



Yolo County Resource Conservation District

221 West Court Street, Suite 1
Woodland, CA 95695

phone: (530) 661-1688
www.yolorcd.org

The Yolo County Resource Conservation District (RCD)

Strategic Plan

Board of Directors

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Adopted November 20, 2019

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 and implementing 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.

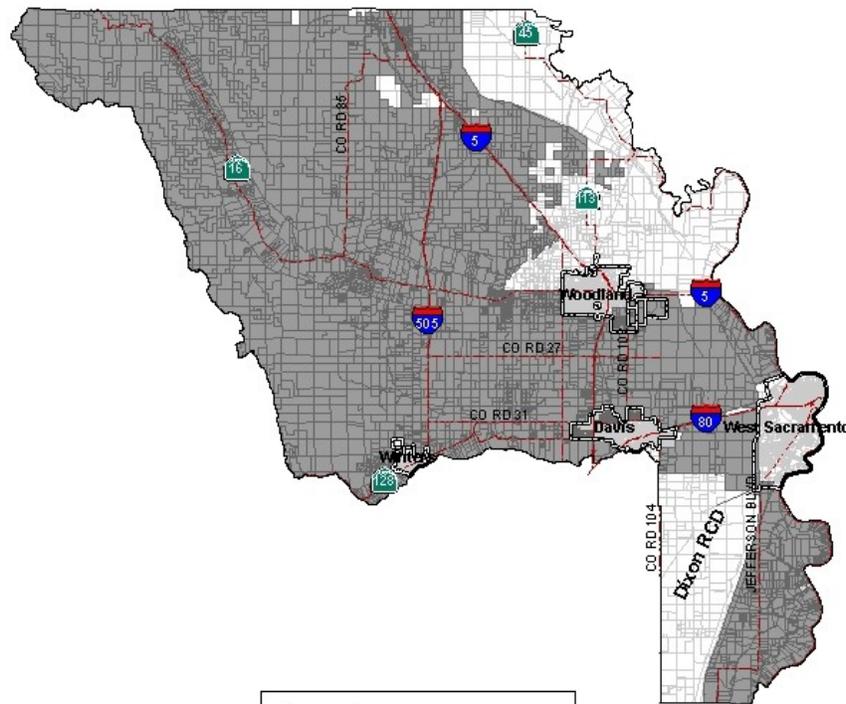


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Yolo County Resource Conservation District



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

The Mission of the Yolo County Resource Conservation District is to Protect, Improve, and Sustain the Natural Resources of Yolo County.

Statewide Vision and Standards

Yolo County Resource Conservation District

Statement of Adoption

Vision

It is the vision of RCDs throughout California to be relevant, excellent, and visible "go-to" hubs for natural resource and agriculture conservation on public and private land at the local, regional, state, tribal, and federal levels. Yolo County RCD shares this vision to:

- Provide meaningful, quantifiable benefits to their district's natural resources through high-quality, timely, and scientific programs on the ground
- Uphold excellent operational management through having appropriate technical capacity and retaining quality key staff.
- be sought after, critical partners in an active and local natural resource network
- be looked to as a reputable education and information source on natural resource conservation.
- Promote community and legislative awareness of and involvement in local conservation goals.

The RCD is Relevant

Relevancy involves continuous effort. Relevant RCDs proactively address current natural resource issues and are prepared to meet the changing needs of their communities. They build, train, and retain skilled staff who are current on technology and trends in natural resource conservation. They anticipate issues and apply the results of research toward solutions to problems and to advances beyond the current conventions. RCDs are woven into their communities and thus have a unique local role in conservation. Strong working partnerships with community members, private and public land owners and managers, non-profit organizations, research institutions, and in multiple levels of government allow RCDs to deliver a broad range of on-the-ground solutions others cannot. Beyond solutions to problems, RCDs develop and capitalize on opportunities to move beyond current levels of excellence. This often puts them in the role of serving as an intermediary between communities and government, as well as other participating stakeholders.

How are we relevant today?

The RCD...

- Serves its mission to meaningfully benefit the multiple resource needs of the community.
- Understands the needs of their community, addresses the gaps in natural resource conservation, and strategically prioritizes projects to fill them.
- Recognizes opportunities and builds consensus toward optimal goals
- Helps build a sense of community through its programs by highlighting community participation and public education.
- Promotes collaborative and diverse partnerships.



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- Represents the diversity of its district in its board and associate directors.
- Engages with CARCD.

How do we remain relevant in the future?

The RCD will...

- Build strong working relationships with RCDs in their region, sharing resources and staff, mentoring where appropriate, and understanding each other's role in the larger picture of statewide conservation.
- Proactively serve as a leader in addressing and solving regional resource issues.
- Translate community conservation needs into the regional collaboratives as appropriate.

The RCD is Excellent

Excellent RCDs practice internal and external excellence. With transparent, efficient, and effective operational management RCDs are sought after facilitators of local conservation. Their ability to acquire diversified funding and timely services make them reliable partners and service-providers. Board and staff are involved members of their districts, bringing technical expertise, connections in the community, and local knowledge. Excellent RCDs help advance scientific research in relevant areas, incorporate it into their programs, and quantify their impacts. They contribute to the California Association of Resource Conservation Districts (CARCD) network; sharing resources, information, and even staff to further statewide conservation.

How do we reach excellence today?

The RCD...

- Conducts District business in an open, transparent and efficient way, always seeking to meet current standards of operation and employment and maintaining integrity in their relationships with partners.
- Has appropriate technical capacity to meet the needs of their community through in-house or contracted technical staff, aid from other entities, and possession of routinely used equipment.
- Maintains a proper balance of board and staff operations where the board sets policy and the staff implements it using current knowledge and methods.
- Secures diversified funding sources and leverages funding.

How do we achieve excellence in the future?

The RCD...

- Engages with the research community and works with a variety of partners to advance scientific research and integrate it into program development and implementation.

The Mission of the Yolo County Resource Conservation District is to Protect, Improve, and Sustain the Natural Resources of Yolo County.

- Quantifies its impact on the local resources, imputing data into collective statewide RCD metrics, publishing its accomplishments, and maintaining data on cumulative beneficial impacts on natural resource issues.
- Promotes new leadership opportunities for staff, has engaged directors and associate directors, evaluates performance, and actively recruits and trains new members as part of a succession plan for staff and board members.
- Secures and maintains a sustainable funding base and capital reserve funds.

The RCD is Visible

Visibility goes beyond being known in the community. Prioritizing involvement in their districts, visible RCDs reach out to communities and their organizations, agricultural and conservation organizations, and legislative officials through strong outreach, networking, and education programs. RCDs promote their ability to continuously deliver consistent, meaningful, and excellent conservation services through regular publications, an online presence, and community engagement. Thus private and public landowners, land users, organizations, and lawmakers alike go to RCDs for their conservation needs.

How do we maintain visibility today?

The RCD...

- Prioritizes community and stakeholder outreach.
- Upholds an informational relationship with its local legislators.
- Promotes RCD activities in regular publications, an online presence, and through community engagement.

How do we maintain visibility into the future?

The RCD...

- Upholds a strong working relationship with the decision makers at all levels; including legislators, County Supervisors, City Council Members, and the business community.
- Is viewed as important informants on natural resource conservation issues.
- Is a leader in CARCD.

Standards

The Standards provide a roadmap of activities that successful RCDs engage in. They give concrete suggestions and provide criteria and examples to help RCDs achieve relevancy, excellence and visibility. The Standards are separated into three Tiers:

Tier 1: Outlines the legal requirements all RCDs must meet under current state law.

Tier 2: Provides ways RCDs can serve the needs of their communities for conservation today.



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Tier 3: Outlines a comprehensive road RCDs may follow into becoming the go-to hub of conservation in the future.

Yolo County RCD has completed Tier 1 and Tier 2 requirements and will continue working through Tier 3 over the next 3-5 years.

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



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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
- Center for Land-Based Learning
- Putah Creek Council
- Cache Creek Conservancy
- Cities of Woodland, Davis and Winters
- County of Yolo
- Point Blue Conservation Science
- Yolo County Flood Control & Water Conservation District
- Neighboring RCDs
- Farm Bureau
- Universities (UC Davis, UCCE)
- Yocha Dehe Wintun Nation
- Yolo Basin Foundation

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.



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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 areas of conservation focus for the Yolo County RCD include noxious and invasive weeds, biodiversity, water quality and quantity, riparian and aquatic habitats, soil, wildfire and carbon. These seven priority areas were identified by the RCD Directors and Staff to address evolving natural resources issues while staying familiar with the needs of the local 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, and 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.

Yolo County has limited and diminishing untouched natural habitats, especially in areas 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 agricultural producers and communities to adopt practices that remove and/or control invasive species.
- Collaborating to identify and implement invasive species control 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 funding through grants, conservation planning and technical support services to District landowners who need assistance reducing invasive plant species on their property.
- Provide information and support for using burning to control grassland weeds
- Provide information on safe and effective use of chemicals

Recommended actions

- Mapping rated weeds and high value sites to help prioritize projects
- Developing Invasive Weed Management Plans for motivated landowners and/or watersheds
- Conducting weed control and eradication projects
- Supporting the Yolo County Weed Management Area
- Promoting biological weed control methods, where effective
- Replacing weeds with non-weedy vegetation
- Providing science-based education about herbicide use
- Supporting long-term management/follow-up treatment to protect treated and/or restored sites
- Conducting weed control and eradication projects

Potential funding sources and programs

- Wildlife Conservation Board Proposition 1 Steamflow Enhancement Program (arundo and associated riparian weed species)



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- California Department of Food and Agriculture direct funding for Weed Management Areas
- California Invasive Plant Council (sponsoring projects, partnerships and securing funding from the state)
- National Fish and Wildlife Foundation 'Pulling Together' program (small grants for weed management planning and targeted projects)

Biodiversity

Background

Biodiversity is the existence of a wide variety of life in our world. Each species has a specific niche, a specific role and function in an ecosystem. Those roles include capturing and storing energy, providing food, predation, decomposing organic matter, cycling water and nutrients, controlling erosion, controlling pests and regulating global climate conditions. Species support biological production and regulation throughout the food chain in a variety of ways, such as adding to soil fertility, pollination, plant growth, nutrient exchange, predation and waste decomposition. Diverse ecosystems are more stable and more productive, and better able to withstand environmental stress (Pennsylvania Land Trust Association, 2011).

Biodiversity contributes to healthy ecosystems by providing important ecological functions like sustained pest and disease control, crop pollination, decomposition of wastes and nutrient cycling, air and water quality protection and other functions that biodiverse environments typically support. These healthy ecosystems provide us with numerous economic, aesthetic, recreational, spiritual, and health benefits, which strongly support the need for biodiversity conservation in our region and worldwide.

While all residents of the District bear some responsibility for supporting biodiversity within and beyond our region, the RCD can take specific steps to promote increased biodiversity and stabilize ecosystems that have shrinking biodiversity.

The Role of the RCD

The RCD can promote biodiversity by:

- Providing education, technical assistance and implementation to promote the utilization of native plant species and appropriate non-native plant species on working landscapes, open spaces and other appropriate landscapes.
- Identifying areas within the district where biodiversity could be developed, or improving work with partners to leverage efforts.
- Promoting ecosystem service benefits on farmland and in landscapes through conservation and enhancement of our natural resources.
- Hosting education and outreach events on biodiversity and ecosystem service benefits.
- Promoting practices and management regimes for landowners and land managers that encourage the protection, development and enhancement of biodiversity.

The Mission of the Yolo County Resource Conservation District is to Protect, Improve, and Sustain the Natural Resources of Yolo County.

- Seeking partnerships with other organizations that promote biodiversity.
- Reducing threats to biodiversity like invasive species and high-severity wildfire. (e.g., Arundo removal, and wildfire management)
- Educate landowners, partners, and the public about how biodiversity and ecosystems services can provide economic benefits on farmlands and wildlands.

Recommended Actions

- Promote and implement enhancement, revegetation, restoration, protection, conservation and management for critical habitat types including riparian, upland, grassland, shrub/scrub, oak-woodland and wetlands on farms, ranches and open spaces.
- Pond enhancement, vegetation establishment with biodiversity in mind
- Establishment of hedgerows and other field edge or roadside plantings that include a diverse range of climate resilient plant species that provide cover, forage, and nesting habitat for pollinators, birds, small mammals, and other species.
- Canal revegetation and promotion of management practices that maintains some vegetation along canal banks for erosion control and species cover and movement.
- Explore opportunities, strengthen our skillset and build experience in wetland diversity
- Invasive weed control
- Incorporate diverse flowering forbs into any restoration type as forb plots, companion plants, or other seeding or transplanting methods.
- Develop framework/guidelines to ensure these actions are resilient to climate change.
- Support connecting interested landowners to habitat conservation easement opportunities
- Promote fencing riparian areas on rangelands where feasible
- Promoting, implementing and demonstrating agronomic practices that promote on-farm diversity (cover crops, insectary strips, herbicide and pesticide use)

Potential funding sources and programs

- Wildlife Conservation Board various programs
- Delta Conservancy grant and non-grant funding for restoration in the Delta areas
- California Department of Fish and Wildlife various programs
- U.S. Fish and Wildlife Service Partners for Fish and Wildlife program
- Yolo Habitat Conservancy HCP/NCCP mitigation program
- California Natural Resources Agency various programs
- USDA Natural Resources Conservation Service EQIP cost-share program for hedgerow, riparian buffer and conservation cover practices
- Yocha Dehe Community Fund



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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 Sacramento 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 YCRCD has 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.
- The quality of groundwater and surface water needs to be protected for the benefit of urban areas, agriculture, and the environment.
- Water supply quality, quantity and management need to improve to meet current and future demands for both municipal and farming operations.
- All water must be used multiple times for multiple beneficial purposes.
- Water supplies during severe drought conditions will be strained.
- Groundwater extraction has caused subsidence within areas of Yolo County.
- Groundwater management and recharge must be improved.
- Regulatory compliance is increasingly complex and expensive.
- Ground and surface water quality are critical for ecosystem health.
- Yolo County residents must become better-educated about water and watersheds.
- Flood protection must be improved.

Role of the YCRCD

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

- Participating in regional projects identified in the IRWMP.
- Submitting projects for inclusion 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 in a natural resource conservation context.

- Providing technical support to projects intended to improve water quality and habitat within watersheds.
- 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.
- Develop projects and work with agencies to meet new water quality standards for nitrate, salts, hexavalent chromium, arsenic and manganese.
- Support projects that address the role water quality plays in food safety.

Recommended Actions

- Provide irrigation mobile lab services.
- Provide technical assistance with land management practices that help solve water quality problems associated with the Irrigated Lands Regulatory Program (ILRP).
- Educate private landowners, land managers and urban residents on water quality and quantity issues.
- Find additional irrigation districts, reclamation districts and other water purveyors in the county to work with on water management and quality issues.
- Participate in the Yolo Sub-basin Groundwater Agency and development of the Sustainable Groundwater Management Plan.
- Develop a GIS reporting database and user's group for natural resource projects to provide a uniform information and reporting platform.
- Conduct an annual roadbuilding workshop to improve water quality throughout the County.
- Hold an annual "Train the Regulators" workshop or field trip to keep local, regional and state-level agency staff in touch with agricultural water realities.
- Work with the Northern California Water Association (NCWA) on water quality projects that "work" with farming.
- Work with UC Davis to manage reserves, student farm and fallow land to "ag-stewardship," "soil" or "habitat" conservation values.
- Develop revegetation and habitat enhancement or restoration projects on agricultural drains, sloughs and creeks.

Potential funding sources and programs

- State Department of Water Resources – Propositions 1, Prop 68, IRWM (Integrated Regional Water Management) and SGMA (Sustainable Groundwater Management Act) Programs
- Westside Sacramento Integrated Regional Water Management Plan Small Grants Program
- Department of Water Resources or other program for mobile irrigation lab programs
- State Water Resources Control Board Proposition 1 Storm Water Grant Program
- California Department of Food and Agriculture SWEEP program
- Wildlife Conservation Board Proposition 1 Streamflow Enhancement Program
- USDA Natural Resources Conservation Service EQIP cost-share program for irrigation improvements and management practices



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Riparian and Aquatic Habitats

Background

Riparian and aquatic habitats are an integral part of what makes Yolo County unique. These habitat types support a rich community of native flora and fauna and serve as a source of water for agricultural, municipal, and recreational purposes and are an integral part of the stormwater drainage systems. As such, enhancing and restoring them is a high priority for the RCD, its partners and clients. In Yolo County, most existing and potential habitat is on or borders private agricultural property. The RCD, and their partners like the NRCS, have worked with private landowners for many years completing successful habitat projects. This proven performance and expertise developing habitat that works alongside agricultural operations makes the RCD well positioned to continue to develop projects that improve riparian and aquatic habitats throughout the county.

There has been much focus on the riparian and aquatic ecosystems by many groups including The Yolo Habitat Conservancy, the Yolo County Flood Control and Water Conservation District (YCFCWCD), Solano County Water Agency (SCWA), Reclamation District 108, the Delta Conservancy and other local and regional planning efforts. The Yolo Habitat Conservancy has prepared the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP), a model conservation plan to provide Endangered Species Act permits and associated mitigation for infrastructure (e.g. roads, bridges, and levees) and development activities (e.g. agricultural facilities, housing, and commercial buildings), identified for construction over the next 50 years in Yolo County. The Water Resource Association of Yolo County, in partnership with representatives from four adjacent counties, developed the Integrated Regional Water Management Plan (IRWMP) 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 habitat enhancements, as well as flood management and storm drainage to improve water management in Yolo County.

The IRWMP identified the following concerns that drive the need for protection, restoration of our riparian and aquatic habitats in Yolo County:

- 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 and floodplains for juvenile fish.
- 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 riparian and aquatic species.
- Methylmercury accumulation in fish tissue, which puts fish-eating wildlife at risk of neurological and reproductive disorders.
- Sediment transport that degrades existing spawning grounds.

The IRWMP 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 to the Delta

It was also noted that tributaries to these waterways are important to the aquatic and riparian habitat 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.
- Promote and nurture partnerships in adjacent and connected watersheds to Yolo County
- Reaching out to landowners through public outreach to develop projects and encourage good stewardship along riparian corridors.
- Identifying funding sources and secure funding for projects.

Recommended Actions

- Habitat enhancement and restoration on local wetlands, ditches, canals, creeks and rivers
- Invasive species management
- Bank stabilization
- Erosion control
- Development and implementation of stormwater best management practices
- Pesticide, herbicide and nutrient management programs
- Sediment control projects
- Water quality improvements that reduce urban and agricultural runoff
- Promote restoration projects in agricultural lands
- Create riparian habitat corridors
- Promote restoration and other projects that support groundwater recharge
- Develop new partnerships with agencies that work in wetlands (DU, TU, CWA)



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Potential funding sources and programs

- Wildlife Conservation Board various programs
- Delta Conservancy grant and non-grant funding for restoration in the Delta areas
- California Department of Fish and Wildlife various programs
- U.S. Fish and Wildlife Service Partners for Fish and Wildlife program
- National Fish and Wildlife Foundation
- Yolo Habitat Conservancy HCP/NCCP mitigation program
- California Natural Resources Agency various programs
- USDA Natural Resources Conservation Service EQIP cost-share program for riparian buffer and bank stabilization practices
- Solano County Water Agency Lower Putah Creek Coordinating Committee program
- Yocha Dehe Community Fund

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 reduce soil loss and promote healthy soil resources. Past soil conservation efforts focused on erosion issues, or the quantity of soil, but modern research has shown that soil quality or soil health is an increasing concern. Soil health issues are often centered on farming practices that conserve organic content and soil biota. Farming practices that maintain or improve soil health focus on keeping soils covered with vegetative material using practices such as cover crops, crop rotation and diversity, and no or reduced tillage. In addition to supporting beneficial soil biota for farmland and natural areas, healthy soils are crucial to climate smart agriculture, sequestering atmospheric carbon and mitigating unpredictable future climatic conditions, such as increased severity of droughts, rain events and temperature extremes. Conserving soil by reducing erosion and promoting soil health may safeguard our communities from some of the impacts related to increased water scarcity and other evolving climatic conditions through increased soil organic matter, water holding capacity and infiltration rates. Soil is the foundation of our watershed approach to resource 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 can focus efforts to conserve soil resources by developing, evaluating, and implementing soil conservation practices, providing technical guidance and on-site expertise, educating our partners and the public about soil conservation, and developing partnerships and networks that promote healthy soils. 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 and soil health 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 that improve soil health especially on highly erodible sites.
- Reaching out to local farmers and landowners to develop strategies to minimize soil erosion caused by farming operations and to improve soil health.
- Developing and implementing conservation plans with a focus on reducing soil erosion and improving soil biota.
- Providing technical and specialized assistance to federal, state and local government.
- Educating the public on the importance of agricultural and open space land in protecting soil as a natural resource.

Recommended Actions

- Public workshops on prevention of soil erosion prevention and soil health management and improvement.
- Implement soil health projects with local landowners.
- Promote land-use practices that reduce soil erosion.
- Design and develop permanent or temporary vegetative cover crop projects that improve soil health and water infiltration.
- Focus conservation efforts on hillsides and highly erodible land, such as areas in the Capay Valley, Dunnigan Hills and Hungry Hollow.
- Continue to work with cooperative landowners on hedgerows and other conservation practices to hold the soil in place and increase soil organic matter content.
- Research the cost-benefit analysis of cover crops, compost and mulching for reducing soil erosion and improving soil health with the goal of providing technical assistance to farmers and landowners
- Promote the use of compost on irrigated lands to improve soil health and store carbon at workshops and outreach events and provide guidance on developing compost programs to interested individuals
- Partner with farmers and organizations to promote and support soil organic matter building practices.
- Recognize the rights and responsibilities of land users in making land use decisions on private land.
- Ensure that RCD and NRCS programs do not encourage the conversion of farmlands, rangelands, forestlands and floodplains to non-agricultural land-use or the excessive expansion of the peripheral boundaries of existing communities.
- Take a lead on soil health policy by creating a working group or technical committee to advocate for federal, state and local soil conservation programs, outreach and coordination, and assess conversation practices occurring in the District that are outside of RCD or NRCS programs.

Potential funding sources and programs



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- California Department of Food and Agriculture Office of Environmental Farming and Innovation Healthy Soils Program cost-share funding
- USDA Natural Resources Conservation Service EQIP cost-share program for cover crop, mulching, and conservation tillage practices
- Carbon Cycle Institute
- Sustainable Agriculture Research and Education

Wildfire

Background

Wildfire has always existed in the landscapes of Yolo County, as for the entire state. Plants and landscapes regularly exposed to fire have adapted to it to varying degrees, and in fact fire is known to be important to the long-term viability of certain species. Prescribed fire can be a useful tool in managing landscapes and controlling non-native, invasive plants. Wildfires have been increasing in frequency and severity in the western foothills and those bounding the Capay Valley. This may be due to 150 years of fire suppression encouraged by the State and Federal Government, the increase in fuel load, a shift toward more flammable plant species and to the slow effects of climate change. In order to return to more healthy landscapes and to prevent property damage and loss of life it is important to bring wildfire more into balance with a productive landscape and to develop and put into practice land and vegetation management practices that will reduce the severity of wildfire and the damage it causes.

Role of the YCRCD

The RCD has expertise in many aspects of land management, has experience in working with private landowners and community and regional partners, and skills in plan development and implementation. The RCD should work with local and regional fire experts, municipalities most at-risk, and private landowners with property at-risk to develop and implement a plan or multiple plans that describe and recommend wildfire prevention land management practices and community activities that reduce wildfire risks and damage.

The RCD can play an important role in reducing the impacts of wildfire by:

- Collaborating with local and regional fire district officials on priority needs and areas
- Working with the Office of Emergency Services (OES) on county-wide coordination related to wildfire
- Seeking funding through grants to develop appropriate plans and to implement wildfire prevention projects.
- Assisting CAL FIRE with permitting and implantation of vegetation management plans

Recommended Actions

The Mission of the Yolo County Resource Conservation District is to Protect, Improve, and Sustain the Natural Resources of Yolo County.

- Meet with and work with local and regional fire district officials to develop Community Wildfire Prevention Plans (CWPP) appropriate to the different regions and landscapes of the County
- Meet with and work with local communities to develop Fire Safe Councils (FSC)
- Work with the Office of Emergency Services (OES) on fire prevention and management plan development and county-wide coordination related to fire
- Seek funding to implement prioritized projects within these plans.

Potential funding sources and programs

- CALFIRE grant and contract programs
- California Fire Safe Council
- California Fire Foundation
- USDA Natural Resource Conservation Service Regional Conservation Partnership Program
- USDA Natural Resources Conservation Service EQIP cost-share program for fuels reduction, brush management, and prescribed grazing and burning

Carbon

Background

Over the past 150 years carbon in the atmosphere has increased by 30%. Soils contain 75% of the carbon pool on land. Increasing soil carbon storage can significantly reduce atmospheric greenhouse gasses (GHG). Forest, rangeland, wetland and farmland soils in the Sacramento Valley are a vast resource that, if managed for carbon balance, will continue to provide future climate benefits through soil carbon storage. Conservation practices, such as pollinator hedgerows, cover crops, forest fuels management and conservation tillage have been found to further increase soil carbon storage. For decades, YCRCD has worked with public and private landowners to implement practices that are now recognized as having important climate benefits. RCDs have the expertise and landowner relationships needed to deliver effective climate beneficial programs.

The Sacramento Valley is diverse in landscape and landowner interest. The working lands and open space of this primarily rural region support forest industry and agricultural communities amid an important watershed system that provides critical water supply and wildlife habitat to surrounding areas. Research now shows that these landscapes, which rely on healthy soils for production and ecosystem function, also provide significant climate benefits.

The RCDs in the Sacramento Valley have partnered together with the aim to create a regional collaborative that will identify and prioritize actionable conservation projects in the Sacramento Valley that further carbon sequestration and climate plan objectives identified by nonprofit, local, state, and federal agencies.

Role of the YCRCD

The YCRCD can address the need and mechanism for carbon management in the context of woodlands, rangeland, soil health, irrigated agriculture, urban greenspace, wildlife habitat and water quality. The YCRCD can serve as a liaison among farmers, public land stakeholders, non-profits and governmental agencies.



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The YCRCD can identify areas and specific project sites suitable for a suite of carbon sequestration practices on agricultural lands (compost application, minimal tillage, cover cropping, hedgerow and riparian habitat), forests (vegetative fuel management), and urban centers (greenspace establishment).

The YCRCD can assist with addressing carbon planning, carbon sequestration and climate change through:

- Developing and maintaining programs for wildfire management, rangeland health, soil health for agricultural production and conservation, wildlife habitat and biodiversity, and water quality and quantity.
- Identifying and prioritizing conservation projects that include quantifying carbon benefits (agroforestry, riparian, woodland etc.) to both establish baselines and estimate carbon sequestration potential regionally.
- Tracking carbon and ecosystem services market opportunities as they develop.
- Carbon (Farm) Planning to increase carbon capture within municipalities and on working lands within a whole-farm planning and implementation framework (Carbon Farming) by quantifying existing carbon sequestration, identifying long term conservation practices that would reduce greenhouse gas emissions and guiding implementation of selected conservation practices.
- Identifying funding opportunities to support carbon sequestration practices identified in Carbon Farm Plans.
- Leading outreach and education for carbon planning and on-farm conservation practices that benefit soil health and carbon sequestration..
- Supporting Healthy Soils Program Demonstration Projects that effectively display carbon sequestration-focused conservation practices to landowners and regional stakeholders while providing a cost-benefit management model for regional climate, water and cropping systems.
- Engaging in Integrated crop and livestock systems (ICLS) such as prescribed contract grazing in vineyards and row crops to support fuel loads reduction and carbon draw-down on landscapes.

Recommended Actions

- Participate in the newly formed Sacramento Valley Regional Carbon Farming Hub
- Secure funding from state and federal partners to implement actionable carbon-driven conservation projects.
- Identify carbon planning and calculation tools
- Assist the county and the region in meeting its GHG emission reduction goals through carbon sequestration.

Potential funding sources and programs

- California Department of Food and Agriculture Healthy Soils Program cost-share funding

The Mission of the Yolo County Resource Conservation District is to Protect, Improve, and Sustain the Natural Resources of Yolo County.

- USDA Natural Resources Conservation Service EQIP cost-share program for riparian buffers, hedgerows, conservation tillage practices and other carbon beneficial practices
- Carbon Cycle Institute
- Private foundations and businesses such as Patagonia
- State grant programs funded by California Cap-and-Trade

Implementation of Strategic Plan

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