



Petaluma Watershed Enhancement Plan

An owner's manual for
the residents and landowners of
the Petaluma Watershed

Prepared by:
The Southern Sonoma County
Resource Conservation District
in conjunction with the people
of the Petaluma Watershed

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1.0 Executive Summary

The Petaluma Watershed Enhancement Plan was prepared through grant funding from the California Regional Water Quality Control Board (RWQCB). The Regional Board is currently focusing efforts on initiating watershed management planning for several counties, including Sonoma County. It is the RWQCB's belief that watershed planning and protection efforts will not be effective unless solutions are defined and implemented locally.

In compliance with the intent and purpose of the grant funding, the Southern Sonoma County Resource Conservation District (SSCRCD) issues this Watershed Enhancement Plan (Plan) in partnership with the many dedicated individuals from the AC established in 1997. During the Plan's two year planning process, the Advisory Committee determined the purpose, scope, and intent of the Enhancement Plan. The primary focus of the Enhancement Plan is the issues of concern of the agriculturists and landowners located outside of the Petaluma urban area.

The Advisory Committee met regularly to discuss their common issues and concerns and from these they identified goals for improving the watershed. One of the major issues for the landowners was the fact that the Petaluma River is not actually a river but is in fact a tidal slough or "tidewater estuary". This particular issue played an important part in the Committee's goal setting. See the History section 3.5 for more details. This particular issue played an important part in the Committee's establishment of future goals.

The majority of the landowners involved in this planning process are ranchers and farmers who care about the health of the watershed. They are interested in participating and contributing to the process of enhancing the watershed and sustaining agriculture in Sonoma County. The local landowners also realize that the criteria for water quality standards set for a river could be significantly more stringent than for a slough and could be unattainable. The main concern this created for landowners is the question of how to set water quality standards. With this in mind, the Advisory Committee realized that it would be prudent to remain involved in setting criteria for water quality standards within the watershed. Therefore, many of their goals reflect this interest.

At first, ten goals were identified and then through a process of strategizing and clarification, the Advisory Committee further refined and shortened the number of goals to four. These four goals and their accompanying objectives and recommended actions are described in detail with a time line for implementation in

Chapter 4.0. The four goals are listed as follows:

- Goal A: *Establish a Local Watershed Council for Residents and Other Organizations to Fund and Coordinate Watershed Enhancement Activities and Keep One Another Informed.*
- Goal B: *Improve Water Quality and Ground Water Recharge in the Petaluma Watershed with the Ultimate Purpose of Removing the Petaluma River from the RWQCB Impaired Waterbody List 303d*
- Goal C: *Support the Viability of Agriculture in the Community*
- Goal D: *Conserve and Enhance Existing Wildlife Habitat*

A fundamental assumption in attaining any of the goals in the Plan and/or following through with any of the recommended actions for enhancement in the watershed is the establishment of a Watershed Council. In turn, the success of the “Watershed Council” is directly related to the commitment and strength of the community and continuation of the existing Advisory Committee as it begins to evolve into a “Watershed Council.” It is envisioned that the founding members of the Watershed Council would primarily consist of agriculturists and landowners from outside the urban community. Over time and with continued success, stakeholders from throughout the watershed would be invited to participate and work cooperatively on mutual goals.

Prunuske Chatham, Inc., an environmental consulting firm, specializing in ecological restoration and design, was hired to prepare supporting documentation on key technical subject areas such as erosion and sedimentation, land use, riparian enhancement, and marsh/bay habitats. These studies were originally entitled “summaries” and they are provided herein in their entirety and found as individual appendices of this document. Important information and analyses from these studies have been incorporated where appropriate, into the body of the Plan document.

2.0 Introduction

2.1 Purpose

The purpose of this document is two-fold: 1) to identify the existing conditions and issues from the perspective of the landowners and residents in the watershed, and 2) to state a set of goals, objectives and recommended actions that were collaboratively developed addressing specific issues and concerns. It is hoped that this Enhancement Plan for the Petaluma Watershed will serve as a guide for addressing the need for more information and outreach among stakeholders in the watershed and in identifying a focus of effort for a “Watershed Council” and it’s recommended future actions.

The health of this watershed is affected by the many land use components making up our community. All activities within and beyond the City limits contribute to our watershed. This plan focuses primarily on the issues of concern related to the agricultural community of this watershed and lands beyond the Petaluma City limits. It is recognized, however, that urban land uses contribute significantly to water quality impacts such as erosion and sedimentation and the need for increased water supply and flood protection.

Representatives of the community and other entities came together to establish a collection of concerns for this watershed. In addition to issue identification, this group also established a number of actions and objectives to achieve major goals for the Petaluma Watershed. This plan was constructed primarily from the volunteer time and effort of the members of the AC. The issues and goals identified in this plan show the dedication and concern that members of the agricultural community have for the Petaluma Watershed.

2.2 Funding Source and Grant Objective

The funds to prepare the Petaluma Watershed Enhancement Plan were awarded to the Southern Sonoma County Resource Conservation District (SSCRCD) through a 205(j) grant from the California Regional Water Quality Control Board (RWQCB). The RWQCB’s overall mission is to protect surface and ground waters of the San Francisco Bay Region. The RWQCB carries out this mission in many ways including regulation, enforcement, and pollution prevention. For example, RWQCB has administered a permit program for nearly two decades to control municipal sewage and industrial wastewater discharges. At the same time, urban and agricultural runoff discharges have continued mostly unchecked, and may contribute to the pollutant loading of rivers, streams, bays, lakes, and lagoons in the San Francisco Bay area. The RWQCB will be focusing much of their effort over the next few years on controlling pollution from these latter sources. The emphasis will be on preventing pollution before it occurs by managing resources more carefully, as opposed to cleaning up pollution “after the fact.”

To help accomplish this, the RWQCB is focusing efforts on initiating watershed management planning for several counties, including Sonoma and Napa. In 1997, the SSCRCD prepared a similar Enhancement Plan for the Sonoma Creek Watershed. The RWQCB firmly believes that watershed planning and protection efforts will not be effective unless solutions are defined and implemented locally. An effective watershed

management plan requires formulating water quality goals and objectives for watershed protection and enhancement, and committing to specific tasks that will eventually allow the objectives, and ultimately the goals, to be met. Broad, local consensus on what preventative and remedial actions are needed and how they should be applied, are crucial to success of this Plan.

2.3 Stakeholders in Watershed Planning

This plan serves as a vehicle and voice for the local watershed residents and landowners. In general planning terms, the “stakeholder” is an individual or group entity such as a resident/landowner/agency/or other group who has a business, or other interest, responsibility, or jurisdiction regarding the health and well being of the watershed. Each stakeholder comes to the table and typically works on a level playing field with others. In a local work group setting, such as a “Watershed Council”, the stakeholders would come together to share information and to work cooperatively on common tasks where they are united by a shared vision of watershed planning goals.

2.4 How to Use the Enhancement Plan

The Petaluma Watershed Enhancement Plan is a working document and represents the consensus of over two year’s work. The Plan has been written as a guide for future watershed enhancement efforts in the Petaluma watershed. The Plan is broken into sections beginning with a summary, introduction, description of the watershed, the plan goals and objectives, and numerous technical appendices.

The Petaluma Watershed Enhancement Plan is designed for readers to reference in several ways. Some readers may have limited time and want only to absorb the main points, while others will be able to read every appendix. The list below identifies the most essential portions of the Plan, which should not be missed. In order to get the most out of your time spent with the Plan you should use the list below in conjunction with the Table of Contents to read the sections most appropriately fitting your time and needs. Many acronyms are used throughout the document and they are defined on Table 1.

For those readers who have limited time:

- Read Section 1.0, Executive Summary
- Read Section 2.1, Purpose
- Read Section 4.3, Enhancement Plan Goals, Objectives and Recommended Actions
- Review Table 4, Enhancement Goals - Potential Source of Funding and Technical Support
- Review Section 4.4, Summary of Appendices

Table 1

List of Acronyms

AC	Advisory Committee
ACOE	United States Army Corps of Engineers (Corps)
ACP	Agricultural Conservation Program
AWC	Sonoma Marin Animal Waste Committee
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
CIWMB	California Integrated Waste Management Board
EQIP	Environmental Quality Incentives Program
FSA	Farm Service Agency (USDA)
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmosphere Administration
NRCS	Natural Resources Conservation Service (USDA)
PCI	Prunuske Chatham, Inc.
RCD	Resource Conservation District
RWQCB	Regional Water Quality Control Board
SCWA	Sonoma County Water Agency
SSCRCD	Southern Sonoma County Resource Conservation District
TMDL	Total Maximum Daily Load
UCCE	University of California Co-operative Extension
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
WC	Watershed Council

2.5 Public Involvement

The Petaluma Watershed Enhancement Plan would not exist without public participation and it is the public's interest and active participation that will continue to be at the heart of the Plan's effective implementation. Public meetings were held throughout a two-year planning process (1997-1999). An Advisory Committee (AC) met periodically to discuss technical reports as well as establish the goals for the Watershed Enhancement Plan. A newsletter was published quarterly by the RCD to update residents of the Plan's progress as well as inform them of ongoing conservation efforts and workshops within the watershed.

The purpose of the first public meeting was to provide an overview of watershed issues, stimulate as well as discover landowner interests, and create a dynamic watershed group. This first public meeting formed the AC, consisting of landowners, residents, ranchers, farmers and community groups. From October 2, 1997 to February 10, 1999 the AC held 8 meetings at the Lucchesi Park Community Center to discuss technical studies, plan components, and goals. The group also attended two tours throughout the watershed and spent innumerable hours of their own time reviewing technical reports and scrutinizing proposed goals for the enhancement plan.

Five extended landowner outreach meetings were held by the RCD. These area meetings were established in order to discuss the enhancement plan, planning process and concerns of the landowners in these specific areas. These meetings were held in the Lakeville region, Denman Flat (Penngrove) region and two additional meetings took place in the San Antonio Creek subwatersheds.

The watershed tours were another form of outreach created to educate community members within the watershed and promote thought towards the Plan's development. The tours were part of an effort to identify ways of improving water quality through improved land management practices. Tour sites included a bayland farm, a dairy, a sheep ranch, and an olive orchard. Landowners demonstrated how they utilize best management practices to maintain and improve soil and water resources to comply with ever-increasing regulations.

The goals and recommendations of the Petaluma Watershed Enhancement Plan come directly from the AC and represent concerns voiced by residents throughout the watershed. During the process of identifying the goals and recommendations, three major themes emerged. The most important theme is that the local residents and community groups take the lead in watershed enhancement projects. Also vital to the Plan is that the community and all enhancement work support viable agriculture in the watershed. Another critical aspect of the Plan is to reduce erosion, improve water quality and enhance wildlife habitat. All of the goals and recommendations have these three main ideas interlaced into their "fabric".

All of the people listed in Table 2 attended either all or some of AC meetings that guided the creation of the Petaluma Watershed Enhancement Plan. Each person in the AC participated voluntarily in this process.

Table 2

Advisory Committee

Landowners & Residents:

Gloria Altenreuther	George Gambonini	Jeff Peters
Tom Altenreuther	Ray Gwendorf	Ray Peterson
Thomas Bachman	Michael Hart	Jim Riebli
Tom Baginski	Todd Horick	Herb Roche
Stan Brayton	Craig Jacobsen	William Roop
Vasco Brazil	Margaret Kullberg	Suzie Schlesinger
Rita Cardoza	Mimi Luebbermann	Joanne Scott
Elaine Carle	Iris Matson	Tom Scott
Pat Cheda	Jim Mendoza	Don Silacci
Jerry Corda	Lucy Mendoza	Liz Tabor
Hank Corda	Nita Miller	Tim Tamalantes
Cynthia Crane	Don Moreda	Dominga Tunzi
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Others

Nancy Scolari, Executive Director,
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 Robert Rand (former SSCRCD staff)