
Appendix H

Water Quality Priorities

Central Coast Regional Water Quality Control Board

July 2011

This staff report provides a summary of our priorities and some of the actions we are taking in 2011 on these priorities. This is only a very brief, partial list of all the actions we are and have been taking on these and many other issues. The purpose here is to provide a summary of the most important issues and the actions we are taking.

Our highest priorities:

Preventing and Correcting Threats to Human Health
Preventing and Correcting Degradation of Aquatic Habitat
Preventing Degradation of Hydrologic Processes
Preventing/Reversing Seawater Intrusion
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.

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 wells in agriculture areas). Nitrate in groundwater is by far the most widespread threat to human health 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). 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. Revising the Water Board's Irrigated Agriculture Order to include requirements for minimizing fertilizer application rates and reporting usage, 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.
3. Investigating specific cases of nitrate contamination in domestic or public supply wells, which may result in staff recommendations to the Water Board regarding requirements that responsible parties provide replacement water to the well owners. These investigations include areas near San Lucas in Monterey County, Morro Bay, King City,

Anchor Point Christian High School near Gilroy, and farm labor camps. We expect this list to grow significantly in the coming months.

4. Developing a Basin Plan amendment to prohibit or limit certain high risk activities that cause pollution in groundwater recharge areas, 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. We have been following up on our letter to all of our County Public Health Officers last year (which received a very poor response from the Counties) on a county by county basis, prioritized by extent of threatened exposures. As a result of our follow up, Santa Barbara County staff committed to proposing well testing ordinance improvements. We have followed up with San Benito County staff and are following up with the Board of Supervisors. Monterey County already has the most extensive well testing requirements of any county in our region, although the ordinance still needs to be strengthened.
6. Continuing with petroleum and chemical leak site cleanup oversight using priority systems similar to this more general list – first priority to public health threats, 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. Some of the actions we are taking in 2011 include:

1. Including minimum requirements for aquatic habitat protection in the Water Board's draft 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 Pan 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.

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 2011 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, to develop a methodology that local agencies can use to determine their own hydromodification control criteria based on local conditions.
2. Including requirements for hydromodification control in upcoming permit renewals (City of Salinas), 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 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. These projects will provide state of the art designs that others can use 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 (see Accomplishments staff report, last page). Some actions we are taking in 2011 include:

1. Coordinating with State Board staff on possible actions in seawater intrusion areas. Regional Water Board staff have begun 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. We will be pursuing this possibility in 2011.

2. Pursuing actions by local agencies and purveyors in Los Osos to reduce salt water intrusion.
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.

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. Including requirements to reduce or eliminate salt loading, with schedules and compliance monitoring, in the draft Irrigated Agriculture Order.
3. Including salt limits in individual waste discharge requirements.

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, 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.

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 clean up 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.