



The Upper Mark West Watershed Management Plan

THE WATERSHED Mark West Creek is a tributary to the Laguna de Santa Rosa, a tributary to the Russian River in Sonoma County. The Upper Mark West watershed consists of approximately 40 square miles draining to Upper Mark West Creek and its tributaries. Protection and enhancement of the Mark West watershed and its fishery is an objective of many resource agencies including the Department of Fish and Game and NOAA Fisheries, County of Sonoma and the Sonoma County Water Agency, the Regional Water Quality Control Board, National Fish and Wildlife Service, and the Army Corp of Engineers.

THE PLAN The Sotoyome Resource Conservation District (RCD), building on years of successful outreach and cooperation with landowners in the Upper Mark West watershed, has begun development of the Upper Mark West Watershed Management Plan. The plan will be a valuable tool stakeholders can use to make management decisions in the watershed. This plan will be designed to facilitate stewardship planning at many different scales, from the parcel scale to the watershed scale.

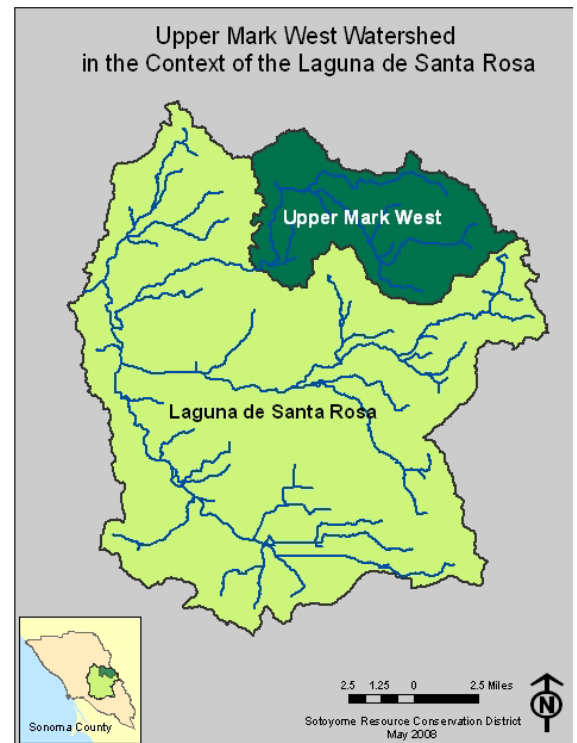
THE GOALS Our plan will address the following conservation goals for the Upper Mark West Watershed:

- Meet water quality standards for sediment/siltation
- Maintain and prevent degradation of aquatic life including *salmonid* species
- Inventory, assess and restore aquatic, riparian and upland habitats
- Promote native biodiversity
- Restore and protect forest health
- Improve water conservation

THE DATA The plan will pull together existing information from many different sources, including, federal, state and local government agencies, as well as landowners and watershed groups to provide a description of present and historic conditions in the watershed. The plan will build upon sediment source assessments completed by Pacific Watershed Associates. Sotoyome RCD will also develop new data sets including roads and other non-point sediment sources using Geographic Information System (GIS) technology and on-the-ground investigation. Finally, in addition to data compiled through Sotoyome RCD's Monitoring and Assessment Program and from input from the Friends of Mark West Watershed (FMWW), Sotoyome RCD will collect water quality, flow and geomorphology data.

THE KEY COMPONENTS Sotoyome RCD will develop a concrete plan of action that links back to the major problems and sources of pollution in the watershed and will follow the U.S. EPA's guidelines for developing an effective watershed management plan by incorporating all nine required elements:

1. An identification of causes of impairment and sources of pollutants in the watershed.
2. An estimate of load reductions expected from management measures.



3. A description of the nonpoint source management measures that will be implemented to achieve load reductions.
4. An estimate of the amounts of technical and financial assistance needed to implement those management measures.
5. An information and education component used to enhance public understanding of the project and to encourage their early and continued participation in selecting, designing, and implementing nonpoint source management measures.
6. A schedule for implementing nonpoint source management measures identified in the plan.
7. A description of interim measurable milestones for project implementation efforts.
8. A set of criteria that can be used to determine whether load reductions are being achieved over time and substantial progress is being made toward attaining water quality standards.
9. A monitoring component to evaluate the effectiveness of implementation efforts over time.

OUTREACH AND DEMONSTRATION PROJECT To facilitate future conservation efforts by private landowners and disseminate information gathered during the planning process, we will create an **interactive online map-based information system** where landowners and stakeholders will be able to access a variety of information on soils, vegetation, precipitation, etc. at the parcel level, as well as best management practices tailored to the unique combinations of biotic and abiotic factors affecting each parcel. In addition, to address the growing interest in water conservation we will create a **roof water catchment demonstration project** to assess the costs, logistics and feasibility of developing winter storage projects for rural residential uses (potable and non-potable, i.e. irrigation, fire protection, etc.), thereby reducing the extraction of groundwater during the summer months. The pressing need for water conservation, combined with the presence of landowners who are highly motivated and involved, makes this watershed an ideal model for water conservation on rural residential land in surrounding watersheds.

THE UPPER MARK WEST PLAN IN THE CONTEXT OF OTHER PLANNING EFFORTS

The Upper Mark West Watershed Management Plan will complement the existing document “Enhancing and Caring for the Laguna” (Laguna de Santa Rosa Foundation, 2006) in several ways. The existence of the Laguna document provides an opportunity for nested planning within the watershed. Planning that reflects the geographic hierarchy of watersheds can serve unique functions at each level. While the Laguna plan provides a broad vision for the future of the watershed, a plan focused on the Upper Mark West sub watershed will build upon this broad vision to develop specific, actionable goals, and describe the steps necessary to achieve these goals. In addition, Sotoyome RCD is playing a leading role in the development of the Saddle Mountain Management Plan with the Sonoma County Agricultural Preservation and Open Space District, also located within the Upper Mark West watershed. Consistency among the overriding goals and principles in these three plans will maximize the effectiveness of each plan. The Sonoma County Water Agency has provided some preliminary funding for the development of the Sotoyome RCD management plan but additional funding remains necessary for the completion of this important plan, interactive plan, and demonstration project.

