

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF JULY 11, 2012**  
Prepared June 20, 2012

**ITEM NUMBER:** 3  
**SUBJECT:** Offsite Meeting  
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**This Action:** Information/Discussion

- A. Priorities and status of work in Priority Areas**
- B. Performance Measures**
- C. Advocacy and Recommendations**

**A. Priorities and status of work in Priority Areas**

The Central Coast Water Board has created a "Vision of Healthy Watersheds" to focus its implementation of state and federal water quality laws to best protect and enhance our watersheds. The term "Healthy Watersheds" seems simple enough. However, there are several aspects to Healthy Watersheds that are of importance to the Regional Board. Our vision of a healthy watershed is one that supports all beneficial uses of the ground and surface water, and where human activities restore, enhance, and protect the watershed, not degrade it. If we can attain our three goals of clean groundwater, healthy aquatic habitat, and sustainable land management, we will have healthy watersheds. We strive to maximize our effectiveness in attaining healthy watersheds by setting measurable goals and specific objectives, implementing the objectives, tracking our progress toward achieving them, and adapting to the feedback our tracking provides.<sup>1</sup> Not all of these goals and objectives can be top priority. The Central Coast Regional Board staffing level is over 20% less than it was just about three years ago, and the Governor proposes an additional 5% reduction in hours and pay for 2012/2013. We need to have well defined priorities to utilize our time in the most effective manner to achieve our goals.

This staff report provides a summary of our priorities and a very brief, partial list of our actions in 2012 on these priorities.

Our highest priorities (these are in priority order):

1. Preventing and Correcting Threats to Human Health
2. Preventing and Correcting Degradation of Aquatic Habitat
3. Preventing Degradation of Hydrologic Processes
4. Preventing/Reversing Seawater Intrusion
5. Preventing Further Degradation of Groundwater Basins from Salts

For each of the priorities above we are identifying or already taking specific actions, as briefly summarized below.

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<sup>1</sup> See December 11, 2009 letter from the Regional Water Board, attached

***Preventing and Correcting Threats to Human Health***

The main threats to human health are contaminants in drinking water, such as perchlorate (Olin and other sites in the northern part of our region) and nitrate (contaminated domestic drinking water wells in agriculture areas). Nitrate in groundwater is by far the most widespread threat to human health in our Region. On rare occasion, vapor intrusion into buildings at chemical spill sites is a public health issue, which receives top priority by our site cleanup staff. Sewage spills can also be a threat to public health. Arsenic exceeds the maximum contaminant level in groundwater in a few areas in our region. Actions we are taking now include:

1. Investigating the extent of nitrate in groundwater and the number and location of rural residents who are at risk, and ensuring they are notified of the risk and their options. We have initiated the notification of rural residents in the Salinas Valley area in a cooperative effort with the State Board's Groundwater Ambient Monitoring Assessment program (GAMA), and as a project within the Central Coast Water Board's newly approved Groundwater Assessment and Protection (GAP) Program. We are following up with additional notifications, which may exceed 10,000 residents. Some residents may be exposed to nitrate levels that are fifteen times the drinking water standard. Our notification (in cooperation with the County Environmental Health Department) includes information on sampling and analysis, nitrate treatment options, and health effects, so that home owners can make informed decisions. The State Water Board has set up a website to provide this type of information (also linked to our website), which we will also be using in our notification efforts.
2. Implementing the Water Board's Irrigated Agriculture Order to minimize fertilizer application rates, and requirements for groundwater sampling and reporting so that the Water Board can prioritize and focus on areas where the threat to public health is greatest. Also, ensuring waste discharge requirements for municipalities with discharge to groundwater are not causing significant nitrate degradation, even though municipalities are a very minor source of nitrate compared to irrigated agriculture.
3. Investigating specific cases of nitrate contamination in domestic and public supply wells, including areas such as farm labor camps, rural enclaves, small communities, and groups of houses or single houses with several residents. As staff has reported to the Board in previous enforcement reports, a handful of these investigations are underway and are in various stages. However, our groundwater basin quality data and various reports (most recently the SBX2 U.C. Davis report) point toward the potential for a large number of such contamination cases – probably many more than staff can address in the near term. Consequently, staff needs to prioritize within this highest of priority categories. Our preliminary outline of priorities for addressing contaminated water wells includes:
  - a. Are users drinking the contaminated well water? That is, contaminated wells that are mitigated through treatment, blending, or other on-going means are a lower priority.
  - b. Concentration –for wells that exceed the Maximum Contaminant Level (MCL), the ones with higher concentrations will be higher priority.
  - c. Number of users
  - d. Combination of b. and c. If a well has five times the MCL and five families use the water, it could be a higher priority than a well that 1.5 times the MCL and twelve families use the water.
  - e. Is the source(s) readily identifiable?

Staff is also looking into various means of redirecting current staff as well as obtaining outside assistance for the highest priority cases.

4. Developing a Basin Plan amendment to prohibit or limit certain high risk activities that cause pollution in groundwater recharge areas (including over-pumping that causes seawater intrusion), and prohibit or limit activities that prevent groundwater recharge.
5. Improving our working relationship with local county health agencies and the State Department of Public Health to promptly address threats to human health, including exposure due to pesticides in fish, inhalation of vapors at groundwater cleanup sites, and contamination in drinking water.
6. We have been very involved in the State Board's consideration of the SB2X UC Davis report (principal investigator Dr. Thomas Harter), including participation by our Board Member Dr. Hunter and our staff at the State Board workshop on the report on May 23, 2012. We discussed the need for testing of smaller wells (wells with fewer than 15 connections rarely have sampling and analysis requirements) in threatened groundwater areas. The State Board will be considering recommendations to make to the legislature, as required by the Senate Bill. Legislation to require testing for the smaller wells may be the best method for obtaining this water quality/public health information for residents using wells with degraded groundwater.
7. Continuing with petroleum and chemical leak site cleanup oversight using priority systems similar to this more general list – first priority to public health threats (i.e., via inhalation and drinking water supply), and threats to more usable groundwater (including landfills with leachate).

#### ***Preventing and Correcting Degradation of Aquatic Habitat***

Aquatic habitat, such as riparian areas and wetlands and their buffers zones are critically important to water quality, water supply, and the overall biological and physical health of watersheds. The loss of aquatic habitat in our Region has been increasing in some areas, especially in agriculture areas due to misconceptions about food safety. Reduction of base flow in some creeks and rivers also stresses aquatic habitat due to inadequate minimum flow conditions (e.g., Carmel River). Some of the actions we are taking in 2012 include:

1. Implementing minimum requirements for aquatic habitat protection in the Water Board's Irrigated Agriculture Order.
2. Targeting more severe toxicity problems with more aggressive follow-up.
3. Including requirements for aquatic habitat protection in Total Maximum Daily Load Orders.
4. Including requirements for aquatic habitat protection in renewed municipal stormwater permits (Salinas). We already included habitat protection measures in our recent approvals of Phase II municipalities' stormwater management plans.
5. Developing a Basin Plan amendment to prohibit or limit certain activities that degrade aquatic habitat and cause subsequent discharges that degrade water quality and beneficial uses.
6. Prioritizing our oversight of projects that would potentially degrade aquatic habitat, such as construction projects in riparian areas regulated under our 401 Certification program.
7. Prioritizing enforcement actions for illegal degradation of riparian areas and wetlands.
8. Ensuring permits for discharge to surface waters are protective.
9. Requiring use of Low Impact Development (LID, see following section) to increase recharge in urban areas, which can help to maintain higher water table levels for shallow

groundwater, increase groundwater flow to creeks, and improve creeks' low flow conditions for healthier aquatic habitat. Agricultural Order implementation of improved irrigation efficiency, with consequent reduced groundwater depletion, will also accomplish this improvement in some areas.

### ***Preventing Degradation of Hydrologic Processes***

Hydrologic processes include stream and river flow, surface runoff, erosion and sedimentation, recharge of groundwater, water circulation, and groundwater and surface water interaction. These processes are intricately linked to water quality and watershed health. Hydrologic processes are degraded by certain aspects of land use activities, such as overgrazing, urbanization and increasing impervious surfaces, channelization, and devegetation. Degradation can occur on a massive, watershed scale. Some of the actions we are taking in 2012 include:

1. Continuing our work with the Low Impact Development Initiative program's "Joint Effort" project. This is a collaborative project among the Water Board, Low Impact Development Initiative staff, nationally leading scientists, and municipalities. The project team developed a methodology and post-construction hydromodification control requirements, based on local conditions that local agencies will use to design development projects. Staff has updated the Board four times on this project (two agenda items and two Executive Officer Report updates), most recently at the March Board meeting in San Luis Obispo, and will bring the Post-Construction Hydromodification Control Requirements developed through the Joint Effort to the Board in September for consideration.
2. Including requirements for hydromodification control in permit renewals (City of Salinas in May 2012), and continuing to help municipalities and consultants improve project designs to include low impact development design principles.
3. Recommending that the State Board include adequate requirements for hydromodification control in their draft Phase II general stormwater permit.
4. Continuing implementation of two Low Impact Development grants through our Low Impact Develop Initiative (LIDI) program. One project is in Paso Robles and will design and build a "Clean Streets" project, similar to the nationally recognized Clean Streets projects in Seattle. The other project is in Atascadero and will design and build a parking lot with low impact development design principles. LIDI has been conducting planning and design tasks for both projects (design is about 90% complete). These projects will provide state of the art designs that others can not only use LID, but hopefully will inspire others to use LID, and will help Water Board staff develop more effective regulatory requirements in the future.

### ***Preventing/Reversing Seawater Intrusion***

Seawater intrusion is one of the most serious water quality issues we face on the Central Coast, resulting in enormous costs to the public as alternative fresh water supplies must be developed in intruded areas. In some areas, such as Los Osos, the rate of salt water intrusion is increasing dramatically due to over pumping in the intruded zone. Although the Regional Water Boards do not have authority to regulate pumping of groundwater (the State Water Board can exercise this authority through adjudication), Regional Water Board staff have acted to address the issue<sup>2</sup>. Some actions we are taking in 2012 include:

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<sup>2</sup> We worked extensively with the Monterey Regional agency and its consultants on first the planning and design (we were grant coordinators) of the Monterey Regional system and later, on the companion recycling project, which now beneficially

1. Coordinating with State Board staff on possible actions in seawater intrusion areas. Regional Water Board staff began in 2010-11 to propose actions directly to the State Board (Regional actions as well as statewide general permits) and Regional staff can use the same approach to address sea water intrusion issues. Staff wrote two letters to the Pajaro Valley Water Management Agency calling for better progress in the seawater intrusion battle, and met with the Agency and the City of Watsonville to discuss progress. We invited the PVWMA to provide an update to the Board on the overdraft situation (February 2012). We emphasized irrigation efficiency improvements as having major potential for reducing overdraft (such efficiency improvements are likely the lowest \$/acre-foot source of water for overdraft reduction), and the PVWMA has focused additional attention on this issue.
2. Pursuing actions by local agencies and purveyors in Los Osos to reduce salt water intrusion. On May 31, 2012, the Executive Officer sent a letter to the court asking for deadlines for the Interlocutory Stipulated Judgment (ISJ) group to produce the Basin Management Plan.
3. Working with local agencies to develop salt and nutrient management plans that include seawater intrusion in applicable basins for Board consideration by Feb 2014.
4. Working on hydromodification controls, as discussed above, to protect and increase groundwater recharge.
5. Working toward a Basin Plan Amendment to protect groundwater recharge areas, discussed in the first section, above, number 4.
6. Requiring improved irrigation efficiency in the Agricultural Order which should reduce pumping in the Salinas and Pajaro Valleys.

#### ***Preventing Further Degradation of Groundwater Basins from Salts***

1. Working with local agencies to develop salt and nutrient management plans for Board consideration by Feb 2014.
2. Implementing requirements to reduce salt loading (via irrigation and fertilizer efficiency improvements), with schedules and compliance monitoring, in the Irrigated Agriculture Order.
3. Including salt limits in individual waste discharge requirements.

#### **B. Performance Measures**

In addition to the priorities and actions summarized briefly above, we continue to prioritize all our work, to make sure we are focusing on the most important issues. We have also developed performance measures for much of our work, and we continue to develop additional performance measures where needed. Performance measures are an ongoing topic of discussion and development between the State and Regional Boards. Performance measures require data collection, and in some areas, we still need to develop data collection methods. Consequently,

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reuses water that used to be wasted to the ocean, and is the world's largest water recycling facility designed for raw food crop irrigation. This project has the huge water quality and watershed health benefit of being a large portion (nearly half) of the solution to seawater intrusion in the Salinas Valley. With the recycled project now coupled with the more recent Salinas Valley Water Project, the long standing and damaging groundwater basin overdraft is reportedly eliminated – recharge should now be sufficient to thwart further advancement of seawater intrusion. Time will tell regarding this delicate balance, and increased water use efficiency will be required to sustain and improve this situation. Similarly, Watsonville is now operating a similar facility in Pajaro Valley with similar benefits in the fight against seawater intrusion.

initial statewide performance measures are focused on measures with existing data availability. They tend to be more administrative performance measures, such as the number of permits renewed and the number of inspections performed. However, we are working with State Board staff and the other regions to focus program performance measurement on more meaningful performance measures, and we have proposed improvements to the GeoTracker database consistent with improved performance measures (May 2012). For example, State Board staff recently approved our proposal to modify the Geotracker database for the landfill program such that we can track individual landfill's efforts, as well as track how we are doing in protecting and restoring groundwater quality at the regional and state-wide levels in this program.

Also, in our office, we are using and developing performance measures that will better inform us of how we are doing in producing tangible results in our watersheds. For example, now that we have developed prioritization criteria for all our cleanup sites, we are tracking how long it takes to initiate cleanup, and how long it takes to achieve some level of cleanup (such as eliminating the health risk), on the top priority sites. We are also identifying the actions we need to take on priority issues, and tracking whether or not we take those actions in a timely manner. In some of our tasks discussed in this report, such as the Basin Plan amendments noted above, we are taking much longer than anticipated. As another example, for our monitoring program, CCAMP (Central Coast Ambient Monitoring Program) to inform all of us of environmental outcomes, we are using measures like, "How many CCAMP data points are being used to inform our water quality control decisions?" We are working towards performance measures related to trends in watersheds - how many watersheds are monitored for trends, how many have enough data to support statistical trend analysis, and how many sites show improving trends or decreasing trends in key indicators?

We look forward to discussing these priorities and our actions with the Board.

#### **D. Advocacy and Recommendations**

The Executive Officer's practice is to provide recommendations for all action items before the Board. Recommendations should be backed by information on why it is the best course of action, as well as some information on other options available to the Board. Less complex issues don't necessarily need as much information on options. Making a recommendation and stating the reasons for the recommendation and against other options could be considered advocating for that action. Advocate and recommend might be synonyms, but they have different shades of meaning<sup>3</sup>, which can be summarized by these two statements:

*Advocate: to support a particular cause or policy; to plead the case of another.*

*Recommend: to present as worthy of acceptance.*

We recently discussed this issue at a staff meeting, and one staff member put it this way: "I actually don't like the word advocacy, from the perspective of our professional responsibilities. Also, advocate is a loaded word - particularly in the context of a civil servant - that sends up red

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<sup>3</sup> Advocacy or advocate:

Oxford: public support for or recommendation of a particular cause or policy: e.g., their advocacy of traditional family values  
Merriam Webster: the act or process of advocating or supporting a cause or proposal. Advocate: one that pleads the cause of another; specifically : one that pleads the cause of another before a tribunal or judicial court

2: one that defends or maintains a cause or proposal

3: one that supports or promotes the interests of another

Recommendation or recommend:

Merriam-Webster: a : to present as worthy of acceptance or trial <recommended the medicine> b : to endorse as fit, worthy, or competent <recommends her for the position>

Oxford: a suggestion or proposal as to the best course of action, especially one put forward by an authoritative body: the committee put forward forty recommendations for change

flags to some people. Advocacy implies an investment of emotion. While all of us have personal feelings about a project or policy, ideally I think our role in public forums is to present ourselves as making a recommendation for a policy or program based on the merits and facts, and based on our obligations to State law and policy. I think there's a fine line between recommending something and advocating it, but I also feel people, in most cases, can tell the difference based on tone, body language, and style of presentation.”

The Water Board is an environmental protection agency and most (nearly all?) of the Central Coast Water Board staff members are passionate about environmental protection. Being passionate about and believing in one's work is a good thing. We need to ensure that passion does not cause us to let our biases (and we all have them) adversely affect the way we go about our jobs of researching information, analyzing situations, seeking involvement from others, responding to comments, and making recommendations to the Board. For example, when seeking comments on particular issues, we will ensure we are seeking out all potentially interested persons for their comments, rather than “cherry picking” in our outreach.

Attachment: December 11, 2009 letter from the Regional Water Board

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