

SIERRA RESOURCE CONSERVATION DISTRICT

LONG RANGE PLAN 2015 to 2020

INTRODUCTION

Resource Conservation Districts (RCD) were authorized by Federal Legislation in 1937 under the Standards Act. California adopted a compatible state provision in 1938 as expressed in Division 9 of the Public Resources Code (PRC) Sections 9001 et seq. These provisions have been amended through the years to reflect changing needs and conditions.

As of 1992, the primary purposes of the Resource Conservation District under Section 9001(a) is to secure "the adoption of conservation practices including but not limited to farm, range, open space, urban development, wildlife, recreation, watershed, water quality, and woodland; to save the basic resources, soil, water, and air of the state from unreasonable and economically preventable waste and destruction."

Under PRC Section 9001(b-1) the District has legal authority to "cooperate with the United States, this state, counties, cities, public districts, other resource conservation districts, persons, associations, and corporations". Additionally, (b-2) with the consent of the owner, the RCD may construct on privately or publicly owned lands, "necessary works for the prevention and control of soil erosion and erosion stabilizations."

The California Legislature determined that the "construction and maintenance on privately or publicly owned land of works for resource conservation is in the public interest and for the general public benefit", and the expenditure of state, county, city, district or other public funds that are or may become available for planning, designing or implementing the above {such resource conservation works} constitutes an expenditure for the general public benefit. (Section 9002)

The RCD is empowered under both federal and state legislation. Agencies at all levels of government have responsibilities to provide expertise and to otherwise assist and cooperate with the RCD on natural resource projects. This is strengthened by additional inter-agency Memorandums of Understanding. The RCD is to provide local input and leadership and foster interagency cooperation and coordination on natural resource projects on both public and private lands.

MISSION

The mission and function of the SIERRA RESOURCE CONSERVATION DISTRICT (referred to as SRCD or District in the balance of this document) is to take available technical, financial and educational resources whatever their source and focus or coordinate them at the local level to meet the present and future natural resource needs of the local land user.

To accomplish this, SRCD maintains working relationships with Federal, State and County Agencies and Departments, non-profit organizations, educational institutions which have natural resource duties and responsibilities under law, and with public and private landowners to save the basic resources, soil, water, and air of the state from unreasonable and economically preventable waste and destruction.

Because of the status of the Resource Conservation District under state and federal laws, the District can call upon numerous state and federal agencies for technical expertise, funding and cost-sharing, in addition to County resources. Private lands and the protection and conservation of critical natural resources on private lands are greatly affected by the policies and practices of the State and Federal agencies. Most effective conservation practices will involve both the public and private land ownerships. The SRCD can and does act as a liaison between the private landowner and a multitude of land use programs to meet natural resource objectives.

As a guide to fulfillment of mission objectives, SRCD has developed this long range plan which will:

I. PHYSICAL SETTING OF SIERRA RESOURCE CONSERVATION DISTRICT

A. Overview

The Sierra Resource Conservation District (SRCD) encompasses approximately 3063 square miles (1,960,248 acres). The area is over 50% of the total acreage of Fresno County (3,817,025). The SRCD is bounded on the north by the Fresno-Madera County line; on the east by the Fresno-Mono and Fresno-Inyo County lines; on the south by the Fresno-Tulare Co line; and the Sequoia National Park Boundary; and on the west by Blackstone Avenue, Herndon Avenue, Fowler Avenue, and Jensen Avenue as they intersect with each other, and also includes the campus of California State University Fresno (CSUF).

Refer to SRCD Consolidated Area Map.

The SRCD can be divided into three distinct sections.

B. Valley Floor

Approximately 15% of the SRCD is in the San Joaquin Valley. This area is noted for its very high agricultural production potential. Orange groves, vineyards, seasonal specialty crops, hay and livestock producers form the agricultural component of the valley portion of the district. The average growing season is long with over 275 days above 32 degrees.

The valley portion of the RCD has the highest population and urbanization pressure, and the lowest elevation (to about 500 feet above sea level). Included are portions of municipalities of Fresno, Clovis and Orange Cove, California State University Fresno, the San Joaquin River Parkway, and a number of community parks. Much of the area is subject to flooding and ponding from the San Joaquin and Kings Rivers, and several lesser watershed drainages. A number of Flood Control Districts and groundwater recharge basins are within the SRCD boundary.

Valley temperatures are quite hot, averaging 101 days per year with temperatures above 90 degrees. Valley winter temperatures are cool at just above 32 degrees with an occasional dip to 15 degrees. The land topography is flat to rolling. Soils vary from hardpan to deep Sandy loam. The water table is shallow, approximately 20 to 60 feet below the land surface.

Rainfall averages about 11" per season. In most areas, water systems provide potable water to cities and waste water treatment plants provide sewage treatment. (Ponding basins are used as a flood control measure and as a water table recharge tactic.) Private wells and septic systems are used in outlying areas. Canals transport irrigation water to agricultural lands throughout the SRCD valley service area.

C. Foothills

About 20% of the RCD is in the foothills. Land elevations increase gently in the lower foothills with slopes increasing rapidly between 500' and 4000'. Small rural foothill communities are interspersed with eastside rangeland used for cattle production, oak woodlands and some apple orchards at the 4000' elevation. Urbanization pressure is increasing throughout the foothills.

Approximately 500,000 acres of oak woodlands is under private ownership. About 60% of those private ownerships are under Agricultural Land Contract (Williamson Act) as eastside range. Historically a number of the cattle producers also utilize grazing allotments on adjacent public lands.

Much of the private land in the foothill zone is winter range for migratory deer herds and other species that summer in the high elevations and winter in the foothills. Wildland fire is a recurring event in the foothills. This area is a wildland/urban interface with increasing residential development on steep terrain in the brush on highly erodible soils.

Public lands include Millerton State Park, San Joaquin River Gorge Recreation Area (BLM), Hume Lake area, Tribal Lands, a wildlife refuge, Sierra Foothill Conservancy Lands, and some special botanical areas (Carpenteria Botanical Area near Auberry).

Temperatures are moderately hot, but average 5 to 10 degrees cooler than the valley floor. Elevations are rolling to steep with areas of highly erodible soils. There are fewer growing days than the valley floor, averaging 180 days above 32 degrees, and an occasional low of 20 degrees.

Water is scattered with wells providing potable water for habitations. Many streams are seasonal, but water flow can be high in peak runoff periods with historical downstream flooding. Rainfall averages 18 inches per season. Groundwater is not overly abundant.

D. Mountains

The eastern 65% of the Sierra Resource Conservation District is in the Sierra Nevada Mountains. The boundary of Sierra National Forest at about 4000' elevation marks the eastern edge of the oak woodlands (foothills) and the beginning of forest/ timber zone. Peaks exceeding 14,000' are within the boundaries of the SRCD.

Sierra Resource Conservation District includes the US Forest Service districts of High Sierra in

Sierra National Forest and Hume Lake District of the Sequoia National Forest; portions of Ansel Adams, John Muir, Dinkey Lakes, Kaiser Wilderness Areas and Monarch Wilderness; the extreme northern portion of Kings Canyon National Park; McKinley Grove Botanical Area and numerous special resource and wildlife study areas. Several thousand acres of private lands encompassed or adjacent to the public lands are in Timberland Preserve Zoning.

Historically, these lands have produced timber, grazing, wildlife, water and recreation. Honey production is also important. Deer herd summer range and migratory patterns are well established. Numerous animal species use both the public lands and the adjacent lower elevation private lands during various seasons of the year.

Wildland fire and insect infestations are recurring events. The mountain areas have more moderate summer temperatures with summer days reaching about 90 degrees. Low temperatures can reach -35 degrees. Snow is common above 4000' elevation December through February. At the upper elevations, the growing season may be limited to a low of 25 days above 32 degrees, and precipitation can exceed 60 inches per year.

The mountainous eastern portion of the SRCD contains vital snowpack, two major watersheds (San Joaquin River and Kings River) and numerous minor watersheds that provide surface water and groundwater recharge for agriculture production in the San Joaquin Valley.

Abundant snowfall in the mountains combined with rain and steep terrain can also mean rapid runoff and flooding. Multiple hydro-electric dams are located on the San Joaquin and Kings Rivers, providing electric generation, recreation and flood control.

Air quality varies within SRCD, with different regulations applying at different elevations. Air pollution can be high in the valley floor with automobiles and agriculture being the highest particulate sources. Pollen and wildland fire smoke contribute to the air pollution at the higher elevations. An inversion layer frequently occurs at the 3500' elevations during the summer months, and 1500' in winter, trapping pollution in the San Joaquin Air Basin.

E. Special Notes

It is important to note the stratification of the SRCD lands.

- 15% of the SRCD in the valley is in agriculture with heavy urbanization with minor amounts of public lands. The terrain is predominately flat or sloped.
- 20% of the SRCD from about 500' to 4000' elevation, is eastside rangeland, grazing and oak woodlands in predominately private ownership with some public ownership interspersed, and modest rural/urban.
- 65% of the District from 4,000' elevation to about 14,000' elevation is in public forest lands, with some private land ownerships interspersed and limited rural residential communities

The rise in elevation increases dramatically from 2000' to 5600', creating steep valleys, rapid water runoffs, and associated soil movements. Summer range for some wildlife species like deer is on public lands at high elevations, but winter range is on predominately private lands in the foothill zone. Additionally, much of the district is heavily used by the bee industry which is

critical to agriculture.

Groundwater issues are a recurring theme on private lands within the RCD, and are specifically addressed in the Fresno County General Plan.

II. HISTORY OF THE SIERRA RESOURCE CONSERVATION DISTRICT

The original Sierra Resource Conservation District (SRCDD) was established in March of 1957 as a legally constituted unit under the State of California. Since that time a number of land areas were added to the current area before consolidating with Navelencia RCD On June 23, 2008.

The Navelencia Resource Conservation District (NRCD), which consolidated with the Sierra RCD on June 23, 2008 by a LAFCO resolution passed by the Fresno County Board of Supervisors. The NRCD was formed in October 1956 and later had a number of sections added to the current area before consolidation with Sierra RCD. The Resultant Resource Conservation District retained the Sierra RCD name with a new Board of Directors and Officers. Refer Sierra RCD Area Consolidated Map.

These RCD's were created to develop and further ongoing programs to conserve natural resources. The Sierra RCD is an autonomous self-governing body. There is no taxing authority, by agreement, at the time of establishment. It is truly a "grass-roots" organization dedicated to serving both the private and public interest.

The Board of Directors (currently seven members) is appointed by the County Supervisors of Districts 4 & 5, from private landowners and other conservation conscious citizens from within the boundaries of the District. Each Director serves for 4 year terms. All board members serve without pay. Additional non-voting Associate Directors are also appointed, and serve the District without pay.

III. DISTRICT INFORMATION RESOURCES

A. SOILS INFORMATION

The soils of Sierra Resource Conservation District are one of Fresno County's most valuable resources. There are two soil surveys that cover all the acreage within the SRCDD boundary. The Soil Survey of Eastern Fresno County has a detailed description of all the soils up to the Sierra National Forest boundary. A general soils map is included in the Eastern Fresno survey. The survey includes information on the different range sites for the survey area, the soils production capacity, the limitations of the soil for various uses from agricultural to suitability for septic tank filter fields.

The Sierra National Forest Survey is a more general survey that includes the lands from the Sierra National Forest Boundary at about the 3500-4000' elevation eastward. This survey indicates the soil family.

A Prime Farm Land Soils Map has been developed from the area covered by the Eastern Fresno Soil Survey. This map indicates all soils that have the Characteristics necessary to qualify for prime farm land soils.

B. WATER INFORMATION

The District has two primary watersheds, the San Joaquin River and the Kings River which greatly affect the foothill and valley floor. Watershed information is available from the State Water Quality Resources Control Board and US Forest Service. Additional watershed/water flow information may be obtained from PG&E and Southern California Edison (power dams and snow packs), and the Bureau of Reclamation (Friant Dam), and the Army Corp of Engineers (Pine Flat Reservoir) and several irrigation districts.

Flooding and soil erosion due to water movement has been a historical problem. The Army Corp of Engineers constructed Francher- Redbank Creek Project which has reduced the flooding problems on the valley floor.

Flood prone areas are identified in the Flood Hazard Analysis of Northeast Fresno and the more general Flood Hazard Study Maps that are used by the Housing and Urban Development Department.

Canals and irrigation districts on the valley floor provide agricultural water during the dry summer months. Their boundaries and practices can affect the SRCD conservation efforts.

Information on individual and community wells, County Service Area (CSA's for community water systems), waste water treatment is available from the Fresno County Environmental Health Department, and the Fresno County Community Development Department.

Groundwater and recharge capabilities of land on the Valley floor and the foothills are an important concern addressed in the Fresno County General Plan. Specifically discussed are the increased pressure on water resources and diminishing capacity for recharge caused by conversion of agricultural and rangeland to other uses.

C. AGRICULTURE and RANGELAND

Agriculture and rangeland are primary elements of the SRCD. Their economic importance is readily apparent. Additionally agriculture and rangelands represent large management blocks and their importance to groundwater, watersheds and wildlife should not be underestimated.

Agricultural and rangeland information is obtained from the Natural Resources Conservation Service, The University of California Cooperative Extension, California State University Fresno, the Farm Bureau, the San Joaquin Experimental Range and other related agencies and organizations.

D. WILDLIFE and BIODIVERSITY INFORMATION

The District has an abundance of wildlife. In 1997, 8 species of wildlife and 12 species of plants are listed as endangered in Fresno County. The elevation changes from valley floor to highest mountains involve significant migratory patterns of various species. Federal and state natural resource agencies have abundant historical and current data on District wildlife. Much

of this expertise and information is available to the SRCD upon request. Local sportsman clubs, Sierra Foothill Conservancy, government agencies and private landowners provide wildlife information to the District.

Biodiversity is a desirable conservation objective. Through California Association of Resource Conservation Districts, the Sierra SRCD represented on the Biodiversity Memorandum of Understanding signed in September 1991. The focus of the agreement is to pursue the establishment of measurable baselines and standards of diversity as a means to conserving biological resources over time. The SRCD is an active participant in local Biodiversity Forum and Council meetings. The various federal, state and local agencies who signed the MOU can be called upon by the SRCD on natural resource projects.

E. VEGETATION INFORMATION

The Sierra Resource Conservation District is unique due to the swift rise in elevation from the valley floor to the Sierra Crest. The vegetation types run full spectrum from sensitive citrus, fruit and nut orchards; specialty crops in the valley floor; open eastside rangeland; oak woodlands and chaparral in the foothills; to the heavily forested mountains and alpine areas above the timberline.

The wildland /urban interface create opportunities for vegetative management of fuels, and rangeland improvement projects. Wildland fire is a factor in vegetative change on the district as is conversion of the land from eastside range to higher density uses.

Information on Vegetation types is available to the SRCD from the San Joaquin Experimental Range, California State University Fresno, the USFS, California Division of Forestry and additional natural resource agencies, educational institutions and non-profit organizations.

F. INFORMATION ABOUT PRIVATE LANDS and COMMUNITIES

Fresno County Zoning Maps, the Sierra North Regional Plan, the Fresno County General Plan, the Clovis City Plan, Census data and Williamson Act lands data provide information on current and proposed land uses within the District. Information regarding specific properties is obtained from public records and the Fresno County Public Works/Planning Department.

G. AIR INFORMATION

Air Quality information is obtained from the San Joaquin Valley Air Pollution Control District or from the Natural Resources Conservation Service.

H. PERSONNEL RESOURCES

The SRCD works closely with the Natural Resources Conservation Service. The District has established working relations with numerous federal, state and county agencies and private landowners. Additionally, the Directors and the Associate Directors of the SRCD have expertise in a variety of natural resource fields.

IV. AGENCIES AND PARTNERSHIPS

This section illustrates the various resource groups and governmental agencies that are partnered with the Sierra RCD to address resource issues within the district.

- Natural Resource Conservation Service (NRCS)
- California Department of Conservation
- California Association of Resource Conservation Districts (CARCD)
- National Association of Conservation Districts (NACD)
- California Resources Agency
- California Department of Water Resources
- Dinkey Creek Collaborative
- Yosemite/Sequoia Resource Conservation and Development Council (Y/SRC&D)
- Fresno County Resource Advisory Council (FCRAC)
- Sierra/San Joaquin Noxious Weed Alliance
- Highway 168 Fire Safe Council (168 FSC)
- Sierra and Sequoia National Forests
- Fresno County Board of Supervisors
- Sierra Foothill Conservancy
- Back Country Horsemen of California
- San Joaquin River Trail Council
- Sierra Club
- Southern Sierra Integrated Regional Water Management Group
- Kings River Basin Integrated Regional Water Management Group
- U.C. Cooperative Extension
- Fresno/Kings County Cattlemen's Association
- Others as needed

Partnering with Agencies:

1. Fresno Co Board of Supervisors, Districts 4 and 5
2. Assemblyperson
3. Fresno County Planning
4. Shaver Lake Chamber
5. Sierra - San Joaquin Noxious Weed Alliance
6. Sierra National Forest
7. Highway 168 Fire Safe Council
8. Sierra Foothill Conservancy
9. Fresno County Agriculture Commissioner
10. Natural Resource Conservation Service
11. CalFire

V. IDENTIFY CRITICAL ISSUES AND PLANNING

The Sierra Resource Conservation District is organized for the protection and conservation of natural resources (including but not limited to soils, water, air quality, agriculture, wildlife, rangelands, oak and forest lands) in the interest of prosperity and the general welfare of the people within the SRCD, Fresno & Tulare Counties, and the State of California.

The Sierra Resource conservation District has identified these problem areas within the District boundary that must be addressed if the natural resource base for sustained use is to be maintained. They are in no particular order as resource projects are identified and prioritized annually.

Critical Natural Resource Issues:

1. Water use management
2. Land use planning
3. Fuels reduction management
4. Invasive species control and management
5. Air quality effects on agriculture and human health

Trends:

1. Water demand and use in District area is showing signs of exceeding availability.
2. Use of small properties (2 to 40 acres) is exceeding the land conservation capacities.
3. Non-native flora and fauna infestation is showing signs of limiting the capacity of land uses.
4. Fuels build up in foothill and mountain communities is creating exposure to catastrophic wild fires.
5. Inability of federal land managers to implement sound land use policy because of legal challenges.
6. Urban land development, population increases, smaller land ownerships, and more intensive recreational uses are putting stress on natural resources.
7. Potential climate change and drought will impact natural resource management.
8. Potential impact of air quality on natural resources will continue to cause degradation to human health and vegetation.
9. Conversion of row crop Ag lands to permanent crop lands for economic and water conservation.

Statements of Intent:

1. By 2020 the Eastern Fresno County area will be reached for education to live within its water capacity through water conservation.
 - Work with county planners to manage growth based on water availability.
 - Educate property owners using wells how to conserve available water through use of low water landscaping.
 - Promote irrigation education and technology
2. Continue development of conservation easements for private agricultural, grazing and timber lands for keeping land in working landscapes and open space

3. By 2017 develop relationship and MOU with Oak to Timberline Firesafe Council
4. By 2017 obtain funding for Upper San Joaquin Stewardship Program
5. By 2016 engagement and involvement with the Kings River IRWM
6. Continue participation with the Southern Sierra IRWM

VI. PROGRAM OF ACTION (The Long Range Objectives)

The Sierra Resource Conservation District has identified the following long range objectives. Each year activities which will work towards meeting these objectives are identified in the Annual Plan and acted upon. Some activities and projects will span multiple years. See the Annual Plan for information on specific activities, programs and projects.

SOILS: - Erosion, Coordination of Best Management practices on public/private lands

A primary objective of the SRCD is soil and water conservation, control of runoff, prevention and control of soil erosion, erosion stabilization in areas including but not limited to: open areas, agricultural areas, urban development, wildlife areas, recreational developments, watershed management, the protection of water quality, water reclamation, the development and storage of water, and the treatment of each acre of land according to its needs. {Public Resources Code Section 9001(b)}

WATER- groundwater, water availability, potability, conservation of water.

Water Management is becoming increasingly important as water resources become scarcer. The District objective is continued availability of groundwater; conservation of surface waters; improving water quality through best management practices; water program coordination to landowners, farmers, livestock producers, rural residents; and informing government departments and agencies on District water issues.

WATERSHED/WETLANDS coordinated watershed management, watershed improvement

A significant portion of the District contributes to two main watersheds. The development of Water Quality Guidelines and improved watershed management is an important issue with the SRCD. To accomplish watershed objectives requires multi-agency cooperation, with the District representing both private landowner issues and public concerns.

AGRICULTURE and RANGELAND

Agriculture and rangeland uses are vital components in the District. The SRCD will seek out ways and means to encourage landowners to keep their property in agricultural/rangeland production. The SRCD supports traditional as well as innovative ways of utilizing land for food and fiber production. Objectives include training ethnic groups in microfarming; encouragement of small acreage farms; tree farms; organic growers; specialty crops; rangeland improvements and NRCS best management practices.

VEGETATIVE MANAGEMENT

The SRCD will strive to improve the management of vegetation within the District for a variety of purposes including but not limited to fuels management to reduce wildland fire risk; rangeland improvement through best management practices; delineation of wetland areas; coordinating multi-agency vegetative management projects; wildlife habitat improvement; and utilization of vegetative material to reduce risk of insect and disease problems.

URBAN ENCROACHMENT

Urban encroachment is a growing concern of the SRCD. It is vital that the District keep the County Planning Department and the Board of Supervisors informed about natural resource trade-offs for land use conversions. The SRCD must identify critical vegetation areas, wildlife habitat, and sensitive soil and water zones for possible land conservation easements or mitigations.

WILDLIFE HABITAT

Biodiversity is a desirable conservation practice. Community and public support are vital to a successful biodiversity programs. Human communities, local economies and private property rights are important District attributes to be maintained. The District will develop procedures and guidelines to facilitate landowner education, dialog and participation in biodiversity conservation practices.

ENVIRONMENTAL EDUCATION

The District has a long range goal of increasing public awareness of natural resources through information packets, public relations programs, workshops for youth and landowners and recreational activities derived from natural resources.

AIR QUALITY

Air Quality is of great concern to the entire SRCD. SRCD will provide oversight of the San Joaquin Air Quality Control District. Evaluate and comment where necessary on rules which may impact the constituency of the SRCD. Air Quality goals need to be coordinated with desirable resource conservation practices to achieve optimum results. The Directors must educate themselves regarding air quality requirements and educate citizens about natural resource best management practices to meet proscribed air quality goals.

VI. ANNUAL SUMMARY REPORT

A report summarizing the District conservation activities and projects and their relationship to the Long Range Plan will be compiled annually. The Summary Report will be used in conjunction with the Long Range Plan as a decision making tool for selecting and prioritizing conservation activities for the next year.

Additionally, the Annual Summary Report may be used by the Directors to assess District progress towards conservation goals enumerated in the Long Range Plan, to educate agencies and to inform the general public about Sierra Resource Conservation District. Report format (whether prepared as a newsletter, meeting minutes, standard report or multimedia publishing format) may vary from year to year, depending upon the will of the Directors.

Accepted by the Directors of Sierra Resource Conservation District on December 23, 2014

