must have a full-time attorney on staff dedicated to enforcement.

Action 1.5.4~~3~~ Adopt a statewide policy that 100% of enforcement penalties should remain within the region, and that a minimum of 20% of all penalties should be used to fund enforcement staff in the region.

Action 1.5.5 Identify water quality issue areas where enforcement has been neglected or ignored (i.e. toxicity) and develop needed enforcement programs.

Action 1.5.6 Develop a process for exercising the State Board's own enforcement authority and begin to implement it by December 2008.

Objective 1.6 Ensure all on-site wastewater treatment systems located within 600 feet of an impaired waterbody must meet advanced treatment requirements of AB885 by 2012.

Goal 2 Ensure monitoring of surface waters is conducted to adequately support assessment of water quality and sources.

Objective 2.1 Establish a self-funded, widespread statewide water quality assessment program to monitoring ambient water quality and discharger impacts.

Action 2.1.1 Expand the SWAMP to include more locations, sample more frequently, include bioassessment, and monitor for toxicity, emerging contaminants and Prop. 65 contaminants.

Action 2.1.2 Fully leverage existing monitoring at other agencies, as per SB 1070 (Kehoe), to develop a comprehensive view on statewide trends on water quality, including tracking clean water to prevent degradation.

Objective 2.2 Standardize stormwater monitoring- by December 2008~~by the SB72 deadline~~.

Goal 3 Restore beneficial uses to coastal waters.

Objective 3.1 Remediate top contaminated sediments hotspots throughout the state.

Action 3.1.1 Prioritize the top 50 hotspots in the state and remediate a minimum of 50 sites of which 20 are those that were prioritized by 2020.

Action 3.1.2 Adopt sediment quality objectives that will inform dredge/disposal management decisions.

Action 3.1.3 Achieve 100% beneficial reuse of contaminated dredged sediments by 2020.

Objective 3.2 Phase out once-through cooling by 2018.

Objective 3.3 Focus efforts on source reduction and elimination of plastic items that are the most abundant forms of marine debris such as bottle caps, plastic bags, and polystyrene.

Action 3.3.1 Develop a statewide Trash TMDL modeled after the Ballona Creek Trash TMDL.

Formatted: Indent: Left: 0.5"

Action 3.3.2 Coordinate with and enforce upon any actions outlined in the OPC report that involve the agency.

Action 3.3.3 Seek innovative methods to reduce plastic waste such as working with plastic product manufacturers to re-engineer products.

PRIORITY 2. PROTECT GROUNDWATER

Improve groundwater quality by reducing waste discharges to groundwater in high use basins by 25 percent by 2020 and remediating at least 50 percent of contaminated basins by 2020.

Issue Statement

Issue Summary

Saltwater intrusion and discharges of waste have impacted or impaired the water quality and beneficial uses of many groundwater basins throughout the State, making their use for drinking water or for additional storage and supply, a particular challenge. Polluted groundwater may require treatment to render it safe for consumption.

The Water Boards have implemented legislative mandates to protect groundwater quality that includes four elements: (1) prevention of petroleum releases from underground storage tanks through prescriptive containment standards; (2) remediation at sites where discharges of waste threaten water quality; (3) permitting of ongoing discharges of waste, at facilities such as landfills and municipal wastewater treatment plants; and (4) monitoring of groundwater at regulated sites (permitted or remediation) and statewide to assess ambient groundwater quality. Despite these efforts, groundwater quality is poor in many areas due to diffuse sources and urban, agricultural and industrial activities that have not been rigorously regulated by the Water Boards in the past. Intensive land use always generates large quantities of waste, including salt and nutrient loads. Some of these wastes are intentionally discharged and some are incidentally discharged. These wastes can and do degrade groundwater quality.

Why this issue is so critical to the Water Boards and to our stakeholders

There is increasing reliance on groundwater to meet the water supply demands of a growing population. Concerns regarding the long-term viability of the Delta for drinking water supply, increased attention to restoring habitat, water bodies ecologically impacted by water diversions, and current growth projections have all contributed to the increased importance and reliance on groundwater for drinking and other beneficial uses. The threat of climate change and prolonged droughts forecast the need for additional groundwater storage to capture precipitation runoff. Wastes from intensive land use, such as urbanization and agriculture, will continue to degrade groundwater even with the most effective management practices. Groundwater basins with intensive land use tend to have the highest groundwater use. Protecting groundwater quality in high use groundwater basins is one of the Water Board's highest priorities.

Long-range approaches to managing the problem

The rate of degradation of groundwater quality can be slowed by improving, expanding, and enforcing existing regulatory programs, including prevention, permitting, and remediation. A significant gap remains to be filled where known groundwater degradation exists (other than for petroleum related contamination) and yet there is no

one person or business that can be identified as responsible for cleanup. In order for these "orphan" sites to be addressed, a funding mechanism to pay for investigation and cleanup must be identified. Furthermore, education programs may have a role in preventing and slowing groundwater degradation.

Comprehensive groundwater management, coupled with sustainable land use practices that maximize natural recharge and regulate controllable discharges, can slow the rate of groundwater degradation due to intensive land use. Comprehensive salt management plans for those groundwater basins where increasing salinity threatens beneficial uses must be developed. However, considering the long-term buildup of pollutants (e.g., decades of application of agricultural fertilizers and imported irrigation water containing salts), wellhead treatment may be needed as an element of a basin's management where groundwater is used for drinking water supply.

Groundwater management generally requires that legally-formed entities subject to regulation be assigned responsibility for management of the resource. The duties of these entities would be to ensure that extraction, inflow, pollutant input, and pollutant output are managed to result in a sustainable situation that protects beneficial uses. To carry out these duties, groundwater management entities would need to rely on a comprehensive data management system.

What the Water Boards can realistically do in the next five years

The Water Boards will continue to improve their regulatory programs regarding dischargers, both point and non-point, to ensure pollutant discharge rates are protective of groundwater quality, and enhance their capability to link water quality and pollutant loading to specific land use activities and physical conditions. Improvements will also be made to our funding programs to more directly demonstrate the relationship of reimbursement funding for cleanups, including cleanup of groundwater, to environmental progress.

The Water Boards also intend to target restoration of groundwater resources that are currently used, or that may be used in the future, as sources of drinking water whenever such restorations are practicable and attainable.

The Water Boards can play an important leadership role to encourage local management of groundwater resources, integrating and sharing water quality information with local agencies, and building awareness of important groundwater protection concepts. The Department of Water Resources' Bulletin 118, 2003 Update, summarizes approaches and tools available for local groundwater management.

Priority 2. Protect Groundwater – Goal, Objectives, and Actions

Goal 2. Improve groundwater quality by reducing waste discharges to groundwater in high use basins by 25 percent by 2020 and remediating at least 50 percent of contaminated basins by 2020.

Objective 2.1. Implement an integrated groundwater protection approach by 2012 to protect groundwater in high-use basins that (a) evaluates and regulates activities that impact or have the potential to impact beneficial uses; (b) recognizes the effects of groundwater and surface water interactions on groundwater quality and quantity; and (c) encourages and facilitates local management of groundwater resources.

Action 2.1.1. The State Water Board will prepare and post a map by March 2008 that identifies high-use groundwater basins.

Action 2.1.2. The Regional Water Boards will encourage local entities to initiate the development of regional strategies to protect high-use groundwater basis.

Action 2.1.3. If no regional strategy has been developed for a high-use groundwater basin by 2012, and a Regional Water Board concludes that limits on extractions are appropriate to improve groundwater quality, the Regional Water Board shall request that the State Water Board initiate a groundwater adjudication, in accordance with Water Code Section 2100, to protect groundwater quality.

Action 2.1.4. Where ~~a decline in groundwater quality is due to~~ unregulated discharges contribute to or have the potential to contribute to a decline in groundwater quality, the Regional Water Boards will regulate those discharges, such as those to agricultural lands, through WDRs to protect groundwater quality.

Objective 2.2. Improve the quality of groundwater for communities that rely on groundwater contaminated by anthropogenic sources.

Action 2.2.1. By December 2008, in collaboration with the Department of Public Health, identify these communities.

Action 2.2.2. By September 2009, in collaboration with the Department of Water Resources, and other involved agencies, identify and take action to address improperly destroyed, improperly abandoned or improperly sealed wells in these communities that may serve as potential pathways for contaminants to reach groundwater.

Action 2.2.3. Offer assistance to the Department of Public Health to identify potential strategies to ensure that these communities will have a reliable drinking water supply in the future.

Action 2.2.4. Upon identification of discharges contributing to the contamination of groundwater relied on by these communities, implement appropriate regulatory or enforcement action.

Objective 2.3. Ensure that all waste discharge requirements (WDRs) include appropriate measures to protect groundwater quality.

Action 2.3.1. Issue new or revised WDRs to high priority facilities, based on threat to groundwater quality and complexity of facility, as necessary to protect water quality.

Objective 2.4. Improve the effectiveness of the Underground Storage Tank program in cleaning up contamination that may impact groundwater.

Action 2.4.1. By September 2009, develop an approach that will link Underground Storage Tank reimbursements with measurable environmental progress.

PRIORITY 3. PROMOTE SUSTAINABLE WATER SUPPLIES

Increase sustainable water supplies available to meet existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015.

Issue Statement

Issue Summary

Demand and competition for the California's limited water supplies will increase as our population continues to grow and climate change impacts occur. Over the past 50 years, California has met much of its increasing water needs primarily through a network of water storage and conveyance facilities, groundwater development and more recently, by emphasizing the gains to be achieved through water use efficiency. Efficiency has traditionally embraced several strategies, including water conservation and recycling of treated wastewater. Efficiently managing our water is the critical purpose of an integrated watershed management approach that leverages actions among and between water supply and water quality, flood protection and stormwater management, wastewater and recycled water, and watershed management and habitat protection and restoration interests.

To ensure that present and future generations have sufficient water when and where it is needed, the Water Boards have encouraged water use efficiency practices by: (1) providing funding in the form of grants and loans; (2) conducting, advocating for and funding research; and (3) supporting the updating of Best Management Practices (BMPs) for conservation by urban and agricultural consumers. Most efforts to date have relied upon voluntary participation. Based on projections of the 2002 Recycled Water Task Force, and reflected in the California Water Plan Update of 2005, the State has the potential to recycle an additional 1,400,000 to 1,670,000 acre-feet per year of water beyond 2002 levels by the year 2030 (the 2002 recycled water deliveries were 525,000 acre-feet per year). This is about 23 percent of the available municipal wastewater. Additionally, the California Water Plan Update of 2005 estimates that by the year 2030, the State has the potential to save an additional 1,200,000 to 2,100,000 acre-feet per year of water through urban water conservation (2002 water conservation numbers are not available as water conservation is measured relative to demand).

Why this issue is so critical to the Water Boards and to our stakeholders

Despite the many positive efforts made to date by State and federal funding agencies to promote and fund water use efficiency projects, the State is struggling to meet its goals as defined in the California Water Plan. For recycled water alone, we will likely not meet the established 2010 goal of 1,000,000 acre-feet per year of recycled water use. Stakeholders are concerned about how increasing wastewater recycling can occur without adverse economic impacts. There is also broad-based skepticism about the State's ability to manage our water supply and reliability needs while maintaining our commitment of environmental stewardship.

Long-range approaches to managing the problem

As we move into the future, we must broaden our definition of efficient water use to include innovative measures that will address the changes in occurrence and quality of water expected to be brought on by increasing population and climate change. The implementation of a comprehensive water use efficiency strategy would leverage the authorities and expertise of all agencies with responsibility for water management in California. This strategy must include clarification of the rules and practices, such as the requirements of the Department of Public Health, to facilitate stormwater reuse. A continuum of incentives could be developed to maximize water efficiencies, with clear triggers signaling a transition from voluntary to mandatory provisions and measures.

We should prioritize and target available funding, and quantify gaps between needs and available funding (it is estimated that $300 million annually in grants and low interest loans would be necessary to achieve the additional 1,400,000 to 1,670,000 acre-feet per year of recycled water potential by the year 2030). As our water imbalance grows, water supply augmentation projects will become more expensive and less tenable, and recycled water projects will become more economical and practical.

Achieving California's recycled water potential also will require greater public acceptance and confidence that the use of recycled water is safe for irrigation of edible crops and, with treatment, for drinking water. In many instances, recycled wastewater is a lower risk in terms of pathogens than irrigation water from current surface sources (the former is treated, disinfected, and monitored, while the latter may not have any of those safeguards). The Water Boards should lead and coordinate water quality research and data improvement efforts designed to expand the efficient use of water while preserving its quality, such as identifying effective technologies and practices for addressing emerging chemicals of concern, salinity management, virus removal, microbiological safety of water used on edible crops, and other environmental concerns. In addition, we should address the economics and effective marketing of recycled water.

What the Water Boards can realistically do in the next five years

Achieving sustainable water supplies is a multi-faceted, multi-organizational endeavor, and the Water Boards have continuing opportunities to work with others to encourage, support, and require water conservation, water recycling, and water reuse efforts. This includes developing innovative incentives and applying little used regulatory authorities. Collaborations and partnerships are needed with the water supply and wastewater communities to reinvigorate recycling and conservation efforts. We will engage the municipal and agricultural supply communities, the CALFED agencies, and wastewater dischargers to move conservation and recycling efforts forward. Where appropriate, the Water Boards will apply regulatory pressures through wastewater and water rights permits to motivate progress in these areas. Additional opportunities to increase usable local water supplies by capturing and treating stormwater runoff to meet increasing water demand will also be explored.

Priority 3. Promote Sustainable Water Supplies – Goal, Objectives, and Actions

Goal 3. Increase sustainable water supplies available to meet existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015.

Objective 3.1. Promote implementation of best management practices (BMPs), and improve compliance with requirements, for water conservation.

Action 3.1.1. Work with the CALFED agencies, California Urban Water Conservation Council (CUWCC), Agricultural Water Management Council (AWMC), and other stakeholders to assess, ~~and~~ update and ensure implementation of urban BMPs, the recommendations of the Landscape Task Force, and efficient water management practices (EWMPs) for agriculture, as appropriate.

Action 3.1.2. Work with the Department of Water Resources to ensure effective implementation by urban water suppliers of water demand management measures required as a condition for receiving financial assistance, and to take action, where appropriate, to limit waste and unreasonable use of water.

Action 3.1.3. Validate existing water conservation plans and actions required by the terms of the water rights permit or license issued by the State Water Board.

Objective 3.2. Increase water recycling of wastewater by 25 percent by 2020 in a manner protective of groundwater and surface water quality, consistent with the requirements of state and federal water quality laws, by focusing on discharged flows to water bodies from which the water is not easily recovered. Mandate the achievement of water reuse targets as part of the regulatory process.

Action 3.2.1. Require the development, implementation and enforcement of Water Recycling Plans, through the permit/WDR renewal cycle, for wastewater treatment plants located in areas using imported water supplies, consistent with the requirements of state and federal water quality laws. Prioritize implementation of the plans for those plants that discharge to water bodies from which the water is not easily recovered.

Action 3.2.2 Commission a study of the disincentives for use of recycled water versus potable water that are built into the potable water system that includes recommendations to address those disincentives. This should include an analysis of economic subsidies built into the potable water system that allow potable water to be used for activities (e.g. irrigation) that may result in surface or groundwater contamination from pollutants in the potable water (e.g. salts).

Formatted: Font: Not Bold

Objective 3.3. Increase the acceptance and promote the reuse of stormwater as a locally available water supply.

Action 3.3.1. Work with industrial dischargers, stormwater agencies, the Department of Water Resources, and water suppliers to develop ~~a~~ stormwater reuse and recharge targets by September 2009 that takes into account data regarding stormwater flows, locations, and timing.

Action 3.3.2. Include water reuse as a criterion for grant funding eligibility. Those agencies that do not meet stated water reuse targets in permits should not be eligible for grant funding. If an application for funding occurs prior to approval of water reuse targets, the agency will only be eligible for funding if it reuses 10 percent or more of its annual treated flow of disinfected advanced or tertiary treated wastewater.

PLANNING PRIORITIES

The Water Boards' planning priorities focus on establishing and improving planning procedures and documents that form the basis of our regulatory framework, and guide our efforts in achieving our mission.

PRIORITY 4. CALIFORNIA WATER QUALITY PLAN

PRIORITY 5. BASIN PLANNING

> The California Water Plan addresses water quality protection and restoration, and describes how the relationship between water supply and water quality is affected across all water supply management strategies, through the development of a California Water Quality Plan.
>
> Basin Plans are consistently organized by 2012, and updated by 2015, to provide a clear structure that readily conveys the beneficial uses, water quality objectives, goals for watersheds, plans for achieving those goals, and monitoring to inform and adjust the plans.

Issue Statement

Issue Summary

California's Water Code declares the ***California Water Plan*** (Water Plan) as the master plan to guide the orderly and coordinated control, protection, conservation, development, management and efficient utilization of the water resources of the State. Water management activities will often have unavoidable environmental consequences, and the link between water supply management and water quality are inseparable.

Water supply and use are inherently linked to water quality. Various water management actions, such as transfers, water use efficiency, water recycling, conjunctive use of aquifers, storage and conveyance, Delta operations, land fallowing, and hydroelectric power, potentially have water quality impacts. Alternatively, degraded water quality can limit, or make very expensive, some water supply uses or options because the water must be pretreated. Furthermore, water managers increasingly recognize that the water quality of various water supplies needs to be matched with its eventual use and potential treatment. (From the California Water Plan Update 2005).

Regional Water Quality Control Plans (Basin Plans), and the statewide water quality control plans and policies, such as the Ocean Plan and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, are the cornerstone of California's regulatory programs and are part of the Water Plan. They contain the regulations to protect water quality. These plans describe the beneficial uses that each water body supports, including drinking, swimming, fishing, protection of aquatic life, and agricultural irrigation, among others. The Basin Plans contain the water quality objectives, policies, and programs of

implementation for the protection of surface and ground waters, and are the key basis for our regulatory actions.

The Basin Plans and statewide plans are reviewed on a three-year cycle, known as the triennial review process (required by the federal Clean Water Act), where new science, new water quality problems, and new or changed laws are considered. Based on regional priorities, the Basin Plans are amended to reflect specific changes and local concerns. However, because these amendments are resource and time intensive, what can be addressed is generally constrained to the highest priority needs.

Why this issue is so critical to the Water Boards and to our stakeholders

The Basin Plans, originally written in the 1970s, and periodically updated, currently do not fully reflect the Water Boards' fast-growing body of knowledge and evolving regulatory approaches to regional and statewide concerns such as stormwater, non-point sources (e.g., irrigated agriculture), and biological integrity. In addition, they generally do not consider the impacts of climate change which will further complicate groundwater-surface water interactions. Basin Plans that clarify regulatory approaches and the application of regulations to different water body types and situations may reduce or eliminate excessively long permit discussions, appeals, remands, and litigation. The last coordinated update of the Basin Plans occurred in the mid 1990s.

Beyond their uses for regulatory program implementation, it is unclear how the Basin Plans and statewide plans inform the water supply strategies in the Water Plan. Water quality must be fully integrated into any decision making process regarding current and future water supply decisions.

Long-range approaches to managing the problem

To better address the existing and emerging challenges of water quality control, we envision a comprehensive, statewide update of the Basin Plans contained in a California Water Quality Plan that fully addresses the priorities for each region including:

- Incorporating the most up-to-date changes in State and federal laws;
- Reviewing and updating beneficial uses, and designating tiered aquatic life uses;
- Establishing biological objectives;
- Establishing numeric objectives for groundwater;
- Evaluating numeric objectives to ensure appropriate limits are used in permits;
- Developing long-term salt management plans for protection of surface and groundwater;
- Addressing emerging pollutants; and
- Using watershed, stream, and wetland restoration, low impact development, and "green" stormwater projects as practical means to achieve objectives and protect beneficial uses.

What the Water Boards can realistically do in the next five years

To readily identify statewide and regional water quality protection requirements in considering water supply issues, we will collaborate with the Department of Water Resources, who is responsible for updating the Water Plan, to integrate the Basin Plans and other statewide water quality control plans and policies into a comprehensive Water Quality Plan. The Water Quality Plan will comprise a key element of the Water Plan. To address Basin Plan specific issues outlined above, we will update all of the Basin Plans in a format that is clear, user friendly, and that allows for more efficient future amendments. The Water Boards will coordinate regional triennial reviews, and work collaboratively with stakeholders as part of the triennial review process to ensure that updated Basin Plans address water quality issues of mutual concern.

Priority 4. California Water Quality Plan – Goal, Objectives, and Actions

Goal. 4. The California Water Plan addresses water quality protection and restoration and describes how the relationship between water supply and water quality is affected across all water supply management strategies, through the development of a California Water Quality Plan.

Objective 4.1: Prepare a comprehensive California Water Quality Plan that can serve as a key component of the Water Plan, to guide the State's protection and restoration of water quality through statewide policies and plans, regional water quality control plans (Basin Plans), and the potential effects of climate change on water quality.

Action 4.1.1: Develop, by June 2009, the internal processes and mechanisms that will be used to determine how the Basin Plans and the statewide plans and policies, will be integrated to create the California Water Quality Plan that identifies statewide water quality priorities.

Action 4.1.2: Develop a Memorandum of Understanding with the Department of Water Resources, by December 2009, to establish the coordination necessary for the development and incorporation of the California Water Quality Plan into the California Water Plan to identify the State's integrated priorities for water quality and water supply.

Objective 4.2: As an element of the California Water Quality Plan, describe the connections between water quality, water quantity, and climate change to better understand the effect of climate change on our water resources, specifically water quality, and to identify and prioritize actions that can help reduce greenhouse gases and address adaptation needs.

Action 4.2.1: Build a collaborative partnership of federal, State, and local interests to examine the connections between water quality, water quantity, and climate change on the coast from central California to the Oregon border, to pilot approaches that could be expanded for regional or statewide application for discussion in the California Water Quality Plan.

Priority 5. Basin Planning – Goal, Objectives, and Actions

Goal 5: Basin Plans are consistently organized by 2012, and updated by 2015, to provide a clear structure that readily conveys the beneficial uses, water quality objectives, goals for watersheds, plans for achieving those goals, and monitoring to inform and adjust the plans.

Objective 5.1: Organize and conduct collaborative processes to synthesize and assess statewide and regional needs for a statewide Basin Plan update.

Action 5.1.1: Convene a statewide stakeholder group by August 2008 that will provide input and advice on defining the scope and approach for future Basin Plan updates. Each Regional Water Board shall determine the need to convene a group of local interests as an element of this process.

Action 5.1.2: Use stakeholder group input and advice to develop a statewide Basin Plan format to guide future updates so that each plan is consistently organized, understandable, and paper- and web-based.

Action 5.1.3: Use stakeholder group input and advice to develop a paper and web-based user's guide and regulatory compendium to the Basin Plans to assist Water Board staff, the regulated community, and the public in navigating the Basin Plans and locating the State's water quality regulations.

Objective 5.2: Achieve near-term priority Basin Plan amendment needs by collaborating in third-party initiated processes that incorporate Water Board requirements and stakeholder interests. An example is the Santa Ana Regional Water Board's Basin Plan amendment process initiated with funding assistance from stakeholders.

Action 5.2.1: Work with external stakeholders to identify and prioritize opportunities to provide resources to address basin planning issues of mutual concern determined through the regular triennial review process to update the Basin Plans.

Action 5.2.1 Work with the academic community and other experts to peer review work-products developed by third-parties.

Objective 5.3: Create policies to better address existing and arising challenges of water quality control in a manner that will enhance consistency among the regions around the most environmentally protective policies being implemented by a region and improve water quality throughout the state. The state will create a policy that promotes the type of consistency that builds on successful approaches adopted in other regions.

Formatted: Indent: Left: 0"

Action 5.3.1 Adopt a statewide policy by September 2008 on toxicity that includes toxicity effluent limits for NPDES permits.

Formatted: Indent: Left: 0.5", First line: 0"

Action 5.3.2 Adopt guidelines for the assessment of excess algal impairment, exotic species impairment, and biological communities structure impairment by the 2010 303(d) data solicitation period.

Action 5.3.3 Adopt a nutrient policy by 2010 that is based on chemical and biological factors (algal cover, chlorophyll-a, index of biological integrity, etc).

Action 5.3.4 Adopt a policy to address emerging, endocrine disrupting, and pharmaceutical chemicals.

ORGANIZATIONAL PERFORMANCE PRIORITIES

The Water Boards' organizational priorities focus on strategies for improving effectiveness, efficiency, transparency, and accountability in conducting our and communicating with the public we serve. These priorities are interrelated and are linked to successfully addressing our environmental and planning priorities.

PRIORITY 6. TRANSPARENCY AND ACCOUNTABILITY

> Improve transparency and accountability by ensuring that Water Board goals and actions are clear and accessible, by demonstrating and explaining results achieved with respect to the goals and resources available and by enhancing and improving accessibility of data and information.

Issue Statement

Issue Summary

Performance-based organizations demonstrate results for internal and external stakeholders. Organizations that are committed to performance set goals based on the problems they want to solve, establish performance measures with targets for those goals, gather data and information to evaluate progress, results, and strategies, and broadly communicate this information. By providing information on our programs, processes, and environmental results, transparency and accountability are enhanced – accountability for progress towards meeting our mission and goals, for how we spend our limited resources, and for what we do and do not do with those resources.

Making this information available in a publicly accessible manner builds public confidence in both the decision-makers and the science behind the decisions. It also translates to timely delivery of information. Data that is accessible and functional can also enhance the delivery of government services, and lead to greater public interest and involvement. Within most agencies, organizational divisions lead to isolation of functions and data. Online availability of information allows an organization to pull its data together, thus breaking down or integrating internal "silos."

Why this issue is so critical to the Water Boards and to our stakeholders

The mandates affecting water quality and water allocation continue to grow. Implementation of new requirements often results from the redirection of resources away from core programs. This leaves little time or ability to evaluate our ongoing programs and improve them as changes in science and technology occur. Many stakeholders and our own staff are frustrated with processes that seem overly time-consuming or repetitive, and may not achieve the desired results in today's environment. The complexity of regulation has also challenged our traditional regional approach to setting and implementing standards with many stakeholders requesting greater consistency in process and application of requirements.

Impacts to our water quality and water supply resulting from changes in land use, changes in climate, population growth, and other trends has led to the expectation that the Water Boards will collaborate with other agencies to present a comprehensive picture of the health of our watersheds. Much of the information provided by the Water Boards has been developed to fulfill specific statutory requirements or gathered in conjunction with a special project and is not comprehensive, routinely updated, or available in an easily accessible or searchable format. While the Water Boards have been acknowledged for their data collection efforts, such as the Surface Water Ambient Monitoring Program (SWAMP) and the Groundwater Ambient Monitoring Assessment (GAMA) program, there is considerable concern that the necessary steps to integrate and coordinate existing information (on groundwater in particular) has not progressed. The lack of linkages between various types and sources of data also means that the information cannot be compared or easily understood and results in redundant, incomplete data systems that are difficult to maintain and update. Improvements to the Water Boards' California Integrated Water Quality System (CIWQS) database are intended to address many of these issues.

Long-range approaches to managing the problem

The Water Boards are working towards a results-based regulatory system that promotes efficiency and effectiveness, organizational and environmental results, and transparency and accountability. Collaboration with the public, regulated and scientific communities, and other stakeholders to establish specific and realistic goals will assist us in directing our efforts towards those activities that demonstrate the most benefit for California's water resources. This includes identifying programs that are no longer effective or beneficial.

The data that is developed by our programs should be accessible and seamlessly displayed in a comprehensive water quality data network that allows regulators, the regulated community, and the public the ability to examine the health of any watershed in the State, identify data gaps, and download data sets for further use or analysis. The process established by Senate Bill 1070 (Kehoe, 2006), which establishes a California Water Quality Monitoring Council, is an excellent approach to resolving problems associated with surface water data availability and use over the long term. The Ground Water Monitoring Act of 2001, which created a groundwater assessment program, needs to be reinvigorated in order to achieve integration of data to provide a comprehensive baseline of groundwater quality and use for each groundwater basin/sub-basin in the State. The ability to network and integrate all State water quality information into a comprehensive data set will go a long way towards improving transparency and accountability, as well as providing a basis for decisions and policies.

What the Water Boards can realistically do in the next five years

Because the Water Boards do not have the resources to address all problems, we must set priorities to identify where we will focus our attention. We will establish and use measures of environmental and Water Board performance, along with adequate data and data systems, to track and report progress in meeting our goals and targets,

manage and evaluate our programs and activities, and improve efficiencies in work processes.

Implementation of the CIWQS' Review Panel's recommendations will mark a significant milestone in the Water Boards' ability to manage its core regulatory program data. Improving the relationships between the Water Boards' data systems and making them available in a more accessible and functional format will enhance routine reporting of programs and performance.

Priority 6. Transparency and Accountability – Goal, Objectives, and Actions

Goal 6: Improve transparency and accountability by ensuring that Water Board goals and actions are clear and accessible, by demonstrating and explaining results achieved with respect to the goals and resources available, and by enhancing and improving accessibility of data and information.

Objective 6.1. Improve the current Water Board systems, programs, functions, and core business processes to enhance effective and consistent implementation of Water Board plans and policies, and State and federal laws and regulations, and to reduce processing time and costs.

Action 6.1.1. Prepare by December 2008 a documented inventory of Water Board programs and functions, including where and how resources are assigned, to establish a baseline for determining changes that are needed to improve effectiveness and efficiency, beginning with the enforcement program.

Action 6.1.2. Prepare and implement performance-based plans by 2010 that include goals and priorities, measures with targets, demonstration of results, and methods for the evaluation of strategies, beginning with the enforcement program.

Action 6.1.3. Evaluate, reengineer, and implement improvements to Water Board processes, beginning with (a) a comprehensive evaluation of process and timelines by December 2008 as a first step in streamlining the water rights application processing, and (b) the formats and processes of our NPDES and other permitting programs by December 2009, resulting in permits that allow for readily identified violations and prompt enforcement actions.

Action 6.1.4. Develop a plan to implement an organization and program review process at the State Water Board by September 2008, including criteria for selection of programs to review, to evaluate each Regional Water Board's and the State Water Board's performance with respect to statewide consistency, efficiency, and effectiveness, and the appropriate implementation of laws and policies. Complete two reviews by September 2009 for discussion and consideration by the State Water Board.

Objective 6.2. Enhance the Water Boards' water quality data systems, and the accessibility of water body and facility data and information on the Internet, by December 2009.

Action 6.2.1. Implement all of the Review Panel's recommendations for CIWQS, and prioritize the development of quality assurance/quality control (QA/QC) systems by July 2008 to improve data quality and ensure accurate data entry associated with the Water Boards' regulatory programs.

Action 6.2.2. Advance implementation of the Groundwater Quality Monitoring Act of 2001 (AB 599, Liu), by December 2008, through the development of online public reports and query tools.

Action 6.2.3. Use on-line mapping technology to present all relevant Water Board data by December 2009.

Objective 6.3. Develop recommendations for a publicly-accessible, statewide network to comprehensively display all water quality data used for planning and decision-making purposes within the State by January 2010, as described in SB 1070 (Kehoe, 2006).

Action 6.3.1. Work with the California Water Quality Monitoring Council to determine the scope and content of the data network by June 2009.

Objective 6.4. Create a portal by December 2008 for the public on the State Water Board's home page to access web-based water quality information for surface, ground, and coastal waters, and a web-based water quality report card, that will communicate to the public the quality of the State's waters, the performance of the Water Boards in protecting those waters, and other Water Board-related issues that affect the public.

Action 6.4.1. Develop annual web-based reports on the effectiveness of Water Board programs, beginning with a report on compliance and enforcement activities by January 2009, which track performance measures that are established in performance plans, and allows the Water Boards to adjust priorities and strategies for the coming year.

PRIORITY 7. CONSISTENCY

Enhance consistency across the Water Boards to ensure our processes are effective, efficient, and predictable, and to promote fair and equitable application of the laws, regulations, policies, and procedures.

Issue Statement

Issue Summary

The Water Boards operate in a dynamic environment and our organization has allowed regional variation within a coordinated framework. Individual Water Boards find innovative and creative solutions to meet the challenges that arise.

However, over the years, some Water Board stakeholders have expressed frustration with a lack of consistency among the Boards. For example, stakeholders and the Legislature have named consistency in enforcement of the State's water quality laws as one of the most important issues facing the Water Boards. The public participation process and stormwater regulation are two additional high priority areas identified by stakeholders. Such concerns have led to recommendations intended to "fix" the problem, including legislative proposals. The Water Quality Coordinating Committee (WQCC), a leadership body of the Water Boards, has discussed the consistency issue at some length. As part of that discussion, the WQCC made the following findings in the fall of 2006:

- Stakeholders engaged with more than one region have reported that some decisions are inconsistent
- Regional Boards exist because some variation is expected and needed to respond to different geography and local conditions
- Consistency in application of law and policy is valuable
- On questions of law and overarching policy, the State Water Board should provide guidance and build a basic policy framework from which the regions can appropriately tailor action
- Water Boards are committed to developing procedures and policies to minimize inappropriate inconsistency

Why this issue is so critical to the Water Boards and to our stakeholders

California's diverse geography, landscape, population, social, cultural, and economic context prevent a "one size fits all" approach to managing natural resources. At the same time, consistency can help to ensure that stakeholders receive equitable treatment, and that they understand and work towards common water quality and water rights goals, and that outcomes can be evaluated in meaningful ways. Nearly all stakeholders embrace the importance of some variation to address unique regional/local needs yet want the benefits of consistent interpretation and enforcement of laws, regulations, and policies. Finding this balance is the challenge.

Long-range approaches to managing the problem

Long-range approaches mirror those of the five-year goal (below), just on an expanded scale. They include effective communication of program direction and functional procedures so they may be applied consistently, a method of continuously assessing core functions so that approaches to consistency are adaptive and remain effective, and a process to monitor outcomes.

What the Water Boards can realistically do in the next five years

In the next five years, the Water Boards will target areas where consistency has been raised as a concern, initiate actions to achieve warranted consistency, and ensure these improvements are implemented. First actions are in response to external and internal input addressing inappropriate inconsistencies in the areas of enforcement, storm water, and public participation. A commitment to ongoing review and input will maintain a focus on consistency as an area of concern for the Water Boards.

Priority 7. Consistency – Goal, Objectives, and Actions

Goal 7. Enhance consistency across the Water Boards, on an ongoing basis, to ensure our processes are effective, efficient, and predictable, and to promote fair and equitable application of the laws, regulations, policies, and procedures.

Objective 7.1. Target consistency improvements in process and policy for Water Board enforcement activities to deter non-compliance.

Action 7.1.1. Adopt and implement, by October 2008, revisions to the Water Quality Enforcement Policy to, at a minimum, ensure consistently strong enforcement response, assessment of penalties for all Class 1 violations, inclusion of enforcement processes specific to waiver holders and non-filers, and assessment of liability in excess of the economic gain obtained as a result of non-compliance. The policy will also establish a clear, consistent statewide approach to the prioritization of enforcement targets, based on threats and adverse impacts to beneficial uses, including the identification of Class I violations.

Action 7.1.2. Develop uniform hearing procedures for contested enforcement matters, and templates for enforcement activities, including but not limited to subpoenas, administrative discovery, and investigation reports, by October 2008.

Action 7.1.3. Complete re-organization/re-direction of staff to separate enforcement personnel from permitting personnel by December 2009, and instill internal process for review of draft WDRs for enforceability beginning in July 2008.

Objective 7.2 Target consistency improvements in program delivery identified through past input, and solicit input to identify consistency issues as they arise.

Action 7.2.1. Evaluate the feasibility of developing a statewide stormwater permit for Phase I municipal separate storm sewer systems (MS4s) by July 2009 that addresses inconsistencies in the municipal stormwater permitting program. Phase I MS4s serve a population of 100,000 or more.

Action 7.2.2. Implement, by December 2008, public participation policies, procedures, or guidelines, as appropriate, to improve Water Board procedures for adopting policies and regulatory actions.

Action 7.2.3. The State and Regional Water Boards will establish as a standing item at its biannual WQCC meetings the identification and prioritization of areas of inconsistency to be addressed, including where statewide policy is needed.

Action 7.2.4. Establish a pilot program for interagency agreements between Regional Water Boards when more than one Regional Water Board has jurisdiction over a regulated facility to ensure effective and equitable actions.

Action 7.2.5 Direct State and Regional Water Board roundtables to discuss inconsistencies among regions. These findings shall be reported to the State Water Board on an annual basis, along with recommendations for improving those regions that are less effective or efficient at protecting the environment and meeting legislative mandates.

Action 7.2.5 Adopt a precautionary approach that ensures that new regional board decisions are equal to or more protective than previously adopted regional board decisions on the same subject matter.

PRIORITY 8. WORKFORCE CAPACITY

> Ensure that the Water Boards have access to information and expertise, including employees with appropriate knowledge and skills, needed to effectively and efficiently carry out the Water Boards' mission.

Issue Statement

Issue Summary

Building workforce capacity is about assessing the employee resources needed to meet the Water Boards' current and future program requirements and taking the actions to meet these needs. It is estimated that 36 percent of Water Board rank-and-file employees and over 60 percent of our managers are eligible to retire. Filling these positions, especially as limited compensation levels are faced, will be challenging. The actions that will need to be taken to help workforce needs are: (1) recruiting to fill important vacancies; (2) growing leadership capacity, and promoting individual development and advancement; (3) providing direction and guidance for allocating staffing resources; (4) providing a clear rationale for linking expenditures for training, career counseling, and recruiting efforts to resource needs; and (5) maintaining or improving a diversified workforce. It is important to recognize that all government agencies, not just the Water Boards, have had an increasingly difficult time attracting and retaining employees.

In addition to recruitment and training, the Water Boards are challenged in making important historical and scientific information available in support of the day-to-day work. With our numerous core and niche programs and mandates, the retirement of even a single employee can result in the loss of a tremendous amount of critical information.

Why this issue is so critical to the Water Boards and to our stakeholders

The expectations of and the demand for what the Water Boards do is increasing as the State's population continues to grow and greater pressures on the quality and quantity of the State's water supply are felt. Based on a recently prepared workforce report for the Water Boards, it is certain that as the demand for services grows, the agency will encounter increased competition for prospective and current employees, and experience an increasing number of employees retiring, which may result in a massive "brain drain." Of importance to the regulated community, turnover in both key rank-and-file staff and management positions can lead to longer processing times, incomplete technical reviews, and redundant approvals. All of these concerns contribute to apprehension about the Water Boards' ability to fulfill future critical mandates and be in a position to lead efforts to address emerging issues.

Long-range approaches to managing the problem

The Water Boards' focus will be on developing people with the capacity to fill leadership positions in the organization. This can be done by growing the leadership arm of the Water Boards' Training Academy, encouraging individual advancement, and providing increased opportunities for employees to accept new challenges. The existing classification systems within State service, especially in the environmental specialties, should be updated to address overlapping job responsibilities with uneven compensation and to create career paths that do not just move up a specialized ladder, but across the organization. Many prospective employees are unaware of what the Water Boards do, how much of an impact the agency has on water resources, and the high profile nature of water. Increasing the Water Boards' presence and reputation, and resurrecting our leadership role in water quality, will help boost recruitment efforts and attract a larger pool of qualified applicants.

What the Water Boards can realistically do in the next five years

While the State classification structure is influenced by much more than the Water Boards, in the shorter term, the future skills of our employees can be developed through job experiences and assignments. We will improve the development of the succession pool of candidates by defining core competencies (e.g., stream science, NPDES permit writing, etc.), and developing the courses and information needed for staff to adequately handle the issues facing the Water Boards.

Opportunities for cross-program sharing of people and information will be encouraged. A system will be set in place for employees to request help from subject matter experts for guidance and consultation on work-related issues as they arise. We will improve the accessibility of scientific and non-scientific information for employees to help ensure that they have the resources needed to effectively and efficiently perform their job duties.

Recruitment will be an ongoing need for the Water Boards. It is imperative that we are able to continuously recruit qualified candidates to backfill vacancies that occur, whether from retirement or expected turnover. By establishing and utilizing a comprehensive recruitment plan, the Water Boards will be able to attract the most suitable applicants.

The Water Boards can also benefit from collaborative partnerships with other governmental and non-governmental agencies, thus increasing the resources and information available to support decision-making. For example, the Water Boards have had some success in leveraging inspection resources by working with Agriculture Commissioners, local building and grading inspectors, and wastewater treatment plant pre-treatment inspectors. Collaboration of this magnitude can lead to better decision-making, improved results and efficiencies, and the leveraging of assets for increasing field presence or obtaining water-related technical and regional information.

Priority 8. Workforce Capacity -- Goal, Objectives, and Actions

Goal 8. Ensure that the Water Boards have access to information and expertise, including employees with appropriate knowledge and skills, needed to effectively and efficiently carry out the Water Boards' mission.

Objective 8.1. Enhance professional development opportunities for Water Board employees to increase their knowledge, skills, and expertise.

Action 8.1.1. Through the Water Boards' Training Academy, assess training needs by December 2008, and develop and deliver courses and core curricula to meet those needs, beginning with enforcement and stormwater regulation by March 2009.

Action 8.1.2. Develop a rotational program for both rank-and-file and supervisory/managerial classifications that fosters inter-program and inter-government collaboration by June 2009.

Objective 8.2. Expand recruitment efforts of qualified professionals to fill vacancies in the Water Boards' workforce.

Action 8.2.1. By June 2008, establish a recruitment plan to guide the recruitment efforts for attracting the most qualified prospective employees possible, including the development and delivery of a training program for State and Regional Water Board recruiters by December 2008.

Action 8.2.2. Create strategic partnerships with the State's university systems that offer in degree and certificate programs applicable to the work of the Water Boards by December 2009.

Objective 8.3. Ensure information, including scientific research and developing science related to emerging pollutants, is easily accessible by staff to achieve optimal job performance.

Action 8.3.1. Prepare an inventory of completed and ongoing Water Board and Water Board-funded research by June 2008, and use this information to establish a research agenda to identify, prioritize, and guide the funding of future research needs by December 2008 (funded research will be conducted by the Water Boards, our partners, and other research entities).

Action 8.3.2. Establish an electronic repository by June 2008 for the sharing of best practices, models, templates, plans, polices, research, and other information.

Objective 8.4. Leverage resources and expertise through innovative approaches, such as teams and partnerships with governmental and non-governmental organizations, to enhance existing workforce capacity and field presence, and provide information to help target Water Board efforts.

Action 8.4.1. Develop partnerships with other agencies that have environmental, regulatory enforcement authority to address threats to water quality, beginning with a pilot enforcement program, in collaboration with DFG, focused on stormwater concerns in the Los Angeles region by December 2008.

Action 8.4.2. Establish a mechanism to identify, and make available to any Water Board organization, State and Regional Water Board subject matter experts that will consult with and assist staff by August 2008.