



Matthew Rodriguez
Secretary for
Environmental Protection

California Regional Water Quality Control Board Los Angeles Region

320 West Fourth Street, Suite 200, Los Angeles, California 90013
(213) 576-6600 • FAX (213) 576-6640
<http://www.waterboards.ca.gov/losangeles>



Edmund G. Brown Jr.
Governor

TO: Interested Persons

FROM: Rebecca Veiga Nascimento *RVN*
Staff Environmental Scientist, Regional Programs
Los Angeles Regional Water Quality Control Board

DATE: August 3, 2011

SUBJECT: 2011 – 2013 TRIENNIAL REVIEW – NOTICE OF PUBLIC MEETING

The California Water Code (§13240) and the federal Clean Water Act (§303(c)) direct the Regional Board to periodically review and update, if necessary, the Water Quality Control Plan for the Los Angeles Region (Basin Plan) and the water quality standards contained therein. This process is known as the Triennial Review. During the Triennial Review, revisions to the Basin Plan are prioritized and then implemented over a three-year period through Basin Plan amendments, based upon available resources. The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is beginning the 2011 – 2013 Triennial Review. The Regional Board invites stakeholders and interested persons to a public meeting to discuss the 2011 – 2013 Triennial Review.

2011 - 2013 Triennial Review Public Meeting

September 14, 2011 at 10:00 am

Los Angeles Regional Water Quality Control Board
320 West 4th Street, Los Angeles, CA
1st Floor Carmel Conference Room

The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of regional surface and ground waters. Specifically, the Basin Plan designates beneficial uses for surface and ground waters and sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy. Designated beneficial uses, narrative and numeric water quality objectives, and the state's anti-degradation policy, together, comprise the water quality standards for the Los Angeles Region. The Basin Plan also describes implementation programs to protect all waters in the region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations (e.g. California Toxics Rule or CTR, California Ocean Plan, etc.).

As a first step in the triennial review process, staff reviewed information and comments submitted by stakeholders during previous reviews, as well as needs and suggestions from various Regional Board programs, and identified seven basin planning issues for principal consideration in 2011- 2013 review. Attachment A provides a summary of each issue. Staff is

California Environmental Protection Agency

soliciting public comment on these principal issues at the public meeting on September 14, 2011. Additionally, stakeholders may provide written comments on these issues and other concerns and/or projects they would like the Regional Board to consider. Written comments and exhibits must be received by the Regional Board no later than 5:00 p.m. on October 14, 2011.

Written comments may be sent via regular mail or email and should be submitted to:

California Regional Water Quality Control Board
Los Angeles Region
320 West Fourth Street, Suite 200
Los Angeles, California 90013

ATTN: Rebecca Veiga Nascimento
or

rb4triennial@waterboards.ca.gov

Staff will consider stakeholder comments and identify a list of basin planning priorities. Staff will present the list of priorities to the Regional Board for their consideration and approval at a public hearing. The approved list will guide staff efforts to amend portions of the Basin Plan over the next 3 years.

Basin Planning is a continuous planning process and as part of the 2008 – 2010 Triennial Review the Regional Board approved the following list of priority projects.

- Re-evaluate how bacteria water quality objectives should be applied in compliance determination, based on more recent monitoring results;
- Reconsider the application of REC-1 and REC-2 beneficial uses in specific instances, where appropriate;
- Complete an administrative update of the Basin Plan as specified in the Staff Report;
- Complete work on the Design Storm project (should funding become available);
- Continue work on the Hydromodification Policy;
- Provide support to other Regional Board Programs including TMDLs, Municipal Permitting, and Stormwater Permitting; and
- Address legal and regulatory mandates (where required), including assistance in the development of Salt and Nutrient Management Plans per the State Water Board Recycled Water Policy.

These projects are underway; staff will continue to work on these projects even as a new list of priority projects is established as part of the 2011- 2013 triennial review.

If you have questions about the Triennial Review process, contact Rebecca Veiga Nascimento at (213) 576-6784 or rveiga@waterboards.ca.gov. We look forward to your continued participation in our efforts to protect water quality.

Attachment

Attachment A**2011 – 2013 Triennial Review Issues to be Addressed****1. Identify and assign beneficial uses to coastal streams that are currently unidentified in the Basin Plan.**

When the 1994 Basin Plan was developed the available Geographic Information System (GIS) data was limited and did not depict all of the coastal streams in the Region, thus not all coastal streams were listed in the Basin Plan and assigned beneficial uses. In the seventeen years since the adoption of the 1994 Basin Plan there have been significant revision and advancements in both GIS mapping and the availability of other resources such as aerial photography. This information along with field surveys, review of existing information and data, and dialogue with other resource agencies could be used to identify and designate beneficial uses for those coastal streams previously unidentified in the Basin Plan.

2. Los Angeles Region Groundwater Quality Protection Strategy

Groundwater accounts for most of the Region's local water supply and is a critical resource that is subject to increasing quality and quantity demands. In recent years events such as drought and reduced snowpack have alerted scientists and managers to the changing conditions and challenges facing California's water resources. As a result, there is an urgency to develop and promote sustainable local water supplies. The Los Angeles Regional Water Quality Control Board has a pivotal role to play in the statewide effort to secure sustainable local groundwater resources by fulfilling our mission to preserve, enhance, and restore groundwater quality.

Regional Board staff is considering the development of a Groundwater Quality Protection Strategy to guide comprehensive, consistent, and coordinated groundwater protection within the Los Angeles Region. This strategy will provide an over-arching framework for the implementation and coordination of Regional Board groundwater programs and ensure that valuable local groundwater resources are available as a clean and abundant source of water. Elements of the groundwater strategy may include.

- Region-wide assessment of existing groundwater quality
- Review of existing Regional Board groundwater regulatory programs, identification of potential gaps in protection and areas in need of updates/strengthening
- Identification of opportunities and/or resource requirements to improve program efficiency or coordination
- Identification and development of plans and/or policies promoting recycled water use and stormwater reuse
- Identification and development of appropriate Regional Board resolutions and/or Basin Plan Amendments to protect and restore groundwater quality

- Identification of existing and new partnerships with other agencies or organization that may be leveraged to protect and restore groundwater quality
- Identification of potential future actions to improve and protect groundwater quality

The Groundwater Quality Protection Strategy would be developed through an active stakeholder process. The stakeholder process would be used to explore additional strategy elements or alternative approaches to groundwater quality protection.

3. Develop a general policy for interpreting narrative objectives

Many of the objectives in our Basin Plan are stated in narrative form (e.g. bioaccumulation, biostimulatory substances, color, exotic vegetation, floating material). That is, there is no specific numeric limit for the pollutant or stressor, instead the objective is generally worded as follows: "Waters shall not contain [pollutant or stressor] in concentrations that cause nuisance or adversely affect beneficial uses". However, staff must consistently interpret these narrative objectives when developing numeric targets in TMDLs and translating these narrative objectives into numeric effluent limits in permits. To facilitate the consistent translation of these narrative objectives, a policy or new language in Chapter 3 of the Basin Plan, may be developed to outline what considerations should be taken into account when the need for such translations arises. These considerations may include: correlation between beneficial use impacts and levels of the pollutant/stressor; all relevant information submitted by the discharger and interested parties; and relevant numerical criteria and guidelines developed and/or published by other state agencies (such as the Department of Fish and Game or the Office of Environmental Health Hazard Assessment), federal agencies (such as the US EPA or US Fish and Wildlife Service), foreign government agencies, international agencies, or from the scientific literature. A policy or implementation provisions in Chapter 3 could outline a decision process for interpreting narratives using appropriate numeric thresholds.

4. Pyrethroid Pesticides Water Quality Objectives

Pyrethroid pesticides are used extensively for both urban and agriculture applications. Pyrethroids are used as an agricultural pesticide in a variety of crops; in particular they are heavily used in nursery crop production, which is a principal crop in both Los Angeles and Ventura Counties. Urban applications of pyrethroids include structural pest control and landscape maintenance. Pyrethroids also dominate retail pesticide sales. Recent sediment and water quality monitoring throughout California and specifically within the Los Angeles Region has documented the widespread presence of pyrethroid pesticides in both rural and urban waterbodies at levels toxic to aquatic organisms.

Currently, the Basin Plan addresses all pesticides with the following narrative water quality objective:

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentration found in bottom sediments or aquatic life.

A numeric water quality objective for pyrethroid pesticides would provide a specific value to ensure that waterbodies are protected from pyrethroid pesticide contamination. Over the last

A numeric water quality objective for pyrethroid pesticides would provide a specific value to ensure that waterbodies are protected from pyrethroid pesticide contamination. Over the last several years the Central Valley Regional Water Quality Control Board (Region 5) has been working on the development of numeric water quality objectives for five specific pyrethroid pesticides (bifenthrin, cyfluthrin, lambda-cyhalothrin, cypermethrin, and permethrin). Los Angeles Regional Board staff is evaluating the progress of this work and may consider the development of numeric pyrethroid water quality objectives based on the technical analysis conducted by Region 5.

5. Directory of Environmental Screening Levels for Chemicals of Concern at Sites with Contaminated Soil and Groundwater

In most cases numerous chemicals are present in soil and groundwater at sites contaminated by hazardous chemicals and the site cleanup process requires a site investigation and detailed risk assessment. The preparation of detailed environmental documents can be a time consuming and costly effort that requires expertise in multiple scientific disciplines. For some responsible parties such as small business owners with limited financial resources the preparation of extensive environmental documents can be cost prohibitive. As a result, progress on cleaning up contaminated sites may be delayed, which can lead to further soil and/or groundwater contamination.

In an effort to address this problem and provide a consistent approach for initial risk assessment, staff is considering developing a directory of Environmental Screening Levels (ESLs) for soil and groundwater based on currently available local, state, and federal guidelines. The directory of ESLs would be designed to accommodate various site specific characteristics (e.g. soil type and land-use) and environmental concerns (e.g. drinking water contamination). Site data would be compared to the ESLs and used to guide decisions regarding the need for additional site investigation, remedial actions, or a more detailed risk assessment.

6. Constituents of Emerging Concern

Traditionally, water quality standards and the assessment of surface water conditions have focused on conventional pollutants and the EPA designated toxic pollutants pursuant to the Clean Water Act section 307(a) (currently 126 priority pollutants). However, advancements in analytical chemistry have dramatically increased the number of chemicals that can be detected in the environment and significantly lowered chemical detection levels to allow detection of low levels of chemicals in the environment. This analytical advancement has expanded the universe of compounds known to be present in water and wastewater, which may cause deleterious effects on human health and aquatic life. Collectively, these compounds are referred to as Constituents of Emerging Concern (CECs). CECs include several types of chemicals and are often grouped into different classes including:

- Persistent organic pollutants such as polybrominated diphenyl ethers (PBDEs), which are used in flame retardants, furniture foam, and plastics;
- Pharmaceuticals and personal care products, including numerous human prescribed drugs (e.g., antidepressants, blood pressure medication), over-the-counter medications (e.g., ibuprofen), and sunscreens;

- Veterinary medicines such as antimicrobials, antibiotics, anti-fungals, growth promoters and hormones;
- Endocrine-disrupting chemicals, including synthetic estrogens and androgens, naturally occurring estrogens, as well as other chemicals such as organochlorine pesticides and alkylphenols.

CECs present significant water quality concerns due to 1) the wide variety and number of chemicals classified as CECs, 2) widespread presence in the environment, and 3) effects on human health and aquatic life. For example, researchers at the Southern California Coastal Water Research Project detected CECs in flatfish and marine sediments in southern California and reconnaissance studies conducted by the USGS documented the prevalence of CECs in streams throughout the U.S. Also, endocrine-disrupting chemicals are known to modify normal hormonal functions in aquatic organisms; field studies have documented wild populations of intersex fish associated with very low concentrations of endocrine-disrupting chemicals.

Recording the occurrence and concentration of CECs in waterbodies is an important building block necessary to advance CEC research. Currently, upon permit renewal, discharger monitoring programs include limited monitoring for certain CECs, and the Regional Board is beginning to direct resources toward establishing some baseline information on CEC occurrence in inland surface waters throughout the region. A coordinated monitoring program, in addition to directed research on CEC fate and transport and ecological and human health effects, is needed to understand and address potential water quality impacts from CECs. Regional Board staff is considering laying out a strategy for addressing CECs in the Los Angeles Region. The strategy may include identifying CEC monitoring and research priorities, establishing minimum levels of discharger monitoring of CECs based on discharge characteristics, and outlining a region-wide CEC monitoring program. The CEC strategy would be developed in cooperation with the regulated community and stakeholders.

7. Reevaluate Temperature Water Quality Objective

Water temperature has far reaching effects on both aquatic chemistry and aquatic life. For example, temperature influences the concentration of oxygen in the water and chemical reaction rates as well as the growth, feeding, fecundity, and incubation rates of organisms. Elevated water temperatures can contribute to beneficial use impairment both directly by influencing and/or interrupting the life cycles of aquatic organisms and indirectly by affecting the attainment of another water quality objective such as dissolved oxygen.

Currently, the Basin Plan temperature objective states:

For waters designated WARM, water temperature shall not be altered by more than 5 °F above the natural temperature. At no time shall these WARM designated waters be raised above 80 °F as a result of waste discharge.

For waters designated COLD, water temperature shall not be altered by more than 5 °F above the natural temperature.

The application of this objective requires staff to determine the "natural temperature" of waterbodies. This determination requires information such as historical data records, which may or may not be available. In many cases the waterbodies have been so dramatically altered

that it may be impossible to reliably determine the "*natural temperature*". A numeric water quality objective for temperature would provide a specific value to ensure that aquatic life is protected from unnaturally elevated temperature conditions. Staff is considering the development of numeric temperature objectives for various waterbody classes and aquatic life beneficial uses.