

WATERSHED SUCCESS STORIES

SUTTER COUNTY RESOURCE CONSERVATION DISTRICT

Lower Feather River/Honcut Creek Watershed Existing Conditions Assessment

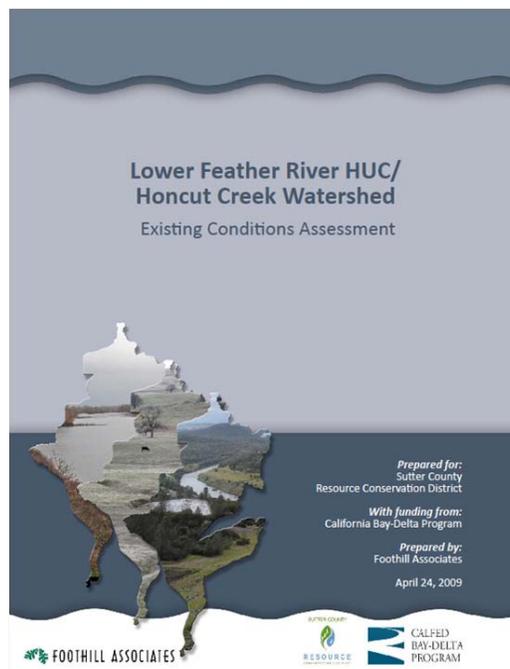
The Lower Feather River/Honcut Creek Watershed Existing Conditions Assessment (Assessment) identifies and addresses resource issues and concerns that affect the economic, ecological, and social conditions of the Watershed. The Assessment features research and analysis in five essential categories: watershed characteristics; socioeconomic issues; existing planning efforts; gap and knowledge analysis; and conclusions. The Lower Feather River/Honcut Creek Watershed includes landscapes in Butte, Yuba and Sutter Counties.

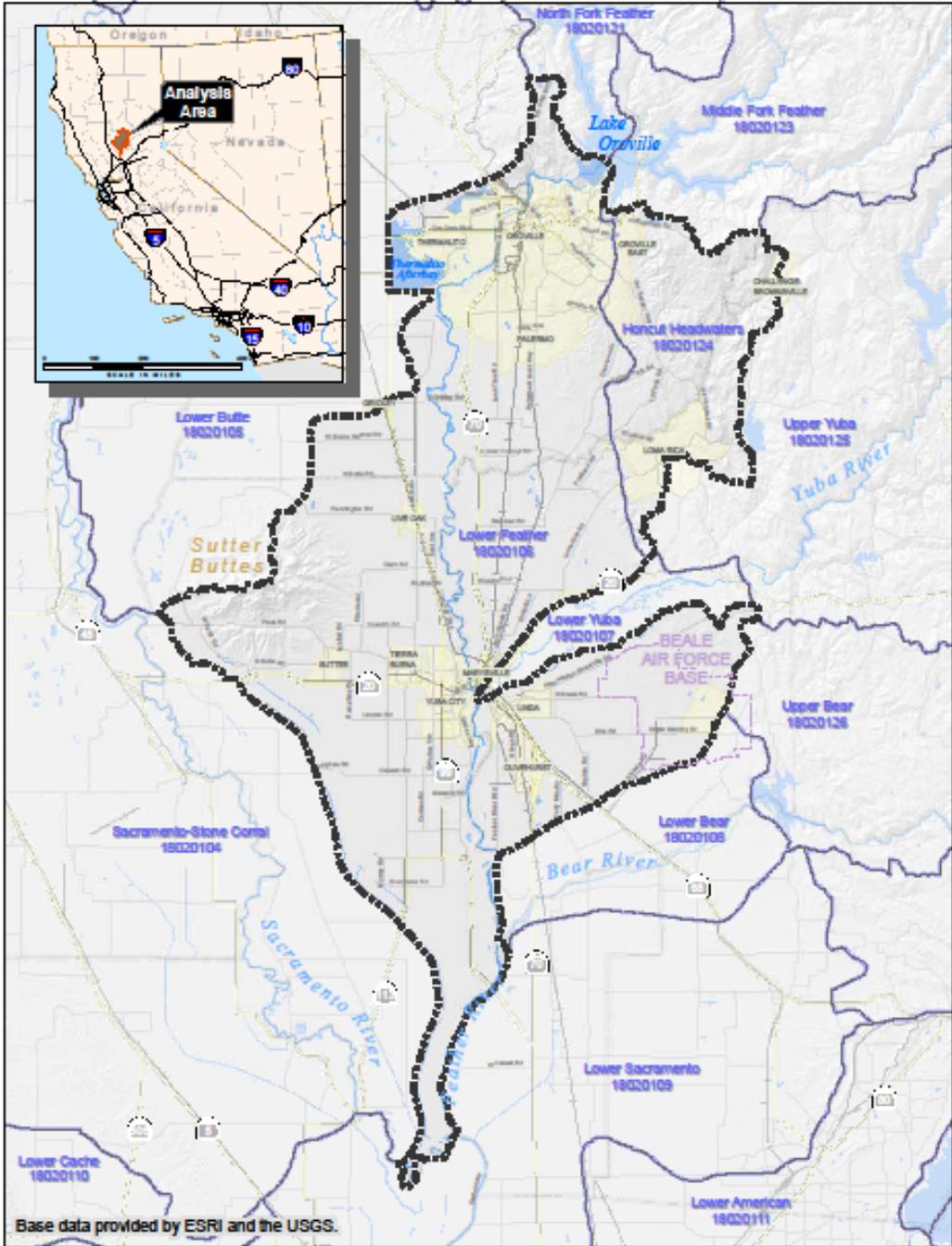
In early 2006, The Sutter County Resource Conservation District (SCRCD) formed a partnership with the Yuba and Butte County Resource Conservation Districts and the City of Yuba City to examine a variety of resource-related conditions within the geographic boundaries of the Lower Feather River HUC /Honcut Creek Watershed. At the outset, the primary purpose of this collaborative project was to develop a comprehensive understanding of existing watershed conditions based on data previously collected by local, state and federal agencies, and others. Throughout the assessment process, emphasis was placed on a consensus-building approach with local landowners, stakeholders, and all levels of government.

The Assessment is designed to help a broad spectrum of planners and stakeholders address cross-jurisdictional resource challenges and—ultimately—design plans that will foster a vibrant economy in balance with a sustainable environment throughout the Watershed.

This project was funded under Proposition 50 as administered by the CALFED Bay Delta Authority, the CALFED Watershed Program, and the California Department of Water Resources.

The entire document is available online at: scr.cd.org/programs/lfr.htm.





HUC LOCATION REFERENCE MAP

<p>0 4 8 SCALE IN MILES</p>	<p>N ↑</p>	<p>Prepared By: Foothill Associates Drawn By: PDL Date: 06/11/08</p>	<p>Figure 2.1</p>
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Lower Feather River/Honcut Creek Watershed

Implementation of Feather River Total Maximum Daily Load for Orchards

In 1994, the Lower Feather River was placed on the Federal Clean Water Act 303(d) list as impaired for beneficial uses due partially to an exceedence of Diazinon, an organophosphate (OP) pesticide. Under the Federal Clean Water Act, California State Water Resource Control Board (SWRCB) is required to set priorities for addressing 303(d) listed state waterbodies and to establish Total Maximum Daily Loads (TMDL) for pollutants as objectives for attaining water quality standards. A TMDL describes reductions needed to meet water quality standards and allocates measures to be implemented throughout the identified water body. In October 2003, the Central Valley Regional Water Quality Control Board (CVRWQCB), as directed by the SWRCB, established TMDL regulations for Diazinon, pyrethroids, and irrigation-transported sediment on the Lower Feather River.

Project Goals

The primary goal of the Implementation of Feather River Total Maximum Daily Load for Orchards was to meet the TMDL regulations through a three-step process: 1) reduce Diazinon use, 2) reduce runoff containing Diazinon, and 3) delay runoff of Diazinon. The TMDL notes that “vegetation management practices could be used to increase infiltration and/or reduce runoff” and that “vegetation such as the planting of cover crops, buffer strips or allowing native vegetation to grow where they will reduce runoff rates” will help reduce excess nutrients and recharge groundwater in addition to reducing runoff.

To fulfill these three actions, the project implemented the following objectives:

- Determine pesticide load targets for Diazinon, pyrethroid and irrigation transported sediment and other pesticides in the Lower Feather River Watershed by analyzing data and information appropriate to pre-project conditions of the stretch of river from Oroville Dam to the confluence with the Sacramento River at Verona.
- Evaluate and track grower participation and implementation of best management practices (BMPs) such as vegetated filter strips and cover crops to control off site runoff of Diazinon, pyrethroid and irrigation transported sediment into the Lower Feather River.
- Demonstrate improvement in water quality as a result of vegetative BMP implementation to control the amount and movement of Diazinon and other pesticides in outflows of orchards located in the Lower Feather River Watershed by conducting field-level BMP implementation and effectiveness monitoring.
- Develop recommendations and education programs for orchardists, irrigation district managers, pest management and crop consultants, and others that will increase the inclusion of vegetated filter strips and cover crops in the standard orchard practices.

In September of 2009, the CVRWQCB recommended delisting the Lower Feather River for the exceedence of Diazinon.

The Project was funded by the State Water Resources Control Board through the Proposition 50, Agricultural Water Quality Grant Program.

The entire document is available online at: scrcd.org/programs/tmdl.htm



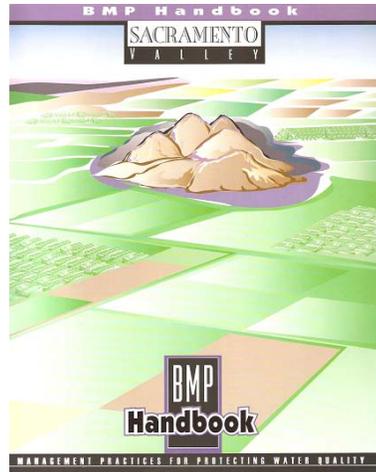
BMP Effectiveness Monitoring



Gilsizer Slough Monitoring



Sprayer Calibration



BMP Handbook



Bare Ground Orchard Floor



Vegetative Cover Crop

The Gilsizer Slough Agricultural Water Enhancement Program Project Action Plan

In early 2008, the Sutter County Resource Conservation District (SCRCD) formed a partnership with the Natural Resources Conservation Service (NRCS) to sponsor an Agricultural Water Enhancement Program (AWEP) proposal (Proposal). Titled “The Gilsizer Slough AWEP Project Action Plan (Plan)”, the Proposal focuses on assisting producers who operate orchards within the Gilsizer Slough Watershed.

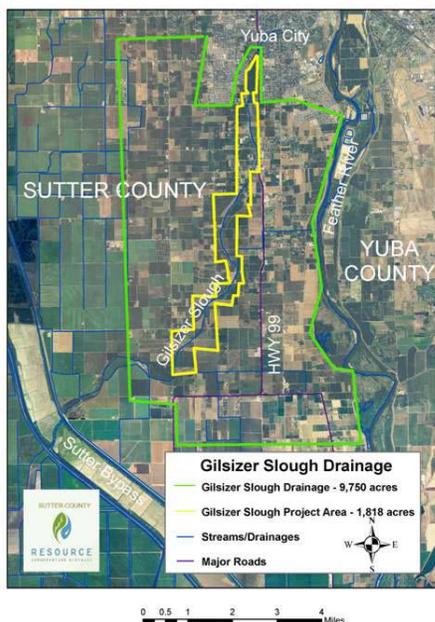
In September of 2009, the Central Valley Regional Water Quality Control Board (CVRWQCB) recommended adding the Gilsizer Slough to the Federal Clean Water Act 303(d) list as impaired for beneficial uses due to exceedences of Diazinon. Agriculture was identified as the probable source of the Diazinon found in the Slough.

In 2009, NRCS funded the Plan, which is designed to address both water quantity and water quality improvements for agricultural producers (producers) in the Gilsizer Slough Watershed through: higher efficiency irrigation systems; vegetative cover crops and filter strips; the adoption of Integrated Pest Management (IPM) techniques; nutrient management; irrigation system monitoring; instream monitoring; and conservation practice education and outreach.

The Plan allows NRCS to enter into Environmental Quality Incentive Program (EQIP) contracts with producers to address water quality and water quantity resource concerns through the adoption of specific Best Management Practices, as discussed above. The Plan is funded for five years at \$1.1 million per year. In 2009, twelve (12) producers were awarded AWEP-funded EQIP contracts for a total of 596 acres treated with BMPs. In 2010, ten (10) producers were awarded AWEP-funded EQIP contracts for a total of 826 acres treated with BMPs. Producers are lining up to submit proposals for the 2011 calendar year.

The ultimate goal of the Plan is to decrease Diazinon loading in the Slough that will result in a de-listing of the Impairment by 2012.

2009 Gilsizer Slough AWEP Project Action Plan



Gilsizer Slough

