

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

STAFF REPORT FOR REGULAR MEETING OF MARCH 24, 2006

Prepared on March 2, 2006

ITEM NUMBER: 17

SUBJECT: Status Report on Regional Board Vision and Measurable Goals Development

SUMMARY:

This item is a status report on staff's efforts to draft a vision, measurable goals, and specific objectives for the Water Board organization. We (up to about half the office at different times) have been working on developing tangible goals for our organization over the past several months. The point is to establish a vision for the future Central Coast Region, and measurable goals and specific objectives to get there. We can best serve and benefit the resources we want to protect, the public (our customers), and ourselves (for job satisfaction) by being proactive and achieving measurable improvements in the real world.

Our draft Vision, Goals, and Objectives are included as Attachment 1. The objectives are examples only, and are provided for context. Without specific, short-term objectives, the long-term goals have no meaning. We are currently working on final objectives and will bring them to the Board in June 2006. The write-up in Attachment 1 is the result of many hours of effort by many staff members who stepped up and did the work in addition to their regular tasks.

Today's item also summarizes some of the work we are doing now, such as the groundwork for a major Basin Plan amendment to protect aquatic habitat (riparian areas and wetlands), promotion of low impact development throughout our region, and better coordination of our programs. This is an on-going, long-term effort to be a more proactive, effective organization.

DISCUSSION

Staff began working on our vision/goals/objectives last Spring. We started with a brainstorming session, with all staff that wanted to participate, and then we developed issue statements from the brainstorming session. We used a consensus approach in these meetings, and came up with issues statements for the main concerns facing our Region. We presented this information to the Board in June 2005. During the Fall of 2005, our progress slowed considerably due to large enforcement actions and other priorities. However, we established workgroups and several staff members (Jill Wilson, Dan Niles, Chris Rose, Ryan Lodge, and Dominic Roques) stepped up to lead the workgroups and develop draft measurable goals.

The common themes that came out of this process were:

*Protecting aquatic habitat
Urbanization problems
Land management practices
Updating the Basin Plan
Monitoring and assessment work
and
Improving our organization*

There is also an interesting "groundwater versus surface water" issue in our office, probably because of the fact that most people in the office work on only one or the other. Nevertheless, we are addressing both surface and ground waters in this process.

The workgroups drafted measurable goals and submitted them to the management team (Roger Briggs, Michael Thomas, Harvey Packard, Karen Worcester, Lisa McCann, John Robertson). The management team then met with the workgroup leaders and further revised the goals and drafted vision language.

We are also getting help from Gene Crumley, the Director of Business and Technology at UC Davis Extension. Mr. Crumley is also the Director of the Executive Leadership Program at UC Davis. Mr. Crumley has worked with the State Water Board Training Academy to develop advanced leadership training classes for State and Regional Board staff, and has extensive experience in executive leadership and with helping organizations improve their effectiveness. One of the key lessons we learned (and are continuously reminding ourselves of) is that we need to make decisions, move forward, learn from our mistakes and successes, and make corrections. Organizations often become bogged down or paralyzed by planning processes, trying to create the perfect or unanimously acceptable plan before taking action. We will plan to a certain degree, then act, and learn from the result. We want to create a dynamic organization that constantly evaluates and improves based on tangible results in the real world. Gene Crumley is a great resource to help us achieve that end.

The next step is to develop specific objectives. The workgroup leaders again stepped up and drafted example objectives for this staff report (with the help of another staff member, John Goni). The objectives are examples only, and will be finalized over the next few months. We plan to present final objectives to the Board at our June 2006 "off-site" meeting. Objectives are specific, shorter-term tasks that we will do to achieve the measurable goals. Our Unit supervisors (Sheila Soderberg, Burton Chadwick, Eric Gobler, Dave Athey, John Robertson, Lisa McCann, Karen Worcester, and Chris Adair) will play the lead roles in developing the final objectives for Water Board review.

Our vision, measurable goals, and example objectives are included here as Attachment 1. It is very important to note that the measurable goals are focused on the physical condition of the Central Coast in the future. Other important

themes, like assessment work and updating the Basin Plan, are reflected in the objectives. This is critical—our goal is to protect and improve the physical environment, while assessment work and the Basin Plan are tools to achieve the goal.

Our vision for the Central Coast is expressed as:

Clean Water

Healthy Coastal Environments

Healthy Functioning Watersheds

Our five measurable goals are:

1. By 2025, 80% of the watershed riparian systems on the Central Coast are healthy, and the other 20% are getting healthier.

Notes: *Healthy* will be defined by a multi-parametric evaluation of water quality, habitat quality [i.e., geomorphology, shade, aquatic substrate, etc.], and biologic function. *Healthy* is a defined target or range described by the multiple parameters [staff are currently developing the target(s)]. *Getting healthier* is a positive trend toward the defined multi-parameter target. The multi-parameter approach is based on defining and protecting properly functioning ecological systems; this is a fundamental shift for the Water Board. We need to ground-truth and adjust the 80/20 ratio.

2. By 2025, 90% of the land within any watershed is free of impervious surfaces.

Notes: The 10% (or 90% free) value is taken from Pew Oceans Report (2002) and we must ground truth the value for the Central Coast. The percentage is based on protecting watershed functions. We need to define the watersheds (consider existing hydrologic designations). The trend in impervious surfaces is an indicator of watershed health, but we consider it to be a critical indicator given the urbanization predicted for the coastal zone over the next several decades.

3. By 2025, 80% of land within any watershed is properly managed to support a healthy functioning watershed, with the remaining 20% achieving a positive trend.

Notes: A *healthy functioning* watershed is defined by a multi-parameter approach, similar to

Goal #1 but on a watershed scale. This goal focuses on source control measures across most of our programs, and acknowledges the fundamental role of land management practices in protecting water quality and watershed functions. We need to define watershed scales for this goal.

4. By 2025, 80% of groundwater is clean, with the remaining 20% getting cleaner.

Notes: *Clean* is defined as meeting water quality objectives for defined beneficial uses. *Getting cleaner* is defined as a positive trend in groundwater quality achieved by source control and/or remediation. This only covers groundwater impacted by human sources. We need to define metrics for this goal and ground-truth and adjust the 80/20 ratio.

5. By 2025, the Water Board will manage all discharges to ensure a healthy coastal environment for humans and wildlife.

Rationale: This goal is designed to address discharges to the marine environment.

Three major elements are reflected in our vision, measurable goals, and example objectives:

1. Protection of healthy, functioning systems (such as riparian corridors and watersheds).
2. Comprehensive assessment and analysis of existing conditions and land use activities in our Region.
3. Achieving positive trends.

Functioning Systems: The protection of functioning systems (such as riparian corridor systems) is a major step forward for the Water Board. Historically, we focused on single parameters, not the interaction of parameters and how they define a functioning system. Karen Worcester, the Water Board's lead on the Central Coast Ambient Monitoring Program and her team are developing state-of-the-art tools to assess functioning systems. For example, the Biostimulatory Risk Index is an analytic tool that combines nutrient data with measures of biostimulation (dissolved oxygen, pH, plant cover, water column chlorophyll concentrations) to evaluate the risk of adverse nutrient impacts in streams. We will use this tool, and develop others, to assess and track the health of functioning systems throughout our region. In

previous discussions with the Board on long-term issues, we decided our focus should be riparian corridor protection and enhancement, low impact development, and enhanced storm water management. Our efforts on our Vision and Goals align with these previous decisions. The Board also listed more specific issues such as trash and specifically plastics in our waterways and the ocean, pharmaceuticals in our waters, etc., that may be significant problems, but may also be difficult to "get our arms around," or effectuate improvements. However, through our multi-parameter approach, we can address such abuses of our waters, and our storm water program in particular will be used as a tool to minimize trash and plastics in our waters.

Comprehensive Assessment and Analysis:

Another main theme that came out of our process is the need to do comprehensive assessment work. We are currently working on determining the level of assessment work we need to do, and we are strategizing how we will do it. Several of our staff have great expertise in this area, including Karen Worcester, Chris Rose, Larry Harlan, and others, and we plan to capitalize on their abilities to create a high resolution geographic information system (GIS) database for our Region that will track land use changes, management practices, habitat quality, water quality, urbanization (impervious surfaces and low impact development), and functioning systems. It is critical to realize that a GIS based effort is not a goal or end result, but is only a tool to track our progress and help us make course corrections.

Positive Trends: A third theme that came out of our process is the fact that we have major pollution problems, such as nitrate pollution in the Salinas Valley groundwater basin. Several basins have extensive nitrate problems and salt imbalances. The physical size of this problem and the cultural/economic conditions that created it are such that we cannot realistically expect to "fix" it in our lifetimes. However, we do not want to write the problem off, and therefore included the concept of positive trends in our goals. For the more major issues that cannot be resolved in a reasonable time frame, we will achieve a positive trend in water quality.

Actions We Are Implementing Now

While we are developing specific objectives to achieve the goals, we are also moving ahead on important action items. These parallel efforts include developing a major Basin Plan amendment to protect aquatic habitat (riparian areas and wetlands), promoting Low Impact Development in our Region, and better coordination of our programs.

Aquatic Habitat

We recently established a team to develop a major Basin Plan amendment for the protection of functioning aquatic habitat (riparian areas and wetlands). This team is lead by Chris Rose, and includes Howard Kolb, Dominic Roques, Karen Worcester, Bill Hoffman, Mary Adams, and Dave Paradies. The Basin Plan amendment will be based on an integrated multi-parameter approach to water quality protection. The effort is driven by the consensus among staff, from several regional boards, that long-term protection of beneficial uses can only be achieved by understanding the dynamic relationship between the chemical, physical, and biological parameters that define functioning systems, and by basing requirements on that understanding. Staff believes, and the Board concurred, that a protected riparian zone, including a "buffer zone," will be a necessary component of the integrated approach. The resulting tool will be a computer model based on the Board's Central Coast Ambient Monitoring Program data and research.

Region 1 and Region 2 are also working on riparian corridor protection policies and we are coordinating with them to share information and promote consistency between our efforts. A teleconference among the regions is planned for mid-March.

Staff intends to have a conceptual model in May 2006. The conceptual model will include the chemical and physical indicators that define healthy, functioning aquatic habitat. We will test, revise, and calibrate the model over the next year. Staff will provide regular updates to the Board, and intends to bring a Basin Plan Amendment item to the Board in that latter part of 2007, or early 2008.

Low Impact Development

On September 9, 2005, the Central Coast Water Board approved \$250,000 for the funding of a Low Impact Development (LID) pilot project and other LID outreach actions within the Central Coast Region. The following is a list of recent developments and actions taken by Water Board staff:

1. LID Workshop – On November 18, 2005, the Regional Water Board, led by Donette Dunnaway, hosted a workshop titled "Moving Toward Sustainability: Advancing Low Impact Development, Smart Growth, and Integrated Regional Water Management on the Central Coast". There were 12 presenters from around the United States, eight demonstration tables, and approximately 110 attendees. Invited attendees included representatives from municipalities, non-profit organizations, consultants, and the general public from throughout the region. Staff used Board approved funding for the workshop.
2. City of Santa Maria - Water Board staff and management met with City of Santa Maria representatives from Engineering, Planning, Utilities, Community Development, Parks and Recreation, and Legal departments on December 14, 2005. The purpose of the meeting was to explain what LID is and why it is beneficial to the City to adopt such practices, to answer questions and concerns, and to discuss conceptual LID projects. The City was receptive, and is pursuing an LID project and LID funding.
3. City of Salinas – Water Board staff issued a letter on December 23, 2005, to the City of Salinas which explained that LID meets the Maximum Extent Practicable (MEP) standard required in the Salinas Storm Water Permit, and consequently the City must incorporate LID methodology into its ordinances and design standards.
4. Ordinance and Design Standards Review and Revision – One of the most significant hurdles for LID is that many cities have ordinances that actually preclude some aspects of LID. The Board-approved funding included monies to hire a consultant to work with a Central Coast municipality to review and align development ordinances and design standards with LID principles. Staff issued a Request for Proposal to four firms for this work. Regional Board staff, in conjunction with City of Salinas representatives,

reviewed the submitted proposals, and then concluded that the project scope needed to be expanded. We expanded the Request for Proposal and issued it to the top two firms. Regional Board staff and City of Salinas staff reviewed the two expanded proposals, and conducted phone interviews with the two potential candidates. Regional Board and City staff unanimously agreed that Kennedy/Jenks Consultants were the best candidate. Regional Board staff is reviewing the contract scope of work, and expects work to begin by the end of February 2006.

5. City of Paso Robles – Water Board staff requested the City to meet to discuss LID, similar to our session with Santa Maria described in paragraph number 2., above.

We also compiled the Proposition 40 and 50 State Board grant information that is applicable to LID projects. We distributed this information to municipalities, developers and other LID interested parties on December 22 and 27, 2005, with a letter encouraging the parties to submit LID conceptual designs by the January 2006 submittal deadlines. Nine LID and/or storm water grant proposals were submitted from our region, totaling a request for \$3.9 million.

Water Board staff is conducting ongoing outreach, via face-to-face meetings and correspondence with municipalities, consultants, developers, and educators in an effort to encourage any one of these groups to pursue an LID pilot project. Water Board staff will continue to update the Board on a regular basis as Low Impact Development concepts gain momentum in the Central Coast Region.

Coordinating Programs

A major part of our vision, measurable goals, and objectives process is to better align the organization such that we are more effective at achieving our goals. This will be an on-going effort over the next couple of years, and cannot begin in earnest until we finalize our specific objectives in June 2006. As an example of our initial efforts, we are working on better coordination of our Total Maximum Daily Load (TMDL) program with our Storm water and Non-Point Source programs.

The Central Coast Region currently has approximately 181 impaired surface water listings [per the 2002 303d list, approved by USEPA in 2003. This list can be found at:

<http://www.waterboards.ca.gov/tmdl/docs/2002reg3303dlist.pdf>].

Discharges associated with irrigated agricultural cause or contribute to more than one-third of these surface water impairment listings. Grazing and animal feeding activities cause roughly an additional 10 percent of the total impairments. Combined, these two sources are responsible for nearly half of all the listed impaired waters in our region.

Staff evaluate impairment listings, and where appropriate, develop TMDL allocations and implementation plans to achieve load limit requirements. To date, the Central Coast Regional Board has adopted 11 TMDLs. USEPA has approved seven of these TMDLs to date. Collectively, these TMDLs address 27 or 15% of the total impaired surface water listings. Additionally, pending TMDLs and delisting proposals address an additional 5% of the total impaired surface water listings, which will bring us to 20%. Considering we had a steep learning curve and typical resultant adjustments in methodology and processes, we are off to a pretty good start. You can link to the complete list of adopted TMDLs at:

<http://www.swrcb.ca.gov/rwqcb3/TMDL/303dandtmdlprojects.htm>.

The overall Non-Point Source Program effort (agricultural waiver plus non-point source and watershed management initiative resources) in the Region comprises approximately six staff positions (Personnel Years or PYs). We commit roughly 95 percent of these resources toward implementing TMDLs in watersheds where they have been adopted, or toward implementing management measures in impaired watersheds that do not as yet have established TMDLs. We focus nearly all (>90%) of this TMDL implementation effort at correcting water quality pollution associated with irrigated agricultural, and to a lesser degree, grazing-related discharges. The small remaining Non-Point Source PY allocation (~5%) goes toward work in multiple land use watersheds (combined urban and agriculture, as in Santa Barbara County's south coast) and preservation and protection efforts in unimpaired watersheds.

The Non-Point Source work plan reflects the clear priorities identified both in the impaired surface

waters list and through implementation plans associated with adopted TMDLs. Through the adoption of the *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Agriculture* (Agricultural Waiver), we expect changes in farming practices that will bring about improvements in water quality through increased management measure implementation. These management measures will maximize both irrigation and nutrient application efficiency, both of which can lead to improvements in groundwater quality. By decreasing runoff and agricultural tailwater flows, overall pollutant loading (including nutrient, sediment, and pesticide loading) to surface waters decreases.

Through adoption of prohibitions on activities (poorly built and maintained roads, poor ranching practices, etc.) contributing to sediment load in the Pajaro River Watershed, landowners must implement and report on sediment-control measures or demonstrate they are not discharging sediment. At both the regional and State Board level, we are also developing regulatory approaches for dealing with discharges associated with grazing activities to assist in implementing TMDLs related to this type of discharge.

Staff will continue to propose appropriate requirements to control non point source discharges in new TMDL implementation plans. These requirements will be made with waste discharge requirements, effective conditions for waivers, or prohibitions for consistency with the State's Non Point Source Policy, and to insure effective water quality improvements.

The Agricultural Conditional Waiver and the prohibition both require a concerted staff effort to perform outreach, technical assistance and tracking. TMDL and Non-Point Source program managers coordinate respective work plans, funds, and assigned tasks for these efforts to align staff resources with priority water quality challenges.

Similarly, urban storm water is often identified as a source of pollutants when TMDLs are developed. Storm water program staff are requiring management practices from municipal storm water dischargers in Storm Water Management Plans pursuant to TMDL plans and

the Municipal Storm Water Permit. Additionally, TMDLs are requiring monitoring for stormwater dischargers. Storm water program staff have reprioritized their efforts both in terms of the municipalities they are working with and the management practices they are incorporating into the stormwater management plans to implement TMDLs. As with the Non-Point Source Program, TMDL and Storm water program managers are now coordinating respective work plans, funds, and assigned tasks for these efforts to align staff resources with priority water quality challenges.

CONCLUSION

Over the next few months, staff will develop specific objectives for Board review. The objectives are short-term tasks that we will do to achieve the longer-term measurable goals. We will bring the objectives to the Board in June 2006. The next step after finalizing the objectives is to align the organization, and that will be an ongoing process where we constantly evaluate our effectiveness and make course corrections to achieve better real-world results.

As we progress, we will be able to inform the Board, the public, and ourselves with actual data that shows whether or not we are achieving our measurable goals. We will update our Basin Plan, to make it a more effective regulatory tool to help us achieve our goals. We also need to build additional assessment tools, and refine the ones we have, to provide the necessary data on land use practices, low impact development, healthy functioning habitats, and water quality. Effective tools provide two primary functions of 1) tracking our progress and 2) telling us when we need to make changes to continue making good progress. We look forward to discussing our efforts with the Board, and progressing toward our Vision of:

Clean Water
Healthy Coastal Environments
Healthy Functioning Watersheds

ATTACHMENT

1. Vision, Goals, and Example Objectives for the Central Coast Water Board