

1.0 Project Introduction

Chapter 1 provides an overview of the project, not the watershed nor recommendations. The directives provided externally to the project, as well as those developed specifically for the project, are discussed. Some Watershed Fundamentals are discussed in Chapter 2 and the Overview of the Watershed is discussed in Chapter 4, after the Regulatory Framework in Chapter 3. Chapter 5 contains the recommended objectives as well as specific action items that can be undertaken to meet some of these objectives.

1.1 Authority and Sponsorship

This plan has been prepared on behalf of the Carlsbad Watershed Network (CWN), a group of organizations that deal with water resource issues within the Carlsbad Hydrologic Unit. The CWN began meeting several years ago on a monthly basis. These meetings include all the member organizations involved in water resources issues including all agencies, jurisdictions and non-profit organizations with an interest in streams, creeks and lagoon resources. Each member provides the network with updates of programs or projects they are considering to be the most effective method to approach the task at hand. If a task is specific to a particular organization's primary interests, then they are the lead agency. The CWN acts as a clearinghouse for water resources projects within the Carlsbad Hydrological Unit.

The CWN initiated this Watershed Management Plan (WMP) through the application and subsequent award of a Clean Water Act 205 (j) grant from the State of California. The grant was awarded in late 1999, though the consultant team and Technical Advisory Group was not selected and formed until 2001. This study is administered through the State Water Resources Control Board (SWRCB), with local assistance and direction from the San Diego Regional Water Quality Control Board (SDRWQCB). The Resource Conservation District of Greater San Diego (RCD) is providing the day to day management of the study.

The creation of the CWN in 1997 has provided an opportunity to develop a coordinated planning effort, to share resources and to find solutions for the benefit of the entire Carlsbad Hydrologic Unit. The CWN is made up of the following non-profit environmental interest groups: Agua Hedionda Lagoon Foundation, Batiquitos Lagoon Foundation, Buena Vista Lagoon Foundation, Cottonwood Creek Conservancy, Escondido Creek Conservancy and the San Elijo Lagoon Conservancy. The CWN is represented by local jurisdictions including: the cities of Escondido, San Marcos, Encinitas, Vista, Carlsbad, Oceanside

Quick View:

This column provides the key points made in the Plan, abbreviated for quick review.

This plan has been prepared on behalf of the Carlsbad Watershed Network (CWN), a group of organizations that deal with water resources issues within the Carlsbad Hydrologic Unit.

and Solana Beach as well as the County of San Diego. Other interested groups that are members of the CWN include: the SDRWQCB, the RCD, San Diego Association of Governments (SANDAG) and the Natural Resource Conservation Service (NRCS).

The RCD serves as the chair of the CWN and directly administers the development of this plan, with overview and management assistance from the State Water Resources Board. A special Technical Advisory Committee (TAC) was formed to provide direction to the consultant team. The TAC began meeting in March of 2001 and has been meeting every month since that time with the final TAC meeting being March of 2002.

1.2 Planning Directives

A key goal of the State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) is to provide water resource protection, enhancement, and restoration while balancing economic and environmental impacts. This is done using an integrated planning approach called the Watershed Management Initiative (WMI). The main ideas that define the WMI and distinguish it from previous efforts are as follows:

1. Water resource problems are identified and prioritized primarily on the basis of water quality within individual watersheds (geographic drainage areas used for management purposes). Unique solutions are developed for each watershed that considers all local conditions and pollution sources, and relies on the input and involvement of local stakeholders.
2. Historically, the SWRCB's programs have functioned on a state-wide and/or region-wide basis. This has worked reasonably well for controlling conventional pollutants from point sources, but has not proven adequate to address non-point sources of pollution. The WMI better coordinates existing efforts to regulate point source problems, along with efforts to address challenges from the threat of non-point source pollution.
3. The RWQCBs work in collaboration with local stakeholder groups. In conjunction with the SWRCB, they attempt to coordinate the actions of governmental agencies and programs to best assist the local groups. Better coordination of the many overlapping state and federal activities, especially those involving regulations and funding, is critical to the success of local watershed groups.

1.3 Project Purpose

The overall project purpose for the WMP is to provide a vision for the resource management of the Carlsbad Hydrologic Unit; identify goals for realizing this vision; specify actions necessary to achieve these goals; outline a strategy for implementing these actions; determine the responsibilities of various stakeholders in implementing this strategy; and prescribe a measurable monitoring program to determine how well the actions have implemented the vision.

1.4 Project Elements

The contract scope defines ten individual elements that this Plan will address. The Plan will strive to:

1. Describe the geographical boundaries of the watersheds;
2. Describe the natural resource conditions in the watersheds;
3. Identify sources of water pollution and the relative contribution of those sources;
4. Develop a process for public involvement and community-based leadership that includes diverse interests;
5. Describe measurable management practices for water quality improvements;
6. Identify measurable environmental and programmatic goals;
7. Identify measures to achieve clean water and other natural resource goals;
8. Identify phasing priorities and possible funding sources for implementation of needed restoration measures;
9. Identify means of monitoring progress towards achieving environmental and programmatic goals; and
10. Identify appropriate agencies to oversee implementation, maintenance, monitoring and evaluation.

1.5 Watershed Vision Statement

The CWN, through a Technical Advisory Committee, developed a "Vision Statement" that provides the overall direction for the Plan. This vision statement was reviewed by all CWN members and adjusted as a result of the first two public workshops conducted for this project. The final adjusted vision statement is:

"To protect, restore and enhance the quality and beneficial uses of water, habitats and other natural resources of the watersheds of the Carlsbad Hydrologic Unit and the adjacent coastal shoreline!"

The Plan will strive to:

- *Describe boundaries*
- *Describe resource conditions*
- *Identify sources of pollution*
- *Develop public involvement process*
- *Describe management practices*
- *Identify programmatic goals*
- *Identify resource goals*
- *Identify implementation measures*
- *Identify monitoring*
- *Identify agencies to oversee plan and actions items*

Plan Vision Statement:

"To protect, restore and enhance the quality and beneficial uses of water,

habitats and other natural resources of the watersheds of the



Carlsbad Hydrologic Unit and the adjacent coastal shoreline!"

The TAC and the general public collaborated to identify goals that could assist in the implementation of the project Vision Statement.

1.6 Watershed Goals Supporting the Vision Statement

The CWN Technical Advisory Committee also assisted in the development of individual goal statements that are necessary to provide direction and support for the vision statement. Similar to the vision statement, these goals were circulated to all CWN members and were also adjusted based on comments received at the first two public workshops.

The following goals provide additional direction and support for the vision statement:



Goal 1: Protect, restore and expand undeveloped open space that will provide self sustaining hydrologic and habitat connections along the established water courses of the Carlsbad Hydrologic Unit. Purchase or transfer into public ownership as many of these resources as possible, including functional buffers needed for protection.



Goal 2: Protect public health by preventing or minimizing health risks to users (human & wildlife) of local water resources. Establish a monitoring program to assure continued protection and a method of ranking severity of problems. Determine a process for making this data publicly accessible through an Internet database. Recognize that public health includes flood protection as well.



Goal 3: Protect, restore and enhance beneficial water uses and environmental health. Strive for a balance between human uses, planned development and resource protection.




Goal 4: Facilitate coordinated efforts amongst municipalities, regulatory agencies and environmental organizations to implement watershed management policies and physical improvements at the most functional locations and in the most effective manner, without restriction of political boundaries.





Goal 5: Through an educational program, increase the public's knowledge, understanding and appreciation of local watersheds and associates water resources. This program should explain how to help protect areas that are set aside for open space, while providing controlled public access to these areas to help in the education process. Develop and maintain a sense of individual and organizational stewardship and financial responsibility for protecting local watersheds and the quality and beneficial uses of local waters. This responsibility includes monitoring, maintenance and protection.


1.7 Prioritized Outcomes and Expectations


As an additional step in the development of the purpose of this Plan and its recommendations, potential outcomes were developed and reviewed by CWN members and prioritized by the attendees of the first two public workshops. These outcomes, in order of priority, include:


Outcome 1:  The sensitive resources of the four major coastal lagoons and waterways would be protected (and allowed to be enhanced) through the lessening of water quality impacts.


Outcome 2:  The hydrologic system would be protected and enhanced so that it becomes a continuous "bluebelt" that would correspond with the protected adjacent "greenbelt" of open space and riparian habitats.


Outcome 3:  A balance would be achieved between sediment transport for beach sand, wetland creation and natural erosion processes and the negative effects of mass erosion, stream bank cutting and sedimentation of waterways.


Outcome 4:  The natural upland resources would be protected to ensure natural processes that protect water quality and decrease excessive runoff during storm events.

Outcome 5:  Public use of and access to coastal beaches and controlled access to other waterways in the Carlsbad Hydrologic Unit would be increased by minimizing water quality conditions that force limitations on these uses.

Outcome 6:  Riparian habitats and streams would be protected from excessive erosion of stream banks and major flood forces. The use of stream courses for water conveyance, water cleansing and wildlife corridors would be enhanced.

Outcome 7:  The removal of concrete channels and restoration of these waterways back to natural creeks would be accomplished while at the same time retaining existing flood protection, and providing for human use and education by providing natural walks, interpretive facilities and streamside parks.

Outcome 8:  The overall quantity (through water conservation, protection and recycling) and the quality of non-imported water available for irrigation, agriculture and domestic use would increase without negatively affecting the other beneficial uses of water in the watershed.

Outcome 9:  Surface water quantity and quality improvements would result in better groundwater recharge, subsurface water quality, prevention of increased saltwater intrusion and elimination of excessive aquifer drawdown.

Though these outcomes are not the final recommended objectives, they have been included here since they represent the initial direction provided by the TAC and the general public.

These outcomes are further refined and supplemented by specific objectives and action items listed in Chapter 5. These outcomes have been included here to identify the initial direction given to the consultant team and should not be used as final recommendations.

1.8 Planning Process

The project scope is divided into seven tasks. The term phasing was not used to stress that these elements of the plan are being done simultaneously and do not occur in a strict linear fashion. The tasks are:

- Task 1: Project Initiation and Data Collection
- Task 2: Technical Advisory Committee Input
- Task 3: Public Outreach Program
- Task 4: Existing Information Analysis
- Task 5: Watershed Management Plan Development
- Task 6: Implementation, Institutional and Financial Plan Development
- Task 7: Revised Submittals

1.9 Limitation of Tools Considered in this Plan

There are a variety of topics where this plan could make recommendations. Some of the most effective tools for implementing water quality and preservation of beneficial water uses is through the powers and jurisdictions provided to the local municipalities. This plan is not intended to make specific recommendations that would overstep the jurisdictions of local municipalities nor to replace the requirements and responsibilities of the Municipal Storm Water Permits. However, for discussion purposes, some of the following tools will be reviewed in this document but will not be turned into specific recommendations since the local jurisdictions have full control and responsibility over their use.

Land use Planning

- Monitoring and controlling future land uses
- Watershed based zoning
- Special overlay zoning
- Urban growth boundaries

Land Conservation

- Critical habitat preservation
- Open space planning
- Aquatic corridor preservation and buffers
- Hydrologic reserve areas

Site Planning and Design Guidelines

- Parking lot, grading and development standards
- Headwater street / runoff control guidelines
- Rooftop runoff management
- Cluster development and site drainage requirements
- Erosion and sediment control requirements
- Stormwater management and treatment systems

This plan will concentrate its efforts on identifying specific objectives and action items that will fall into one of the following categories:

- A framework of how the tools listed above might be used by local agencies
- Watershed advocacy for planning and design review coordination efforts
- Coordination of possible water quality monitoring techniques
- Coordination of research and monitoring of Best Management Practices
- Restoration and enhancement activities and projects for protecting local resources
- Requirements and a framework for future data collection, research & mapping
- Watershed education programs