Vision Assessment Team
Project Charter

Name of the Project Vision Assessment Project		
Date Issued 1/1/2007		Estimated Due Date 1/1/2010
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Project Background

The Central Coast Water Board is responsible for protecting and improving water quality for a large part of coastal California. This is a challenging task given the rapidly growing population, tremendous development pressure and intensive agricultural activity in our Region. We have many mechanisms to protect water quality, typically through specific regulatory programs with dedicated funding. Though this has been very successful in many ways, there are some issues that have "fallen through the cracks" and not received the attention they deserve. The Watershed Management Initiative (1995 Strategic Plan) has served as a mechanism to shift agency planning and priority-setting to a watershed basis to help address these issues. Over ten years ago, we reoriented our organizational structure into watershed groups, with the intent to better integrate and prioritize at a watershed-scale, and to integrate public outreach and education through stakeholder processes. This reorganization was only marginally successful and in the last three to five years we have moved back to more of a programmatic organization. Regardless of our organizational structure, we are now working to improve the way we demonstrate the water quality benefits of our work efforts. We have developed a long-term vision for our Region's waters and watersheds. The vision is simple: "Healthy, functioning watersheds". We have also developed the measurable goals and specific objectives to help us achieve this vision. 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.

The three measurable goals are:

• By 2025, 80% of aquatic habitat within any watershed is healthy; and the remaining 20% exhibits positive trends in key parameters
• By 2025, 80% of lands within any watershed will be managed to maintain healthy watershed functions, and the remaining 20% will exhibit positive trends in key watershed parameters
• By 2025, 80% of groundwater will be clean, and the remaining 20% will exhibit positive trends in key parameters

In order to measure whether the actions we take are resulting in tangible improvements, we need to develop a Vision Assessment project that is capable of tracking our success toward meeting our three measurable goals. This Project Charter addresses that need. The Vision Assessment Team will support the other three Vision Teams (Healthy Aquatic Habitat, Healthy Watershed Functions, and Clean Groundwater) as these teams develop the key parameters they will track for success.

Problem/Opportunity Statement

Though a tremendous amount of information is collected on a routine basis by our agency, we currently have very little capacity to pull that information into a single framework for use in prioritizing our problems and documenting our successes and failures. Without this capacity, we will be unable to determine whether we are making progress towards our measurable goals. The nature of our measurable goals requires that we not only be able to assess the status of our Region once, but that we are able to repeat the assessment consistently over the years to detect long-term trends. This necessitates careful planning and management of the information that we select to serve as metrics of success.

There are many opportunities that can serve to this project's advantage. For example, the newly developing CIWQS water quality data management system may provide information from a number of water board programs in a consistent format that can lend itself well to development of assessment information in a geographic framework. Most Water Board programs already routinely collect information, often in database structures that can be gathered into a single framework for assessment purposes. For example, groundwater cleanup information can be extracted from GeoTracker. Grants information can be obtained from grant Project Assessment and Evaluation Plans (PAEPs). Information on agricultural practices can be obtained from the agricultural waiver enrollment database and the Department of Pesticide Regulation's Pesticide Use Database.

Some data, however, will need to be assembled into database formats that are suitable for mapping into a Geographic Information System (GIS). For example, stormwater annual reports may need to include some form of routine data delivery on extent and location of management practice implementation. Grant information (PAEPs) needs to be required from grantees in tabular format and compiled, along with project location information, at the program level into a simple database structure.. Programmatic adjustments such as these will need to be adequately institutionalized to ensure that staff continues to maintain required information in a consistent way for the long term. The Vision Assessment Team will work with other Vision Teams to develop necessary data formats and to institutionalize necessary program changes.

Project Objective Statement (POS)

The Objective of the Vision Assessment Project is to measure key parameters (as defined by the Vision Teams) and assess whether the three Measurable Goals are being attained. This will be accomplished with our existing data collection program, but if necessary, new types of data will be collected. The three goals require that "healthy aquatic life", "healthy watersheds", and "clean ground water" be defined. Together the Vision Teams will develop multi-parameter indices that will be used as surrogate measures for health. For example, for aquatic habitat health, data associated with measures of bioassessment, biostimulation, toxicity, riparian habitat and water chemistry may be used. For land use, measures may

include impervious surface coverage, effective imperviousness, pesticide use patterns, implementation of management practices, etc. For groundwater, measures may include concentrations and trends in key pollutants.

The Vision Assessment Team will do the following:

1. Assist other Vision Teams to define and calibrate key parameters and assess them at a Region-wide scale. This is ongoing now.
   a. Determine Initial Key Parameters and initiate assessment work
   b. Draft Initial report on Key Parameters
   c. Draft State of Region Report (baseline evaluation of health)
   d. Finalize State of Region Report
2. Create a data management and assessment infrastructure (including software and database structure) so that this process can be successfully maintained and repeated in future years in spite of changing staff.
   a. Create Vision Assessment information structure
   b. Create Vision Assessment reporting system (web-based)
   c. Establish programmatic data entry procedures
   d. <u>Create watershed browser (similar to CCAMP data browser) that displays health attributes at site, reach, and watershed scales</u>
   e. <u>Create basin browser to display groundwater metrics</u>

The success of the Vision Assessment Project will be determined by whether:

1. Each of the three goals have clear measures of "health", using data that is either readily available or which can be made available with reasonable effort.
2. A readily useable and maintainable data management framework exists to store the necessary information.
3. The necessary information is being collected by programs in a routine way and delivered into the data management framework.
4. A baseline evaluation of health has been accomplished for each of the three goals.
5. A web-based assessment tool is available to display assessment information related to each measurable goal and for staff to use in their everyday work.

Project Stakeholders

Central Coast Water Board staff are the primary stakeholders for this project, but in the larger sense the public and regulated entities are as well, because the project needs to develop assessment information in a way that can be understood by all. Key stakeholders include the other Vision Teams, since the Assessment Team must support the tracking needs of the Vision Project as a whole. Other key stakeholders include representatives from various Board programs, who understand the data collected by that program and can serve as liaisons to the Vision Assessment Team. Some of these individuals may also assist with development of data management systems and geographic information systems related to this project. All Water Board staff will have the opportunity to provide input on key parameters for tracking, assessment approaches, information packaging, and adjustments to programmatic activities needed to obtain assessment information. Other stakeholders may include information management and program staff at the State Board and other agencies. Also, many other agencies and organizations are developing tools for geographically displaying information (including the Coastal Commission, the Department of Fish and Game, and the Department of Forestry); one or more of these agencies may be potential stakeholder/collaborators in this project. When the project is at a point that web-based assessment information is being designed, designs should be vetted with outside stakeholders to ensure that information is readily understandable and accessible.

Description of known assumptions and constraints, including expected completion time and resource limitations that may directly affect the project.

Assumptions: We assume that some significant portion of staff time will be freed up for at least three individuals, who will be working on metrics development, building database structures, integrating data within a geographic framework, and interacting with other staff to gather pertinent information and to guide needed programmatic adjustments. We are anticipating that it will take approximately three years (2010) to fully integrate this new program into office-wide activities.

Constraints: We would benefit greatly from at least one full time staff person dedicated to data management activities. We have many data resources available, but need someone with the expertise to take data from diverse sources and integrate them into a single cohesive framework. This is very time consuming, particularly because it needs to be done in a way that is manageable and maintainable for the long term. We are further constrained by access to some imagery analysis that will be needed for metric development. This and other analysis work will require grant funding to complete, probably in the vicinity of $300,000. Some programmatic adjustments may be required, in terms of what information is reported and how it is reported. In some cases this may require adjustments to permit requirements. These adjustments may be time consuming and may delay when the program can be fully integrated into office-wide activities. Adjustments in monitoring activities may also be needed, and SWAMP funding to date has been uncertain and highly variable. If the State Board's CIWQS data management system does

not proceed as planned, this could seriously constrain access to certain types of data.

Issues: We have a great deal of talent within our office to conduct at least a good portion of the work that needs to be done. However, staff already has a full workload, and time needs to be freed up to enable several individuals the latitude to work on this project. We need to explore ways to address this shift in workload, and need to insure that team member work plans address the required commitment of time and effort for the Vision Assessment Project. Another concern is that some of the data we will need for this project is planned to be available through CIWQS in the future. We need to anticipate data structures available through CIWQS to the extent possible, to avoid future duplication of effort. We do not want to build a program that is completely reliant on outputs from CIWQS because of our inability to control the outcome of that program. This creates a challenging situation in that there are areas we need to move forward with immediately in order to serve our vision process. For example, we need better reporting of storm water implementation activities. The Office of Information Technology will likely have concerns with our Region developing our own reporting structure because this is a proposed output of CIWQS. We need to consider development of intermediary data structures, such as those used by CCAMP to import data into the Surface Water Ambient Monitoring Program, and then into CIWQS. These structures can anticipate as much of the needed CIWQS information as possible. We will need to also consider most effective ways to collect and update information from other databases, including GeoTracker, EnviroStor, and GAMA.

Related/Dependent Projects

• The other Vision Teams (for Groundwater, Land Use, and Aquatic Habitat Health) are the most important related projects for the Vision Assessment Team. We must develop regular means of interaction and coordination between teams to ensure that we develop information that will directly support team goals. The Vision Assessment Team has a key function of supporting the assessment needs of the other Vision Teams.
• Several state agencies and organizations are involved in a Watershed Indicators project. We need to continue to participate in this effort, support it where possible, and ensure that our effort either serves as a model or is otherwise compatible with this statewide effort.
• One way we will likely receive information for this project is from CIWQS, or from anticipated CIWQS data structures, as well as from GeoTracker, GAMA, Envirostor, and others.
• We should consider the CCAMP web-based data delivery system as a model for routinely receiving necessary information from Storm Water, Grants, or other programs.
• The Monterey Bay National Marine Sanctuary currently has a grant project to pull multiple sources of water quality and land use data into an assessment framework. We will partner with this project to ensure that we build on this effort and avoid duplication of effort.
• CCAMP will serve as a primary data provider to this project, and as such may need to adjust

monitoring activities to some extent to best support this effort.

Critical Success Factors: Key areas of activity or support in which favorable results are necessary for the project to reach its goals.

Key areas of activity or support in which favorable results are necessary for the project to reach its goals.

• Adequate staff time, including a full time data manager assigned to work on the project
• Technical expertise for data structures development (whether through staff or consulting assistance)
• Support from senior staff and upper management, to ensure that necessary programmatic adjustments are made where needed, to provide assessment information in the needed format and in a timely way
• Ongoing, long-term commitment from staff to continue collecting and delivering necessary information into the project database in a consistent, reliable fashion
• Funding for outside assistance to conduct some technical tasks, and if new monitoring needs are identified, funding to support that effort.
• Cross-program coordination will be critical to ensure that we are asking the right questions, that our measures of success are meaningful, and that inter-related information is understood in multiple contexts.

Resources (skills, capabilities, competencies) required

• Staff skill, capability and competency to understand and interpret the data and information we have or may acquire
• Data and information from various Water Board and external programs
• Database management, including web-based data submittal tools
• Geographic Information Systems expertise
• Statistical capability (for metrics development)
• Software development expertise
• Adequate hardware computing and storage capacity
• Grant fund writing skills
• Non-profit support of additional staffing

Vision Project Charter Approval Signoff

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