



Yolo County Resource Conservation District

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The Yolo County Resource Conservation District (RCD)

Strategic Plan

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Definition of a Strategic Plan

A strategic Plan is defined as a broad visionary statement of an organization's identity, purpose, values and mode of operation. The Strategic Plan starts with the basic mission of the organization, identifies its overall strategies and states its goals and financial projections looking ahead 3 to 5 years.

Definition of an Action Plan

The action plan outlines the implementation of the Strategic Plan. The action plan typically covers one year, is highly specific, and is oriented towards short term results. It translates the Strategic Plan into annual critical issues to be addressed by: 1) establishing short term goals and plans to achieve objectives, 2) determining how results will be measured, and 3) assigning accountability for their completion.

The Relationship of the Strategic Plan and the Action Plan

While the action plan will vary from year to year, the Strategic Plan typically looks ahead 3 years or more and expresses the continuity of strategic organizational goals. The Strategic Plan will only change if the organization undertakes a significant change of direction.

Our Mission Statement

The Yolo County Resource Conservation District (RCD) commits to protect, improve and sustain the natural resources of Yolo County. We promote responsible stewardship by:

- Demonstrating conservation practices through collaborative partnerships;
- Educating agencies and the public in resource conservation & enhancement;
- Sponsoring partnerships and networks;
- Providing technical guidance and on-site expertise.

Guiding Principles

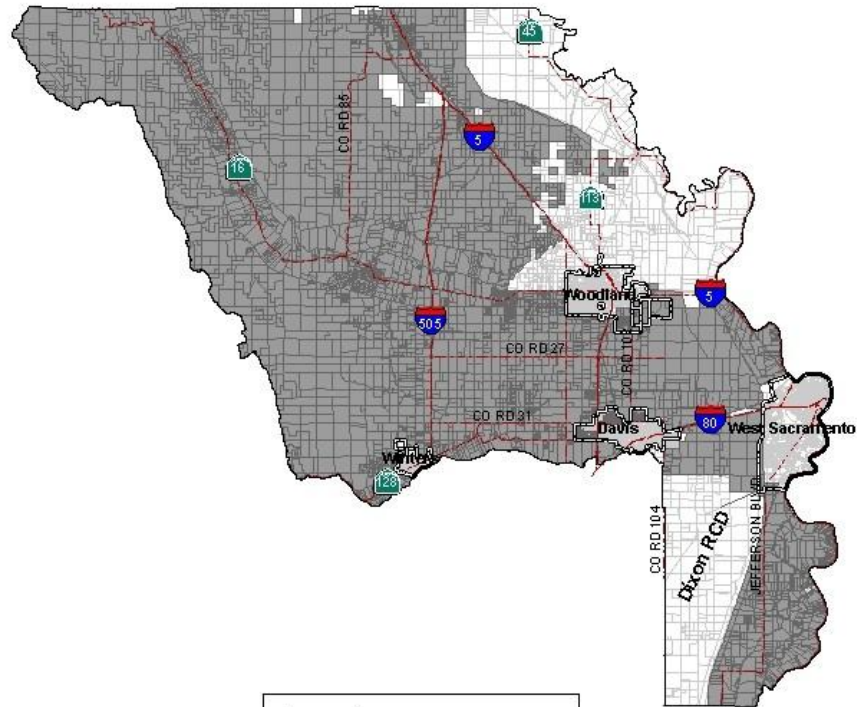
Yolo County Resource Conservation District Statement of Guiding Principles

Guiding principles are any principles that direct an organization irrespective of changes in its goals, strategies, type of work, or the top management.

The Yolo County Resource Conservation District operates by the following guiding principles:

- Integrity – maintain high standards of professional behavior in the performance of all aspects of their daily work.
- Teamwork – the RCD team works together when necessary to complete a task or achieve a common goal.
- Accountability – each employee represents the organization; our reputation depends on each of us saying what we mean, meaning what we say, and doing what we say we will do.
- Excellence – we strive to achieve the highest quality service.
- Relationship building – we are nothing without our long-term connection and service to clients and partners.

Yolo County Resource Conservation District



Legend

- County Boundaries
- City Boundaries
- Major Roads
- Resource Conservation District
- Parcel Lines



0 2 4 6 8 Miles

Created by Yolo County ITD, December 2008
Updated by Yolo LAFCD, February 2009
Data Source: Yolo County

RCD Background

History

In 1937, as a result of the national "Dust Bowl" crisis, (when millions of acres of farmland were destroyed due to drought and erosion) the federal government passed legislation that established the Soil Conservation Service (SCS). To increase the ability to respond to specific local needs, the states were directed to form "Soil Conservation Districts" that were controlled by local boards of directors. In California, Soil Conservation Districts began forming in the 1940s, and today there are 98 districts throughout the state. The first Soil Conservation District in Yolo County was formed in 1955, after which two others formed. Those three districts (Western Yolo, Hungry Hollow and Capay Valley SCDs) consolidated in 1977 to form the current Yolo County RCD. The current District boundaries encompass 392,869 acres. An expanded sphere of influence would add 124,853 acres to that. In the early 1970s, districts originally empowered to address soil and water issues, expanded their emphasis to also include "related resources" such as fish and wildlife habitat enhancement, restoration and the control of exotic and invasive plant species. This broadening of scope was reflected in the name change in 1971 from "Soil Conservation" to "Resource Conservation Districts."

Organization

Resource Conservation Districts (RCDs) are empowered to conserve natural resources within their district boundaries through implementing projects on public and private lands, and by educating landowners and the public about resource conservation. RCDs function independently of county government, and derive their powers from state law. Division 9 of the California Public Resources Code enables district boards to have 5, 7, or 9 directors, who make decisions via a majority vote of the full board. Board members are appointed by the County Board of Supervisors based on their experience as active conservation partners in the community. Board composition is intended to represent a broad spectrum of conservation interests and expertise that reflects the District's diverse resources and needs.

The RCD - NRCS Partnership

The relationship between RCDs and the US Department of Agriculture's Natural Resources Conservation Service (NRCS), previously known as the SCS (see above), has spanned several decades. The NRCS was originally developed to address the Dust Bowl crisis, with local state-level districts forming shortly afterwards. Since then, RCDs and NRCS have worked closely together, with the NRCS District Conservationist providing technical assistance to the local RCD by acting as a liaison between district and federal programs. Other NRCS staff, including soil and range conservationists and engineers, provide additional technical expertise to the RCD. RCD staff, such as those with expertise in native plant systems, design and implementation may also provide technical assistance to NRCS Field Office staff. The NRCS and RCDs formalized their relationship over 50 years ago through a Memorandum of Understanding (MOU), to establish a partnership and define roles between districts and the USDA. This MOU is updated periodically. To read further about the history and function of RCDs, see the website of the California Association of Resource Conservation Districts, www.carcd.org

In addition to the primary partnership with the NRCS, the RCD has many other partnerships in the community, the District, the region and the state. These include other local and statewide conservation and agricultural organizations, city and county governments, as well as state and federal agencies. The District has great flexibility in the ways it is able to work with these partners to accomplish mutual conservation goals on both private and public land. These goals are achieved through education efforts with many of our partners, applying technical skills to achieve or enhance projects, acquiring project support funds through grants or other resources, and on-the-ground implementation.

Partners and Clients

Private and public landowners, farmers and land managers, on whose property we work, are our primary and most valued partners in conservation, and agriculture and landowner needs are our priority. In addition, the RCD has many other partnerships in local communities, the District, the region and the state. These include other local and statewide conservation and agricultural organizations, city and county governments, and state and federal agencies. Many of these may be, at different times, funders or partners in receiving or utilizing funds for implementation of projects that support healthy natural resources.

Our primary local implementation partners include:

- USDA Natural Resources Conservation Service
- Audubon Working Waterways Program
- The Center for Land Based Learning
- Putah Creek Council
- Cache Creek Conservancy
- Cities of Woodland, Davis and Winters
- County of Yolo
- Yolo County Flood Control & Water Conservation District
- Neighboring RCDs
- Farm Bureau
- Universities (UC Davis, UCCE)
- Yocha Dehe Wintun Nation

Agriculture and Natural Resources

The defining characteristics of Yolo County are agriculture and open spaces. Agriculture is a thriving business in the community with fields, orchards, and rangeland comprising most of the agricultural land base. The term “working landscape” is sometimes used to refer to the open space provided by the agricultural land in the county, even though this land is not designated as open space. Our resource base is in working landscapes with natural edges and integrating the two into a functional whole. Agriculture has been at the heart of Yolo County’s way of life since the County’s founding in 1850. Today, over 85% of county land is used for agriculture. Important contributors to the strength and success of agriculture in Yolo County include the County’s longstanding commitment to agricultural preservation and the presence of UC Davis, an international leader in agricultural research and education. Yolo County’s agricultural landscape is dominated by irrigated crops, particularly alfalfa, rice, tomatoes and wine grapes, but other important crops include walnuts, almonds, organic crops, corn, sunflower seed and wheat.

Yolo County's land, soil and water resources are the foundation of successful and continuing agriculture. Native plant and wildlife resources and their interaction with the county's working landscapes enrich the values provided to all of the county's residents and visitors. More than 44% of Yolo County soils are Class I or Class II, some of the highest quality and most productive of agricultural soils. A large percent of the remaining soils are grazed or used for other valuable agricultural products.

Geographic and Environmental Setting

Watersheds of Yolo County

The principal watersheds that affect Yolo County are the Sacramento River, the Yolo Bypass, the Colusa Basin Drain, Cache Creek, Willow Slough and Putah Creek. The Sacramento River system is a complex network of natural and man-made features that are operated to achieve established objectives for water supply, flood control, and environmental purposes. The Sacramento River flows along the entire length of the eastern boundary of Yolo County. Its flow and the availability of water are controlled almost entirely by conditions outside the County.

The Yolo Bypass is an integral part of the Sacramento River system and plays a major role in providing flood protection for the City of Sacramento. It consists of a 41-mile-long swath of agricultural land bounded by levees that convey floodwater to the Sacramento-San Joaquin Delta. The Colusa Basin Drain (Drain) watershed comprises nearly 1,620 square miles in the Sacramento Valley, and includes portions of Glenn, Colusa, and Yolo counties. The portion of the watershed in Yolo County is approximately 255 square miles. The Drain is a man-made channel designed to convey irrigation drainage to the Knights Landing outfall gates for discharge into the Sacramento River. There are 32 ephemeral streams that convey storm runoff to the Drain, seven of which originate in the Dunnigan Hills of Yolo County.

Under natural conditions, Cache Creek can be considered an ephemeral stream. The Cache Creek drainage system is divided into the Upper and Lower Cache Creek portions. The Upper Cache Creek portion of the system includes the watershed upstream of the Capay Diversion Dam operated by Yolo County Flood Control and Water Conservation District (YCFCWCD). The Lower Cache Creek portion of the system extends from the Capay Diversion Dam downstream to and including the Cache Creek Settling Basin. For hydrologic purposes, however, the downstream limit of the Lower Cache Creek portion of the system will be considered at Interstate 5 or Yolo. The total Cache Creek drainage system, upstream of Interstate 5, encompasses 1,139 square miles, with the drainage area above Capay Diversion Dam comprising 1,044 square miles.

The Willow Slough watershed drains most of the central part of Yolo County between Cache Creek and Putah Creek. Natural levees that formed through deposition of sediment along the valley floor reaches of Cache and Putah creeks cause local runoff to flow away from the main creek channels and to enter a complex network of sloughs and small drainage channels. These channels flow eastward and eventually consolidate into Willow Slough. Willow Slough discharges into the Willow Slough Bypass, which is part of the Sacramento River Federal-State Flood Control Project. The Willow Slough Bypass discharges directly into the Yolo Bypass.

The Putah Creek watershed encompasses approximately 710 square miles and extends from an elevation of 4,700 feet at Cobb Mountain in Lake County southeast for a distance of about 50 miles to the Yolo Bypass, at an elevation a few feet above sea level (Thomasson *et al.* 1960). The tributary drainage area for the “inter-dam” reach is 38 square miles, and only one tributary of any significance – Dry Creek – enters Putah Creek between the Putah Diversion Dam and the Yolo Bypass (Northwest Hydraulic Consultants 1998). Natural levees, deposited by the creek as it flowed across its alluvial fan toward the center of the Sacramento Valley, cause lands along both sides of lower Putah Creek to drain away from the creek.

Areas of Strategic Focus

The following are areas of conservation focus for the Yolo County RCD. These priority areas of work were identified by the Yolo County RCD Directors who are experienced and familiar with the needs of the agricultural community. From the guidance under these areas of focus, annual action plans will be developed.

Noxious and Invasive Weeds

Background

According to C.E. Bell et al. (UC-DANR Publ. 74139), invasive plants can cause significant economic and ecological damage in natural and agricultural areas. From an economic standpoint, invasive species can reduce livestock forage quality and quantity, jeopardize animal and human health, increase the threat of fire or flooding, interfere with recreational activities, or lower land value. In addition, aquatic weeds can also impact the movement and navigation of private and commercial vessels, block irrigation systems, and impede livestock access to water.

Invasive plants can also cause dramatic ecological changes that impact both plant and animal communities. This is often due to landscape transformations that reduce the adaptability and competitiveness of more desired native species. Such transformation can be caused by the excessive use of resources by invasive plants. This includes an increased ability to capture light, consume water or nutrients, or deplete gases (oxygen and carbon dioxide) in aquatic systems.

Invasive plants can also transform landscapes in ways such as:

- Changing the soil fertility of the ecosystem.
- Promoting a shorter interval (or in some cases longer) fire frequency that is not conducive to the survival of native species.
- Promoting soil erosion by increasing water runoff down slopes or influencing stream flow.
- Accumulating leaf litter that acts as suppressive mulch, which prevents the establishment of more desirable species.
- Creating a saline environment as roots absorb salts from deep in the soil and redistribute them from the foliage to the soil surface.

Many of these mechanisms create a more suitable environment for invasive species, at the expense of native plants, leading to a reduction in desirable plant diversity. Such impacts change the biological structure and relationships with other organisms in an area.

California has limited and diminishing untouched natural habitats, especially in regions of the state highly populated by humans. Infestations of invasive plants severely degrade the value of these sensitive sites. Maintaining control of noxious weeds is important for protecting land values, agricultural productivity and the health of habitats, livestock, wildlife and native plants, and humans.

The Role of the RCD

The RCD can serve multiple purposes in control and management of noxious/invasive weeds by:

- Identifying and prioritizing target areas for weed control.
- Providing education and outreach to local landowners about noxious and invasive weeds.
- Encouraging producers and communities to adopt practices that remove and/or control invasive species.
- Collaborating to identify and implement invasive species projects.
- Obtaining and utilizing invasive species management tools.
- Serving as the coordinator for the Yolo County Weed Management Area.
- Collaborating with other county and regional agencies to promote noxious weed control methods that utilize integrated pest management procedures.
- Providing conservation planning and technical support services to District landowners who need assistance reducing invasive plant species on their property.

Recommended actions

- Development of Invasive Weed Management Plans
- Conducting weed control and eradication projects
- Conducting Roadside Weed Management
- Development of Watershed Weed Management Plans
- Supporting the Yolo County Weed Management Area
- Promoting biological weed control methods, where effective
- Replacing weeds with non-weedy vegetation

Food Safety

Background

Food Safety is becoming an increasing issue in the production, harvesting and processing of all agricultural commodities. With the onset of governmental regulations like the FDA's Food Safety & Modernization Act (FSMA) as well as pressure being placed on food producers by industry boards, re-sellers, and consumers for continual improvement of their Good Agricultural Practices (GAP), everyone in the agricultural industry will have to consider food safety in their day-to-day work. This day-to-day consideration of food safety includes, but is not limited to, the hygiene of people who come into contact with food products, cleanliness of equipment that comes into contact with food products, and contamination prevention during the storing and shipping of food products. One of the challenges of increased Food Safety GAPs is the possible conflict between food safety issues and programs designed to improve and conserve natural resources (wildlife, etc).

As the food safety pressures increase on food producers & processors, there needs to be an organization that the food producer/processor can go to for information, resources and direction. Also, as the food safety regulations become more stringent, there needs to be a natural resources advocate involved in the discussions so that the regulations do not become so extreme as to label natural resources as an enemy to food safety.

The Role of the RCD

The RCD can assist in bringing about solutions that meet shared goals of both interests by:

- Providing education, information and resources on food safety standards and Good Agricultural Practice for farmers, food handlers and consumers.
- Promoting projects and programs that illustrate that natural resource conservation and food safety can co-exist.
- Staying informed of new food safety regulations and trends, especially those that address natural resource issues.
- Partnering with other groups and agencies that are working on or being impacted by food safety regulations and practices.
- Evaluating future natural resource conservation projects and their potential impact (positive and negative) on food safety.

Recommended actions

- Hosting workshops to assist agriculture producers and handlers in developing and implementing Best Management Practice Plans.
- Providing information via workshops, websites and written material for clientele.

Biodiversity

Background

Biodiversity is the existence of a wide variety of life in our world. As stated in Economic Benefits of Biodiversity: A Guide published by Pennsylvania Land Trust Association, each species has a specific niche, a specific role and function in an ecosystem. These roles include capturing and storing energy, providing food, predation, decomposing organic matter, cycling water and nutrients, controlling erosion, controlling pests and climate regulations. Species support biological production and regulation throughout the food chain in a variety of ways, such as adding to soil fertility, pollination, plant growth, predation and waste decomposition. The more diverse an ecosystem, the more stable it is, and the more productive it tends to be and the better it is able to withstand environmental stress.

Healthy ecosystems are derived in part due to biodiversity including pest and disease control, crop pollination, decomposition of wastes and nutrient cycling, and air and water quality protection. These healthy ecosystems provide us with numerous economical, recreational, spiritual, and health benefits, documenting the need for biodiversity conservation.

The Role of the RCD

The RCD can promote biodiversity by:

- Promoting the utilization of native plant species and appropriate non-native plant species on farmland and in landscapes.

- Identifying areas within the district where biodiversity could be developed or improved.
- Promoting ecosystem service benefits on farmland and in landscapes through conservation and enhancement of our natural resources.
- Hosting educational events on biodiversity and ecosystem service benefits.
- Promoting practices that encourage the protection, development & growth of biodiversity.
- Seeking partnerships with other organizations that promote biodiversity.

Recommended Actions

- Riparian and upland revegetation, protection and conservation
- Pond installation
- Field edge planting, such as hedgerows
- Canal revegetation
- Invasive weed control
- Highway beautification

Water Quality and Quantity

Background

A dependable source and availability of high quality water is vital to the customers and partners of the RCD and to the vitality of natural resources and economy of the region. In recognition of this important resource, the Yolo RCD has adopted the Westside Sac Integrated Regional Water Management Plan (IRWMP). The IRWMP provides a wide-ranging vision for the future of water management in Yolo County and identifies high-priority water management actions including projects, programs, or policies to improve water management in Yolo County as well as four neighboring counties. These water management actions are consistent with Department of Water Resources and State Water Resources Control Board goals, policies and strategies.

The IRWMP identified the following findings and issues with respect to water supply and quality that are relevant and important to the YCRCD:

- Urban areas, agriculture, and the environment in Yolo County depend upon a reliable, high quality water supply from a combination of both groundwater and surface water.
- Water supply quality and quantity need to improve to meet current and future demands for both municipal and farming operations.
- Water supplies during severe drought conditions will be strained.
- Groundwater extraction has caused subsidence within areas of Yolo County.
- Regulatory compliance is increasingly complex and expensive.
- Protect the quality of groundwater and surface water for the benefit of urban areas, agriculture, and the environment.
- Ground and surface water quality are critical for ecosystem health.
- Deteriorating water quality may increasingly have a negative impact on agricultural production.
- High levels of boron in shallow groundwater aquifers that reduce crop yields or destroy young, perennial crops.

Role of the YCRC

The RCD can play an important part in protecting water supplies and water quality by:

- Participating in regional projects identified in the IRWMP.
- Collaborating and participate with stakeholders of the IRWMP in the delivery of projects.
- Provide educational outreach to farmers and urban communities on water resource issues.
- Pursuing funding for projects associated with enhancing water quantity and quality.
- Providing technical support to projects within watersheds intended to improve water quality.
- Identifying in the IRWMP the individual and integrated projects that will allow the RCD to interface with private landowners; or are associated with implementation of improved agricultural practices that reduce water demands or improve water quality.

Recommended Actions

- Development state-of-the-art urban and agricultural water use efficiency programs, soil conservation plans that meet statewide guidelines and provide substantial and measurable water use reductions throughout Yolo County.
- Development of continuous monitoring, management, and protection programs and institutional capacity to ensure that water quality continues to meet standards for surface and groundwater sources.
- Habitat enhancement projects associated with creek restorations.
- Revegetation and habitat enhancement projects related to agricultural drains, sloughs and creeks.

Riparian and Aquatic Ecosystems

Background

The aquatic and riparian ecosystems are an integral part of what makes Yolo County unique. The ecosystems not only support a rich community of flora and fauna, they also serve as a source of water for agricultural, municipal, and recreational purposes, and are an integral part of the storm drainage systems. As such, protecting and maintaining them is a high priority to the RCD, its partners and clients. Because much of these lands border on private property it puts the RCD in a unique position to support many key projects necessary for the success of our partners and customers.

There has been much focus on the riparian and aquatic ecosystems by many groups including The Yolo Natural Heritage Program (YNHP), the YCFWCDC, and is a focus of the IRWMP. The YNHP is a county-wide Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for the 653,820 acre planning area that is described in an administrative draft document released July 1, 2013. The document describes an approach to conserve the natural open space and agricultural landscapes that provide habitat for many special status and at-risk species found within the habitats and natural communities in the County. The NHP is intended to advance a number of regional environmental and economic objectives and provides an alternative to the existing piecemeal, project-by-project approach to endangered species permitting and conservation that currently exists.

The Water Resource Association of Yolo County, in partnership with representatives from four adjacent counties, developed the IRWMP to focus on surface and groundwater management. The IRWMP provided a wide-ranging vision for the future water management in Yolo County and identified high-priority water management actions including projects, programs, and policies that included elements for aquatic and riparian ecosystem enhancements, as well as flood management and storm drainage to improve water management in Yolo County.

Within the context of the IRWMP, the YCFWCWCD identified the following concerns that drive the need for restoration of our riparian and aquatic ecosystems:

- Changes to the landscape from agriculture, development, and flood control projects have diminished aquatic and riparian habitat over the last 150 years.
- Loss of native plants, increase of invasive plants leading to increased erosion problems, and loss of habitat.
- Loss of native fish habitat, including spawning grounds.
- Barriers to fish passage that prevent anadromous fish from reaching spawning grounds.
- Barriers to fish passage that prevent juvenile fish from reaching floodplains with superior food availability, and better protection from predators than an open waterway.
- Loss of habitat for terrestrial species, including endangered species, leading to a decline in some populations.
- Increase of invasive aquatic species.
- Methylmercury accumulation in fish tissue, which puts fish-eating wildlife at risk of neurological and reproductive disorders.

The IRWMP also identified waterways and lesser streams in Yolo County that could benefit from various forms of aquatic and riparian aquatic ecosystem enhancement that include:

- Cache Creek
- Putah Creek
- Colusa Basin Drain
- Sacramento River (including Fremont Weir)
- Salt Creek, Bird Creek, and Oat Creek (north of Cache Creek)
- Willow Slough, Willow Slough Bypass, and Dry Slough (south of Cache Creek)
- Yolo Bypass

It was also noted that tributaries to these waterways are important to the aquatic and riparian ecosystem enhancement effort and that many of Yolo County's waterways are considered to be of statewide importance for aquatic and riparian ecosystem enhancement efforts.

The Role of the YCRC

The RCD can play an important role in enhancing and protecting the riparian and aquatic ecosystems by:

- Collaborating and participate with stakeholders of the IRWMP in the delivery of projects.
- Reaching out to landowners through public outreach to develop projects and encourage good stewardship along the riparian corridors.

- Identifying funding sources and secure funding for projects.
- Providing educational outreach to landowners.

Recommended Actions

- Habitat restoration
- Invasive species management
- Bank stabilization
- Erosion control
- Development and implementation of storm water best management practices
- Pesticide, herbicide and nutrient management programs
- Sediment control projects
- Water quality improvements

Soil

Background

The RCD's existence is tied to the man-made Dust bowl of the 1930s, and the need to develop and implement conservation practices to prevent such calamities from recurring. By developing, evaluating, and implementing soil conservation practices, providing technical guidance and on-site expertise, educating our partners and the public about soil conservation, as well as developing partnerships and networks, the RCD can focus on soil conservation. Soil is the foundation of all of those resources as part of our watershed or whole systems approach to conservation. The RCD's attention to soil conservation will be central to all other areas of focus including water and air quality.

The Role of the RCD

The RCD assists with soil conservation by:

- Seeking out farm operators and landowners, including public landowners, of all sizes to develop solutions to issues threatening the health and viability of the county's soils.
- Educating the public about soil erosion through workshops.
- Assisting landowners in meeting regulatory requirements for offsite movement of sediments in irrigation and stormwater runoff.
- Working with clients to implement conservation programs, especially on highly erodible sites.
- Reaching out to local farmers and landowners to develop strategies to minimize soil erosion caused by farming operations
- Developing and implementing conservation plans

Recommended Actions

- Public workshops on prevention of soil erosion.
- Design, development and installation of sediment traps, ponds or other erosion prevention technologies.
- Design and development of permanent or temporary vegetative cover crops.

Implementation of Strategic Plan

The Strategic Plan outlines Areas of Focus that are important areas of conservation.

Implementation of the Strategic Plan includes:

- The development and implementation of an Action Plan by the Executive Director and Staff for approval by the Board of Directors.
- Strategic discussions with RCD partners, clients and stakeholders.
- Research and apply for available and accessible funding sources including local monies, private monies, and state and federal grants and contracts.
- Consider the impact of pending and current regulations.