MUNICIPAL SERVICE REVIEW

FOR

COLUSA COUNTY RECLAMATION, DRAINAGE,

FLOOD CONTROL AND LEVEE DISTRICTS

COLUSA LAFCO

Reclamation District 108
Reclamation District 479
Reclamation District 1004
Reclamation District 2047
Sacramento River Westside Levee District
Cortina Creek Flood Control and Floodwater Conservation District
Knights Landing Ridge Drainage District
Colusa County Flood Control and Water Conservation District

Adopted: September 2, 2010
LAFCo Resolution 2010-0008

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1 INTRODUCTION

1.1 LAFCO's Responsibilities

This Municipal Service Review (MSR) has been prepared for the Colusa Local Agency Formation Commission (Colusa LAFCO). Local Agency Formation Commissions are quasi-legislative local agencies created in 1963 to assist the State in encouraging the orderly development and formation of local agencies. This MSR consists of a review of reclamation, drainage, and flood control service as provided by the following Districts:

1. Reclamation District 108
2. Reclamation District 479
3. Reclamation District 1004
4. Reclamation District 2047
5. Sacramento River Westside Levee District
6. Cortina Creek Flood Control and Floodwater Conservation District
7. Knights Landing Ridge Drainage District
8. Colusa County Flood Control and Water Conservation District

The Colusa Basin Drainage District is discussed in this report but no specific determinations are made since its boundaries are not regulated by LAFCO.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §56000 et seq.) is the statutory authority for the preparation of an MSR, and periodic updates of the Sphere of Influence of each local agency. The Governor's Office of Planning and Research has issued Guidelines for the preparation of an MSR. This MSR adheres to the procedures set forth in the MSR Guidelines.

A Sphere of Influence is a plan for the probable physical boundaries and service area of a local agency, as determined by the affected Local Agency Formation Commission (Government Code §56076). Government Code §56425(f) requires that each Sphere of Influence be updated not less than every five years, and §56430 provides that a Municipal Service Review shall be conducted in advance of the Sphere of Influence update.

1.2 Municipal Service Review Requirements

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 as amended by AB 1744 and regulations call for a review of the municipal services provided in the county or other appropriate area designated by the LAFCO.

> The LAFCO is required, as part of the MSR, to prepare a written statement of findings of its determinations with respect to each of the following:
>
> 1. Growth and Population
> 2. Capacity and Infrastructure
> 3. Financial Ability
> 4. Shared Facilities

5.	Government Structure and Accountability

A service review is a comprehensive study designed to better inform LAFCO, local agencies, and the community about the provision of municipal services. Service reviews attempt to capture and analyze information about the governance structures and efficiencies of service providers, and to identify opportunities for greater coordination and cooperation between providers. The service review is a prerequisite to a sphere of influence determination and may also lead a LAFCO to take other actions under its authority.

1.3 LAFCO Policies and Procedures Related to Municipal Services

The Colusa LAFCO adopted policies and procedures related to municipal services on February 5, 2004.

1.4 Description of Public Participation Process

Colusa LAFCO proceedings are subject to the provisions California's open meeting law, the Ralph M. Brown Act (Government Code Sections 54950 et seq.) The Brown Act requires advance posting of meeting agendas and contains various other provisions designed to ensure that the public has adequate access to information regarding the proceedings of public boards and commissions. Colusa LAFCO complies with the requirements of the Brown Act.

The MSR Guidelines provide that all LAFCOs should encourage and provide multiple public participation opportunities in the municipal service review process. MSR policies have been adopted by the Colusa LAFCO. Colusa LAFCO has discussed and considered the MSR process in open session, and has adopted a schedule for completing the various municipal service reviews and sphere of influence updates for Colusa County. Each municipal service review will be prepared as a draft, and will be subject to public and agency comment prior to final consideration by the Colusa LAFCO.

1.5 California Environmental Quality Act (CEQA)

The Municipal Service Review is a planning study that will be considered by Colusa LAFCO in connection with subsequent proceedings regarding the reclamation and levee districts. The Sphere of Influence review or update that would follow has not been approved, or adopted or funded by LAFCO.

This MSR is funded in Colusa LAFCO's 2009-2010 Budget. This MSR includes an analysis, to the extent required by section 15262 of the CEQA Guidelines, of the environmental factors that may be affected by the Municipal Service Review process; but will not include the preparation of an environmental review document.

1.6 Preparation of the MSR

Research for this Municipal Service Review (MSR) was conducted over several months from the fall of 2008 and into 2010. Modifications have been made reflecting dynamic circumstances. This MSR is intended to support preparation and update of Spheres of Influence, in accordance

with the provisions of the Cortese-Knox-Hertzberg Act. The objective of this Municipal Service Review (MSR) is to develop recommendations that will promote more efficient and higher quality service patterns; identify areas for service improvement; and assess the adequacy of service provision as it relates to determination of appropriate sphere boundaries.

While Colusa LAFCO prepared the MSR document, Colusa LAFCO did not engage the services of experts in agriculture, engineering, biology, ecology, hydrology, accounting or other specialists in related fields, but relied upon published reports and district staffs for information.

The State Law (Cortese-Knox-Hertzberg Act) requires the districts to provide this information as stated in the following code section:

Section 56425(i)

> *When adopting, amending or updating a sphere of influence for a special district, the commission shall do all of the following:*
>
> *(1) Require existing districts to file written statements with the commission specifying the functions or classes of services provided by those districts.*
>
> *(2) Establish the nature, location, and extent of any functions or classes of services provided by existing districts.*

Therefore, this MSR reflects LAFCO's recommendations, based on available information during the research period and provided by districts and county staff, to assist in its determinations related to the following:

1) Promoting more efficient and higher quality service patterns

2) Identifying areas for service improvement

3) Assessing the adequacy of service provision for the districts

2 SACRAMENTO RIVER AND FLOOD CONTROL REGULATIONS

2.1 Sacramento River

The Northern California Water Association's (NCWA) "Draft Sacramento Valley Integrated Regional Water Management Plan" describes the Sacramento River as follows:

> Since 1944, the flow of the Sacramento River and its tributaries has been managed to a significant degree by the facilities of the Central Valley Project (CVP) and the State Water Project (SWP), a system of reservoirs and conveyance facilities that help to deliver River water to users both within and outside the Sacramento River Basin. Flows in the Sacramento River are influenced by the following factors:
>
> - Operation of Shasta and Oroville Dams and other local projects
> - Climatic conditions
> - Land use
> - Water rights and contractual allocations that govern the use of surface water[1]

The Sacramento Valley may be broadly characterized as a "flow-through" system because most of the water not consumed for irrigation or other purposes eventually returns to the River via the streams or percolates to groundwater that recharges local aquifers. The typically high groundwater levels in the Sacramento Valley allow groundwater to enter the streams and the River system.[2]

The west side of the Sacramento Valley is composed of a number of watershed sub-basins. Primary among these sub-basins is the Colusa Basin, which encompasses lands west of the Sacramento River from Stony Creek in the north to Cache Creek in the south. The Basin, which includes nearly 1,700 square miles, was progressively developed for irrigated agriculture beginning in the late 1800s. The development of agriculture required the formation of a number of reclamation districts. These districts constructed an extensive system of levees to protect the Colusa Basin from winter river flooding.

2.2 Reclamation and Levee Districts

2.2.1 Reclamation Districts Background

The formation of reclamation districts was originally authorized in 1868 to facilitate reclamation of swamp lands by building levees and drainage systems. The formation and regulation of reclamation districts is incorporated into the California Water Code, Section 50000 and following. Landowners within these districts financially support their operation, maintenance, and improvement.

The infrastructure maintained by the reclamation districts is associated with layers of regulatory authority for constructing, maintaining, and repairing levees and flood control facilities.

[1] NCWA, "Draft Sacramento Valley Integrated Regional Water Management Plan," July 12, 2005, page 1.
[2] NCWA, "Draft Sacramento Valley Integrated Regional Water Management Plan," July 12, 2005, page 3.

Although the primary purpose of reclamation districts has not changed since the enabling legislation was passed, land uses, laws, regulations, and agencies with oversight authority have changed significantly. The levee maintenance process has evolved into a complicated and costly process of regulatory agency approvals and mitigation.

Despite the layers of regulatory oversight, maintenance is primarily the responsibility of local reclamation districts and the individual landowners within the district. Improvement and maintenance of non-project levees is very difficult for reclamation districts due to the unknown or poor quality foundations and regulations to protect levee wildlife habitat.

While some local districts responsible for maintaining these levees are reimbursed for a portion of the costs under the Delta Levees Subvention Program established in 1973 and the Delta Flood Protection Act of 1988, both added a major environmental mandate to ensure no net long-term loss of habitat. This requirement adds costs which further reduces money available for maintenance.[3]

The reconstruction of failed levees is a complicated and costly process, which involves the cooperation and coordination of the following agencies:

- US Army Corps of Engineers
- Federal Emergency Management Agency
- Central Valley Flood Protection Board (Formerly State Reclamation Board)
- Local reclamation districts

According to Keith Swanson, Chief of the Flood Maintenance Branch for DWR, costs for levee repairs have now reached $5,000 a lineal foot.[4] Of the 6,000 miles of levee in the Sacramento-San Joaquin system, only about 1,700 miles are designated as priority flood control projects which are eligible for State and Federal assistance. The remainder of the Sacramento-San Joaquin levee system (approximately 4,300 miles) must be maintained and repaired when necessary by local reclamation districts and private parties.[5]

2.2.2 Levee Maintenance Issues

Beyond budgetary constraints on the local, State and Federal levels, the conflict inherent between natural resource protection (endangered species and wetlands, in particular) and the need to maintain levees has also created problems and delayed both appropriations and repairs. Added to the mix is the issue of allowing the public to use the levees for recreational fishing. While the right to fish in public waters is guaranteed by the State Constitution, the landowners within reclamation districts are concerned about increased liability and damage to the levees.[6]

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[3] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, CA 95695 Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, CA 92024, March 2005, Page 23.

[4] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, CA 95695 Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, CA 92024, March 2005, Page 23.

[5] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, CA 95695 Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, CA 92024, March 2005, Page 23

[6] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, CA 95695

The infrastructure challenges facing reclamation districts are substantial. The cost of vegetation removal and compliance with CEQA add significantly to the costs and reduce the amount of money each reclamation district has available for maintenance. Reclamation districts have had to adjust their maintenance programs and bear the cost of complying with the Endangered Species Act and the Clean Water Act, legislation that did not exist when most of them were formed. They are essentially required to mitigate for environmental damage that has happened over decades throughout the region.[7]

Despite the number of agencies regulating reclamation districts, funding is typically not associated with their oversight. Funding programs also frequently require a higher maintenance standard which adds to costs or the payment of the grants presupposes an unusual amount of working capital. As a result, the cost of maintenance primarily becomes the responsibility of individual landowners within each reclamation district even though the service provided by reclamation districts is of benefit to the region and ultimately to the large portion of California dependent on the Delta for water supply.[8]

Irrigation, levee, and reclamation district activities along the Sacramento River can relate to riparian habitat management in several ways. Unlined irrigation and drainage ditches and canals may provide sufficient water for the growth of riparian habitat in areas that might not otherwise support it. Ditch and levee maintenance practices may also affect riparian habitat.

In some areas levee maintenance is carried out in a way that allows strips of riparian habitat to remain on levee berms; in other areas this is not the case. The siting of larger diversion structures along the Sacramento River may also have important implications for riparian habitat; structures requiring bank protection may inhibit the physical river processes which maintain riparian forest succession.[9]

2.2.3 Reclamation District Financing

The State Law (California Water Code Section 50000 et seq.) allows a Reclamation District to use the following financing tools to raise money needed to pay for facilities and services:

1) Special assessments based on the specific benefit each parcel receives from the improvements
2) Fees or charges, including minimum and standby charges, for services provided
3) User fees for the irrigation services provided to property owners

The Reclamation District may also issue bonds to finance improvements.[10]

Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, CA 92024, March 2005, Page 24.

[7] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, CA 95695
Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, CA 92024, March 2005, Page 9.

[8] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, CA 95695
Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, CA 92024, March 2005, Page 9.

[9] Sacramento River Watershed Program, "Sacramento River Conservation Area Handbook", January 2000, P. 8-16.

[10] California Tax Data, 100 Pacifica, Suite 470, Irvine, CA 92618, Phone: 949-789-0660, Fax: 949-788-0280, www.californiataxdata.com.

2.3 Regulatory Agencies

Several Federal and State agencies have flood control and related responsibilities. For the most part, these responsibilities relate to levees that are part of the joint Federal-State Sacramento River Flood Control Project (SRFCP). Levees within the SRFCP system are called "project levees."

2.3.1 US Army Corps of Engineers

The U.S. Army Corps of Engineers (ACOE) designed and constructed the Sacramento River Flood Control Project, and establishes standards for maintaining project levees. It establishes construction standards and flood control guidelines. The ACOE is responsible for conducting certification of project levees.

2.3.2 Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) defines which geographic areas are within floodplains and flood hazard areas, and which are required to purchase flood insurance. FEMA is also responsible for financing flood disaster recovery efforts. FEMA is organized as part of the federal Department of Homeland Security.

FEMA administers the National Flood Insurance Program, which enables property owners to purchase flood insurance. FEMA identifies flood hazard areas by producing maps showing flood, flood hazard, and floodway boundaries. Several areas of flood hazards are commonly identified on these maps. FEMA designates floodways where encroachment is prohibited to ensure that flood waters drain effectively.

The special flood hazard area or high-risk area is defined as any land that would be inundated by a flood having a one percent chance of occurring in any given year (also referred to as the 100-year flood or base flood). For the most part, the official Digital Flood Insurance Rate Maps (DFIRMs) covering Colusa County were developed by FEMA in 2003.

FEMA has approved dozens of Letters of Map Revision (LOMRs) as levee and drainage improvements have been made and evaluated, effectively changing the FIRMs. FEMA prepared the 2003 DFIRM under the assumption that levees provide 100-year flood protection, but now requires that levees be certified.[11]

2.3.3 California Department of Water Resources

California Department of Water Resources (DWR) maintains 1,600 miles of project levees in California and directly maintains 152 levee miles, with local reclamation districts maintaining the remainder.

The Flood Maintenance Office is responsible for the operation and maintenance of the federally constructed flood control features in the Sacramento Valley as authorized by the Water Code Sections 8361 and 12878 and cooperates with the U.S. Army Corps of Engineers in repairing

[11] Current rules for mapping areas protected by levees were codified in Federal Regulation (44 CFR 65.10) in 1986.

flood damaged federal flood control projects maintained under the authority of the Central Valley Flood Protection Board. Maintenance includes planning, environmental permitting and coordination, and design through the Maintenance Support Branch, and field operations through the Sutter Maintenance Yard and the Sacramento Maintenance Yard.[12]

The Sutter Maintenance Yard (and the 31 employees there)[13] is responsible for the State-maintained portion of the Sacramento River Flood Control Project from Knights Landing on the Sacramento River northward to Red Bluff. The Sutter Yard ensures that the channels, levees, and structures of flood control projects in this region are maintained in accordance with federal regulations and the State water code.[14]

According to the Colusa County Budget, Maintenance District 12 contributed $311,009 to the State Water Resources Board for flood control in 2008-2009.[15] The budget for flood control is determined by the State and then each landowner is assessed by the County according to the location, number of acres, and land use. These assessments are collected in addition to the *ad valorem* taxes collected by the County.[16] State Budgets for Maintenance Areas 1 and 12 are shown below. A map showing the location of Maintenance Districts 1 and 12 is shown at the end of this section.

STATE of CALIFORNIA
Natural Resources Agency
PROPOSED DISTRIBUTION OF WORK IN STATE MAINTENANCE AREAS
2009-2010 Fiscal Year Budget MAINTENANCE AREA 1
WEST LEVEE SACRAMENTO RIVER NEAR COLUSA[17]

JOB CATEGORY	*2007-2008 ACTUAL COST*	*2008-2009 PROJECTED COST*	*2009-2010 PROPOSED BUDGET*
Vegetation Control	$37,900	$24,000	$26,000
Burning	$34,400	$27,000	$30,000
Rodent Control	$22,796	$18,000	$ 22,500
Patrolling	$4,010	$2,600	$50,000
Mowing	$5,538	$6,200	$7,500
Inspection	$6,470	$ 2,500	$5,500
Encroachment Removal	$5,599	$4,500	$5,000
Restoration	$33,895	$16,000	$20,000
Crown Roadways	$13,703	$9,600	$20,000
Minor Structures	$9,571	$2,600	$4,500
Dragging	$8,675	$ 10,500	$15,000
MEO Equipment Costs	$ 22,032	$22,850	$24,000
Maintenance Yard Overhead	$20,000	$15,000	$ 12,500

[12] State of California, Department of Water Resources, http://www.water.ca.gov/floodmgmt/fmo/, October 7, 2009.
[13] State of California, Department of Water Resources, Sutter Maintenance Yard, Joel Farias, Phone 530-755-0071 X 223, October 9, 2009.
[14] State of California, Department of Water Resources, http://www.water.ca.gov/floodmgmt/fmo/sumy/, 10/7/ 2009.
[15] Colusa County, Final Budget 2008-2009, Page 440.
[16] Colusa County Auditor's Office, Janet Dawley, Phone: 530-458-0400, October 14, 2009.
[17] State of California, Department of Water Resources, Swanson, Keith, kswanson@water.ca.gov, November 25, 2009.

Telemetry Maintenance	$ -	$ -	$ -
TOTAL BUDGET	**$ 224,589**	**$ 161,350**	**$ 242,500**

Notes: Increase in mowing and vegetation control costs in 07/08 needed to meet Corps compliance standards.
Increase in encroachment removal costs in 07/08 needed to meet Corps compliance standards.
Projected costs in 08/09 are lower due to mild winter conditions.

STATE of CALIFORNIA
Natural Resources Agency

PROPOSED DISTRIBUTION OF WORK IN STATE MAINTENANCE AREAS
2009-2010 Fiscal Year Budget MAINTENANCE AREA 12 COLUSA DRAIN LEVEE[18]

JOB CATEGORY	***2007-2008 ACTUAL COST***	***2008-2009 PROJECTED COST***	***2009-2010 PROPOSED BUDGET***
Vegetation Control	$18,540	$9,500	$9,500
Burning	$9,627	$8,500	$9,500
Rodent Control	$5,962	$5,900	$6,000
Patrolling	$ 833	$2,600	$5,000
Mowing	$4,134	$4,500	$5,000
Inspection	$4,891	$1,800	$2,000
Encroachment Removal	$7,998	$2,000	$2,000
Restoration	-	$3,200	-
Crown Roadways	$29,927	$12,000	$26,000
Minor Structures	$6,161	$5,000	$5,500
Dragging	$6,529	$7,500	$8,000
MEO Equipment Costs	$8,186	$8,400	$8,500
Maintenance Yard Overhead	$7,500	$7,140	$5,000
Telemetry Maintenance	-	-	-
TOTAL BUDGET	**$110,288**	**$78,040**	**$92,000**

Notes: Increase in mowing and vegetation control costs in 07/08 needed to meet Corps compliance standards.
Increase in encroachment removal costs in 07/08 needed to meet Corps compliance standards.
Projected costs in 08/09 are lower due to mild winter conditions.

[18] State of California, Department of Water Resources, Swanson, Keith, kswanson@water.ca.gov, November 25, 2009.

2.3.4 Central Valley Flood Protection Board

The Central Valley Flood Protection Board (CVFPB) was formerly known as the State Reclamation Board. The Central Valley Flood Protection Board's mission is to control flooding along the Sacramento and San Joaquin Rivers and their tributaries in cooperation with the United States Army Corps of Engineers to provide public safety through flood protection in the Central Valley. The Board cooperates with various agencies of the federal, State, and local governments in establishing, planning, constructing, operating, and maintaining flood control works. The Board also maintains the integrity of the existing flood control system and designated floodways through its regulatory authority by issuing permits for encroachments that comply with Board standards.[19]

The Board must approve any activity that may affect "project works," to ensure that the activity maintains the integrity and safety of flood control project levees and floodways, and is consistent with the flood control plans adopted by the Board and the California Legislature. Project works include levees, bank protection projects, weirs, pumping plants, floodways, and any other related flood control works or rights-of-way that have been constructed using State or Federal funds. The Board has police powers relating to encroachment on levees, and issues permits for levee construction and use.

DWR is responsible for levee inspection and rates the reclamation districts' maintenance activities. If maintenance is inadequate, DWR may form a maintenance area, conduct the maintenance directly and charge property owners for associated costs. This is the case in the part of Colusa County known as Maintenance Area 12. Levee maintenance standards have become more rigorous with new ratings implemented in 2007. The vegetation clearance criterion is open visibility and access; the State and the ACOE reported they are working on an effective strategy in 2008 regarding levee vegetation.

The Sacramento-San Joaquin Drainage District was created by the California Legislature in 1913 to allow the State Engineer at the time, to procure data, and perform surveys and examinations of the San Joaquin and Sacramento rivers and their tributaries for the purpose of preparing a report to the Reclamation Board (now the Central Valley Flood Protection Board- CVFPB) to further the Board's plans for controlling the floodwaters of the rivers, improve and preserve navigation, and the reclamation and protection of the lands that are susceptible to overflow from those rivers and their tributaries. According to the Statute, the Drainage District can acquire, own, hold, use, and enjoy any and all properties necessary for the purposes of the district; its management and control are vested in the Central Valley Flood Protection Board (CVFPB); and comprises more than 1.9 million acres of area in the Central Valley along the general course of the Sacramento and San Joaquin Rivers including portions of Colusa County along the Sacramento River.

In October 2007, AB 162 was chaptered. This bill requires that each city and county located within the boundaries of the Sacramento-San Joaquin Drainage District submit the draft element, or draft amendment to the safety element of its general plan to the Central Valley Flood Protection Board for review and comment.

[19] State of California, http://www.ebudget.ca.gov/StateAgencyBudgets/3000/3860/program_description_35.html, October 28, 2009.

Beginning January 1, 2009, these general plans are to be submitted to the CVFPB for review at least 90 days prior to the adoption of, or amendment to, the safety element, and allows the Board 60 days to review the general plans and provide comments back to the cities and counties that have submitted plans.

The City of Colusa and the unincorporated portion of Colusa County along the Sacramento River falls within the jurisdiction of the Sacramento-San Joaquin Drainage District and, therefore, the City of Colusa and County of Colusa will need submit draft safety elements to the CVFPB. The City of Colusa adopted its General Plan prior to January 1, 2009. The County of Colusa is currently in the process of updating its general plan and will need to comply with AB 162 in the immediate future.

2.3.5 California Department of Fish and Game

The California Department of Fish and Game (DFG) regulates diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources. For example, certain vegetation clearance activities of the reclamation districts must be approved by DFG.

2.4 Runoff

To reduce pollution in watersheds, the Clean Water Act directed the states to establish Total Maximum Daily Loads of pollutants. The TMDLs require monitoring of pollutant levels and remedial actions that will prevent contaminants from exceeding maximum allowable levels. TMDLs present numerical targets for water quality pollutant levels in impaired water bodies.

Central Valley RWQCB is responsible for water quality control plans (basin plans), water quality objectives, and regulating stormwater runoff pollution. Cities and industries known to contribute to storm water runoff pollution are regulated by National Pollutant Discharge Elimination System (NPDES) permits and waste discharge requirements issued by RWQCB.

Stormwater NPDES permits are issued to protect water quality from nonpoint source discharges, such as roadways or construction sites. RWQCB issues individual NPDES permits to cities and counties with population of 100,000 or more, and has issued a general permit to smaller jurisdictions that meet either of the following requirements:

a) Meet the EPA definition of urbanized areas

b) Are designated as regulated areas by RWQCB in light of high population growth, population density, growth potential, and/or discharge levels

2.5 Other Agencies

2.5.1 Power and Water Resources Pooling Authority

The Power and Water Resources Pooling Authority (PWRPA) is a Joint Powers Authority comprised of 15 public water purveyors that organized in 2004 under California State law to collectively manage individual power assets and loads. As indicated in the following map, the

aerial scope of PWRPA spans a significant portion of the Sacramento-San Joaquin Valleys and coastal counties of California. The Authority's power load ranges from 20 to 120 MW from winter to summer consuming 400 to 450 GWH of energy annually to convey, treat, and recycle water for their growers and consumers. Participants' individual loads range from 2 to 35 MW.

Although principally formed to coordinate power supplies, these districts and agencies recognize the interchangeability of water management and power requirements. Accordingly, as the name reflects, the PWRPA participants envision alternative water-management options and potential exchanges as a potentially significant role for the Authority.[20] District participants in Colusa County include the Glenn-Colusa Irrigation District, RD 108 and the Provident Irrigation District.

2.5.2 Colusa Basin Drainage District

In 1985 a Multi-County Drainage Task Force was created in response to local requests for help regarding drainage and flooding in Glenn, Colusa, and Yolo Counties. This task force provided a forum whereby the diverse interests in the Basin could discuss problems and solutions to drainage and flooding problems. The tremendous expansion of irrigated acreage in the Basin brought about by more intense cultivation of lands, groundwater pumping, and the development of the Tehama-Colusa Canal service area, since the construction done by the Reclamation District 2047 in the 1920's, obviated the need for a reassessment of the drainage needs of the Basin. Most remedial measures would not have the desired result unless they could be applied uniformly over the drainage area.[21]

The California State Legislature formed the Colusa Basin Drainage District in 1987 to address flooding and winter drainage, irrigation drainage and subsidence problems in the Colusa Basin Watershed. In September 2000, Congress enacted the "Colusa Basin Watershed Integrated Resources Management Act" (PL 106-566, Title VI) authorizing federal participation in development of a flood control and environmental restoration program for the watershed.

The Colusa Basin Drainage District was created to deal with flooding that occurs within the Colusa Basin Watershed. It does not manage the Colusa Basin Drain. The boundaries do not include foothill lands. The Legislation that created the CBDD, by request and design purposefully left the foothills within the Colusa Basin Watershed out of the district boundaries of the CBDD. The Colusa Basin Drainage District encompasses an area from south of Orland (Glenn County) to Knights Landing (Yolo County) and from the west bank of the Sacramento River to the western boundary of the Tehama-Colusa Canal service area. Its nine-member Board of Directors consists of representation from each county, landowners, and districts within its boundaries.[22]
Contact Information for the Colusa Basin Drainage District is as follows:[23]

Gene Massa, General Manager
Colusa Basin Drainage District, PO Box 390 Willows, CA, 95988
Phone: (530) 517-0260 Email: massalaw@yahoo.com

[20] Power and Water Resources Pooling Authority (PWRPA)
http://www.pwrpa.org/pwrpa%5Forg/index.CFM?q_webaction=ABOUTUS
[21] Reclamation District No. 2047, "Brief History and Responsibilities," May 31, 1996, page 3.
[22] Reclamation District No. 2047, "Brief History and Responsibilities," May 31, 1996, page 3.
[23] www.yolocounty.org/Modules/ShowDocument.aspx?documentid=7200, June 15, 2010.

Legal Counsel: Jennifer Harder, Attorney, Downey Brand Attorneys LLP
Phone: (916) 444-1000

Land Service Area: 1,036,000 acres (22,160 Federal / 1,013,842 Nonfederal)
(Colusa / Glenn / Yolo Counties)

Colusa Basin Drainage District Board Meetings are held on the Second Thursday of every month at alternating sites within the three included counties. The Board of Directors are elected or appointed by the Boards of Supervisors of Glenn, Yolo and Colusa counties and one from each county is elected by District votes. The Board members are as follows:[24]

District #1: (Glenn County)	
Leigh McDaniel (Board of Supervisors)	Term Expires: January 2014
Mike Vereschagin, V-Ch. (Elected by Division)	Term Expires: January 2012
Lance Boyd (Elected by Districts)	Term Expires: January 2014
District #2: (Colusa County)	
Gary Evans (Board of Supervisors)	Term Expires: January 2014
John Garner, Sec. (Elected by Division)	Term Expires: January 2012*
Bruce Rolen (Elected by Districts)	Term Expires: January 2012
District #3: (Yolo County)	
Lynnel Pollock, Ch. (Board of Supervisors)	Term Expires: January 2012
Cathy Busch (Elected by Division)	Term Expires: January 2014
George Tibbitts (Elected by Districts)	Term Expires: January 2014

* This Director is a holdover director and the seat is open should a person so desire to petition the Colusa County Board of Supervisors to fill Said vacancy.

2.5.4 SB 1086 Program

The overall goal of the management program for the Sacramento River Conservation Area (SB 1086) is to preserve remaining riparian habitat and reestablish a continuous riparian ecosystem along the Sacramento River between Redding and Chico, and to reestablish riparian vegetation along the river from Chico to Verona. This will be accomplished through this incentive-based, voluntary river management plan. Riparian habitat is actually a diverse mosaic of habitat types, which is part of a bigger picture that includes the entire river ecosystem and the humans within it.

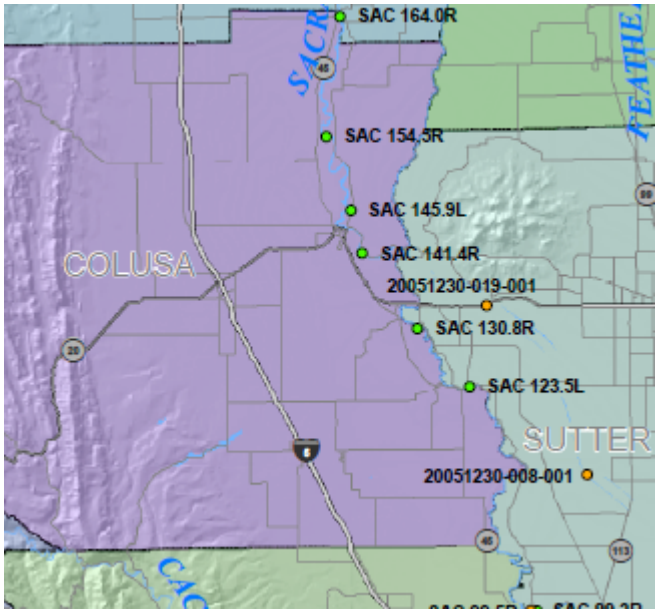
Too often, restoration is attempted piecemeal, or is carried out in ways that do not take human activities into account. In the SB1086 program, the principles which provide the foundation for all restoration work are rooted in the fact that riparian habitat is closely linked to the river ecosystem and human activities. These principles, fall into the following six categories:

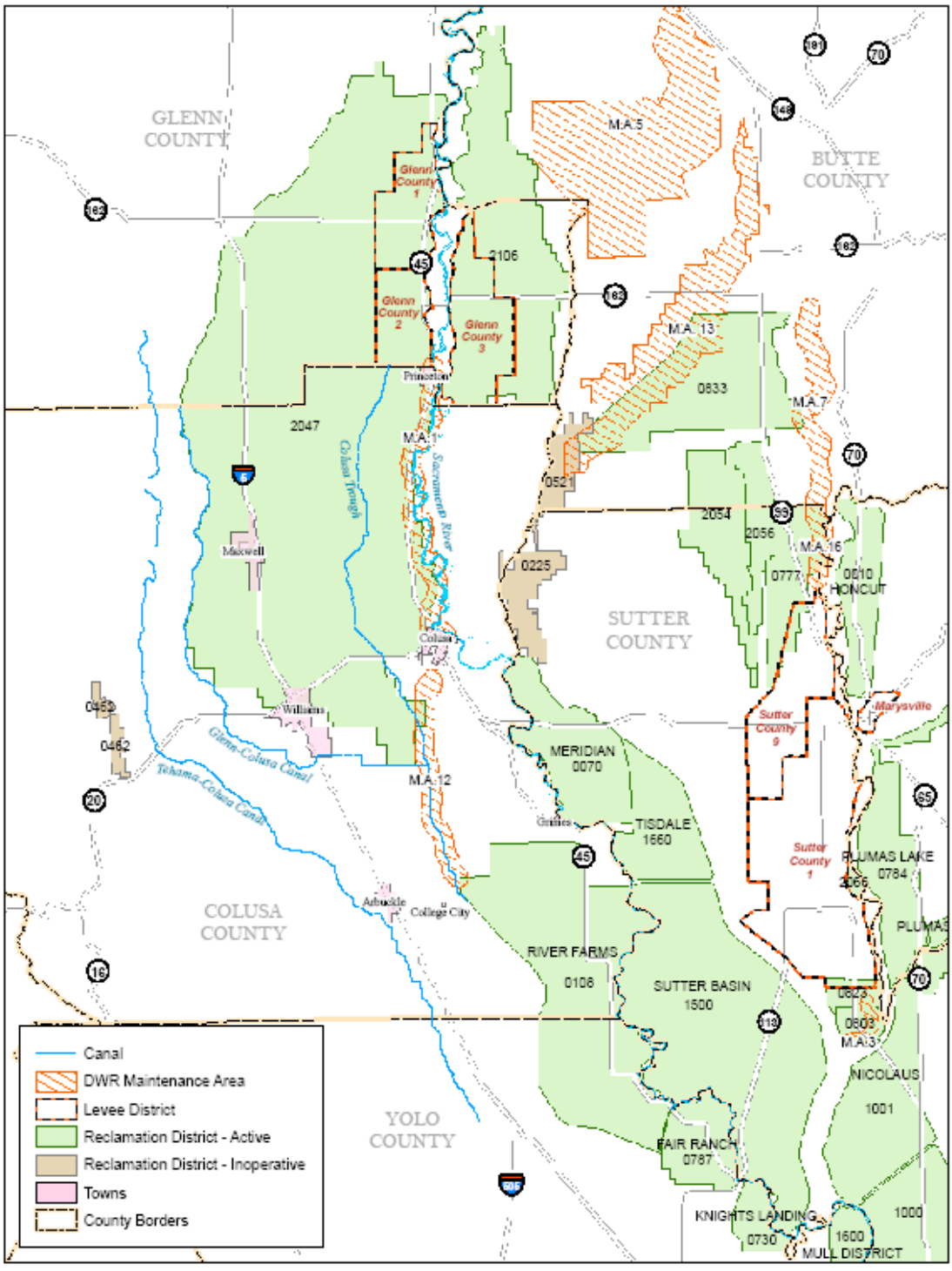
- Ecosystem management
- Voluntary participation
- Bank protection
- Flood management
- Local concerns
- Information and education[25]

[24] Colusa Basin Drainage District, Eugene Massa Jr. General Manager, PO Box 390, Willows CA 95988.
[25] http://www.sacramentoriver.org/SRCAF/publications/handbook/Ch1_SacRivHand03_webready.pdf, June 7, 2010.

Maintenance Area No. 12

http://www.water.ca.gov/floodmgmt/docs/map_fld_ctrl_prjagns.pdf





DWR Maintenance Areas
(Maintenance Area 1 is north of Colusa, Maintenance Area 12 is south of Colusa)

3 SETTING

The Reclamation and Levee Districts examined in this report include land within Glenn and Yolo counties as well as land within Colusa County so all three counties will be briefly described below.

3.1 Colusa County

3.1.1 Colusa County Background

A. Colusa County History

Colusa County is one of the original counties of California, created in 1850 at the time of statehood. Parts of the County's territory were given to Tehama County in 1856 and to Glenn County in 1891. According to the U.S. Census Bureau, the County has a total area of 1,156 square miles including 6 square miles of water. A large number of streams drain the county including Elk Creek and Salt Creek. The County's eastern boundary is formed, in part, by the Sacramento River. There are two incorporated cities in Colusa County: Colusa and Williams. There is one census-designated place: Arbuckle.

B. Colusa County Climate

The northern Central Valley has a Mediterranean climate with pronounced, but mild, wet winters and hot, dry summers. Rainfall of the region is confined mainly to winter months and varies between 15 to 20 inches per year. Winters can be very cold for short periods while summers are hot and dry, with practically no rain from May to September.[26]

C. Colusa County Agriculture

According to the University of California Cooperative Extension, the major crops of Colusa County include rice, processing tomatoes, almonds, wheat, vegetable seeds, walnuts and prunes. The total value of agricultural crops produced in Colusa County in 2008 was $662,644,000 up from $484,525,000, in 2007 and $422,729,000 in 2006. In 2009 the value declined slightly to $602,571,000.[27] The value of rice, the County's largest crop was $188,027,000 in 2007[28] and increased substantially to $337,499,000 in 2008[29] but declined to $243,459,000 in 2009. Processing tomatoes, walnuts and vegetable seeds increased in value in 2009.

D. Colusa County Employment

In Colusa County 24% of the 2007 workforce was classified as agricultural. The employment/unemployment patterns directly reflect that condition. The number of jobs in all industries had a decrease of 5.3% (-410 jobs) in 2007. Without considering the agriculture

[26] Colusa County General Plan, 1994
[27] Colusa County Department of Agriculture, Harry A. Krug, Agricultural Commissioner, 100 Sunrise Blvd. Suite F, Colusa CA 95932, Phone: 530-458-0580, "2009 Colusa County Crop Report."
[28] Colusa County Department of Agriculture, Harry A. Krug, Agricultural Commissioner, 100 Sunrise Blvd. Suite F, Colusa CA 95932, Phone: 530-458-0580, "2007 Colusa County Crop Report."
[29] Colusa County Department of Agriculture, Harry A. Krug, Agricultural Commissioner, 100 Sunrise Blvd. Suite F, Colusa CA 95932, Phone: 530-458-0580, "2008 Colusa County Crop Report."

employment for Colusa County, the seasonal variation remains because of the impact agriculture has on the rest of the employment sectors. Nonfarm employment growth in Colusa County grew in 2007 with a 3.1% (+170 jobs) increase. The annual Unemployment Rate for Colusa County in 2007 increased by half a percentage point to 13.1%, up from the 12.6% Rate in 2006.[30] The April 2009 unemployment rate for Colusa County was 19.1% compared to 10.9% for California and 8.6% for the US.[31]

E. *Colusa County Population Growth*

Colusa County population has grown steadily since 2000 as shown in the following table:

COLUSA COUNTY POPULATION 2000 TO 2009[32]				
Year	**City of Colusa Population**	**City of Williams Population**	**Unincorporated Area of Colusa County Population**	**Colusa County Total Population**
2000	5,402	3,670	9,732	18,804
2001	5,452	3,768	9,839	19,059
2002	5,535	3,879	9,997	19,411
2003	5,608	4,050	10,151	19,809
2004	5,685	4,279	10,377	20,341
2005	5,586	4,797	10,509	20,892
2006	5,642	5,033	10,615	21,290
2007	5,688	5,175	10,753	21,616
2008	5,705	5,285	10,821	21,811
2009	5,900	5,287	10,810	21,997

F. *Colusa County Population Data*

As of the US Census of 2000, there were 18,804 people residing in Colusa County. In 2007 there were 7,448 housing units in Colusa County. The Colusa County Homeownership Rate in 2000 was 63.2% (compared to 56.9% for California). The median value of owner-occupied housing units in 2000 was $107,500 (compared to $211,500 for California).The percentage of housing units in multi-family structures in Colusa County was 11.6% in 2000 (compared to 31.4% for California).[33] In 2008 Colusa County had 8.7% of the population under five years old, 28.8% under 18 years old, and 11.6% aged 65 and older.[34]

Educational levels in Colusa County were lower than those for California as a whole, with 64.0% of Colusa County residents aged 25 and older holding a High School Diploma and 10.6% holding

[30] http://www.csus.edu/indiv/j/jensena/sfp/sa11/yol2/col/colusa.htm
[31] State of California, Employment Development Department, Labor Market Information Division, Phone 916-202-2162, May 22, 2009.
[32] State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001–2009, with 2000 Benchmark, Sacramento, California, May 2009.
[33] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06011.html, September 22, 2009.
[34] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06011.html, September 22, 2009

a Bachelor's degree or higher. In California 76.8% of residents aged 25 and older are High School Graduates and 26.6% have a Bachelor's degree or higher.[35]

G. Colusa County Income Levels

The 2007 median income for a household in Colusa County was $43,882 (compared to $59,928 for the State of California).[36] The 1999 per capita income for Colusa County was $14,730. In 2007, 12.7% of the County population was below the poverty line.[37]

The following table shows the 2009 income levels for a family of four in Colusa County:

State of California Department of Housing and Community Development Colusa County Income Limits 2009[38] Four Persons in Household	
Income Category	**Annual Income Level**
Extremely Low	$16,750
Very Low	$27,900
Lower Income	$44,650
Median Income	$55,800
Moderate Income	$66,950

3.1.2 Colusa County General Plan

The Colusa County General plan recognizes there are sensitive lands along the Sacramento River that contain rare species. The Plan also recognizes that much of the Sacramento River's riparian vegetation has been destroyed as a result of agriculture, flood control and channelization. County policy recommends habitat resource conservation and protection of water quality and quantity.

The Resource Conservation Element of the Colusa County General Plan encourages conservation of fish and wildlife habitat throughout the County. Preservation of natural qualities of rivers and streams is also encouraged. Zoning, planning and taxation policies should preserve watershed areas, as well as agricultural lands and hillside areas. Development in the Sacramento River floodway and ecologically sensitive areas is discouraged. The Open Space and Recreation Element supports the conservation of the natural beauty of rivers and streams.[39]

The County is in the process of re-writing its general plan. Compliance with the requirements of AB- 162 include containing known information with respect to flood hazards and sending the safety element to the Central Valley Flood Protection Board (CVFPB).

3.1.3 City of Colusa General Plan

The City of Colusa is surrounded by Zones A and AE (Within the 100 year Flood Zone). According to the General Plan localized flooding occurs within the City Limits, primarily on its

[35] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06011.html, September 22, 2009.
[36] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06011.html, September 22, 2009.
[37] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06011.html, September 22, 2009.
[38] State of California, Department of Housing and Community Development, Memorandum Official State Income Limits for 2009, April 2, 2009.
[39] Colusa County, Colusa *County General Plan Final*, January 13, 1989.

east side. The plan calls for new development to mitigate the effects of storm water drainage especially in those areas east of Bridge Street and Highway 20. The City has policies to cooperate with all agencies seeking to maintain the existing levee system and to avoid encroachment that would damage structural integrity of the levee system.

The City of Colusa General Plan adopted in 2007 designates a Riverfront District as a special planning area. A Riverfront Plan is called for as an implementation measure. This plan will be prepared by the City and incorporated into the City's zoning ordinance prior to or concurrent with large development approvals.[40]

3.2 Glenn County

3.2.1 Glenn County Background

Glenn County is located in north of Colusa County. Glenn County was formed in 1891 from parts of Colusa County. It was named for Dr. Hugh J. Glenn, who was the largest wheat farmer in the State during his lifetime and a man of great prominence in political and commercial life in California. According to the US Census Bureau, Glenn County has a total area of 1,327 square miles. As of 2000, Glenn County had a population of 26,453 and 6,732 families. There were 9,982 housing units.[41]

In 2008, the population of Glenn County was 28,237. The County had 7.9% of the population aged under 5 years old, 27.5% under 18 years old, and 12.3% were 65 or more years old. The female population of Glenn County was 49.5%.[42] The median household income in 2007 was $38,521 per year (compared to $59,928 per year for the State of California).[43]

3.2.2 Glenn County General Plan

The Glenn County General Plan identifies goals and policies that address conservation issues along the Sacramento River. While the County has created a map overlay that outlines groundwater and streamside areas recommended for protection, County Ordinances have not yet been amended to include development standards that protect watershed areas.

Map overlays for restorable wetlands and areas of biological importance have also been created. Watershed protection standards recommend that all new developments proposed adjacent to streams include grading, excavation and erosion control plans to minimize degredation to soil and water quality.

The Glenn County General Plan recognizes the Sacramento River corridor as an area of significant biological importance. Development along the Sacramento River should avoid environmentally sensitive areas and eliminate or minimize any adverse impacts from all proposed

[40] City of Colusa, General Plan, October 2007, page 2-22.
[41] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06021.html, September 30, 2009.
[42] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06021.html, September 30, 2009
[43] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06021.html, September 30, 2009.

projects. County policy encourages preservation of natural riparian habitat along the Sacramento River as well as other watersheds, including Butte and Stony Creeks. Existing riparian vegetation should be protected and revegetation programs undertaken. Mitigation measures should result in no net loss of habitat productivity. The County works with DFG and USFWS, as well as conservation and preservation groups, to identify areas for restoration and enhancement.

The Glenn County General Plan suggests amending County Zoning Codes to include a Streamside Protection Zone, but the County has not addressed this recommendation. The County has recently applied for a Federal grant to fund preliminary watershed protection studies.

Mining and mineral resources are also addressed in the Glenn County General Plan. Mineral extraction is permitted, but is required to be compatible with surrounding land use and should not affect the environment. The use permit process decides when and where these activities can occur. The Extractive-Industrial zoning designation has been removed from areas containing natural riparian habitat and changed to agricultural or light industrial status; this is meant to provide greater protection to habitat areas previously subject to mining activities.[44]

3.3 Yolo County

3.3.1 Yolo County Background

As of the 2000 census, Yolo County had a population of 168,660. Excluding the conurbation of the University of California, Davis and the areas surrounding the City of Davis and the neighboring City of Sacramento; Yolo County remains a relatively rural agricultural region. This is evidenced by the multi-billion dollar California tomato industry, in and around Yolo County, dominating 90% of the tomato market in the United States. Yolo County is part of the Sacramento-Arden-Arcade-Roseville Metropolitan Statistical Area.

As of the census of 2000, there were 168,660 people, 59,375 households, and 37,465 families residing in Yolo County. In 2008, the population increased to 197,658.[45] Yolo County had 6.5% of the population aged under 5 years old, 22.8% under 18 years old, and 9.7% were 65 or more years old. The female population was 50.9%.[46]

3.3.2 Yolo County General Plan

The Yolo County General Plan recommends maintaining waterways and riverbank corridors as part of its open space preservation program because of high scenic values. The Plan includes maps which highlight these areas as significant. Other recommendations include protection and creation of wildlife habitat areas and the adoption of lists and maps of the distribution of natural features and other significant characteristics of the County's physical environment. The County's goal is to plan, encourage, and regulate natural resources in order to ensure long-term ecological benefits, and to prevent unnecessary disruptions to terrain, vegetation, and other resources.

[44] Glenn County General Plan, 1993.
[45] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06113.html, September 30, 2009
[46] US Census Bureau, http://quickfacts.census.gov/qfd/states/06/06113.html, September 30, 2009

All watershed areas are designated on County overlay maps for conservation purposes. Watershed areas are limited to the following activities: grazing; wild hay production; soil, water and wildlife conservation; and non-intensive recreation. The County requires conditional use permits to ensure conservation of natural vegetation.

The Yolo County General Plan does not permit sand and gravel mining operations in areas along the Sacramento River or its tributaries.[47]

[47] Yolo County General Plan 1983.

4 *RECLAMATION DISTRICT 108*

4.1 Reclamation District 108 Background

Reclamation District 108 (RD 108) was established in 1870 and includes 74,000 acres. The District delivers water from the Sacramento River to nearly 48,000 acres of land within northern Yolo County and southern Colusa County as shown on the map at the end of this section. Reclamation District 108 is one of the first reclamation districts formed in California that is still in operation.[48]

One of the District's first projects was construction of the Tisdale Weir on the east side of the Sacramento River to provide relief from flooding to the levees on the west side of the Sacramento River. Early in its history Reclamation District 108 also addressed the impact of the Knights Landing Ridge (an area of high ground created by overflow silt deposits from Cache Creek) on drainage in the Colusa Basin. As a result of a court case, a cut through the Knights Landing Ridge was made to allow water to flow into the Yolo Bypass when flood waters accumulated against the Ridge in the lower Colusa Basin.[49]

A significant portion of Reclamation District 108 overlaps with the service area of the Knights Landing Ridge Drainage District (KLRDD) and the Sacramento River Westside Levee District (SRWLD) as shown on the map at the end of this report. RD 108 provides administration for these two districts. The primary levee that Reclamation District 108 is responsible for is the eastern levee along the Colusa Back Borrow Pit.[50]

Construction of the irrigation canals and pumping plants began in 1916, and shortly thereafter RD 108 became the first reclamation district in California to deliver irrigation water. The first irrigated crops were grains, mostly barley. RD 108's landowners and water users now grow a wide variety of crops, including rice, wheat, corn, safflower, tomatoes, beans, vine seeds, cotton, fruits and nuts.[51]

[48] Yolo County LAFCO, "Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts," Dudek & Associates, Inc. March 2005, page 56.
[49] Yolo County LAFCO, "Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts," Dudek & Associates, Inc. March 2005, page 56.
[50] Yolo County LAFCO, "Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts," Dudek & Associates, Inc. March 2005, page 56.
[51] Reclamation District 108:http://rd108.org/

RD 108 Wilkins Slough Pumping Plant

The Mission Statement for Reclamation District No. 108 is as follows:

> *Reclamation District No. 108 is a service-oriented organization providing water delivery, drainage, and flood control in an economical and environmentally sound manner, while preserving District Water Rights.*[52]

[52] Reclamation District 108:http://rd108.org/

4.2 RD 108 Government

4.2.1 RD 108 Board of Directors

There are five members on the Board of Reclamation District 108 as follows:

Director	Term Expires
Arnold Andreotti PO Box 298 Colusa CA 95932	12/02/2011
Mike Miller 366 State Highway 45 Knights Landing, CA 95645	12/04/13
Marty Stripling 41758 Co. Road 113 Knights Landing, CA 95645	12/02/2011
Frederick J. "Fritz" Durst 1769 Woodside Drive Woodland CA 95695	12/04/13
Jim Erdman 8661 Ceres Avenue Knights Landing, CA 9545	12/02/2011

Board meetings are held every 3rd Thursday of each month at 8:30 a.m. at the District Headquarters: 975 Wilson Bend Road, Grimes, California.[53] There is an annual Landowner and Water User Meeting held in February.[54]

4.2.2 RD 108 Contact Information

The contact information for Reclamation District 108 is as follows:

Lewis Bair, General Manager, Reclamation District 108
975 Wilson Bend Road, P.O. Box 50, Grimes, CA 95950
(530) 437-2221, (530) 437-2248 (FAX)

Website: www.rd108.org Email: lbair@rd108.org or mailto:rd108@rd108.org

53 Reclamation District 108, Email from Cathy Busch, Secretary, October 17, 2008.
54 Reclamation District 108, Minutes January 17, 2008.

4.2.3 RD 108 Personnel

There are 23 employees including the following:[55]

Lewis Bair, General Manager
Kathryn Chandler, Assistant Manager
Chad Navarrot, Superintendent
Cathy Busch, Executive Secretary
Beverly Walls, Bookkeeper
Kevin O'Brien, Attorney
Luis Andrade, System A Waterman, (530) 870-1100
Rafael Villa, System B Waterman, (530) 870-1101
Mike Ludovina, System C Waterman, (530) 870-1102
John Hetherington, System A & D Relief Waterman, (530) 870-1100 or (530) 870-1103

4.3 RD 108 Facilities

Water transfer operations are provided by the following facilities:

- Wilkins Slough Pumping Plant
- Rough & Ready Pumping Plant
- Emery Poundstone Pumping Plant
- North and South Steiner Pumping Plants
- El Dorado Pumping Plant

In 2009 Reclamation District 108 participated in the Drought Water Bank and made approximately 1,500 acre-feet of water available by pumping groundwater instead of diverting water from the Sacramento River.

The District participates in water transfers on a year-by-year basis. RD 108 has over the past 20 years worked diligently in developing water conservation and efficient water management programs in order to make beneficial use of its surface and groundwater supplies and maintain production of its agricultural lands. These conservation efforts have allowed RD 108 to participate in water use transfer programs.

There is an expanding interest by the water community in water transfer programs which would alleviate water shortages to agricultural, urban and environmental agencies and water users. It is RD 108 policy to consider the transfer of water that is not required to supply the needs of its landowners and water users when such water is available. First priority will be given to agricultural, environmental and urban water users north of the Delta.

Fish Screen Projects:

1) Wilkins Slough Positive Barrier Fish Screen

[55] Reclamation District 108, Minutes January 17, 2008.

The Wilkins Slough Fish Screen Sediment Removal Project was completed March 1999. The project is the result of nearly 8 years of planning, design, testing and construction. The objectives of the project was to minimize the impact of water diversions on winter-run Chinook salmon and meet current resource agency criteria for fish protection facilities. The fish screen project was the result of a cooperative effort involving the District and Federal and State resource agencies.

2) Emery Poundstone Combined Pumping Plant and Fish Screen Project

The District combined three of its river diversion pumping plants, Boyers Bend Pumping Plant, Howells Landing Pumping Plant and Tyndall Mound Pumping Plant into a single facility in order to minimize its impact on native fish species. The Poundstone Pumping Plantis a five-bay structure with fish screens made of stainless steel 1.75 mm slot openings. The project was completed in 2008.

4.4 RD 108 Shared Facilities

RD 108 is located within both the Knights Landing Ridge Drainage District and the Sacramento River Westside Levee District except for small parts of RD 108 which may overlap with only one of the other two districts.

RD 108 shares administrative facilities and staff with the Sacramento River Westside Levee District and the Knights Landing Ridge Drainage District which is located in Yolo County.[56] The two districts reimburse RD 108 for the services provided.

4.5 RD 108 Budget

The 2009 Budget for Reclamation District 108 as presented by the District is shown below in three sections:

[56] Yolo County LAFCO, "Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts," Dudek & Associates, Inc. March 2005, page 45.

RECLAMATION DISTRICT NO.108
2009 MAINTENANCE FUND BUDGET

	OPERATING INCOME	
402	SYSTEM FACILITIES RENTAL	1,157,625
404	SRWLD/SERVICES	128,000
406	KLRDD/SERVICES	40,000
410	TRACT 6 LEASES	1,598,386
432	MAINT. SERVICE-LANDOWNER	12,000
439	OUTSIDE DRAINAGE CHARGE	5,964
440	WATER TRANSFERS	1,512,000
448	VEHICLE & EQUIPMENT SALES	18,000
450	MISCELLANEOUS OPERATING	3,000
	NON-OPERATING INCOME	
492	MINERAL LEASES	400
493	EARNED INTEREST	27,660
494	OUTSIDE SALES (MATERIALS)	0
495	RESIDENCE USE FEES	3,590
496	MISCELLANEOUS NON-OPERATING	2,498
496A	TRANSFERS FROM RESERVE ACCOUNT	200,000
	PROJECT INCOME	
486A	LONG CRESTED WEIR	116,000
486B	CO-OP WATER MEASUREMENT	0
486C	SOLAR	3,450,000
486D	WATER RECYCLE MGMT - SCADA	50,000
486E	WATER RECYCLE EFFICIENCY PROJECT	0
487	COMBINE PUMP PLANT	200,000
	TOTAL INCOME:	**$8,525,123**

RECLAMATION DISTRICT NO.108
2009 MAINTENANCE FUND BUDGET
EXPENSES Part 1 of 2

	WATER SUPPLY	**221,200**	**2.7%**
506	CONTRACT RENEWAL	200,000	
601	PHASE 8 - BAY DELTA	21,200	
	WAGES & BENEFITS	**1,398,300**	**17.0%**
510	WAGES	966,000	
512	PAYROLL TAXES & BENEFITS	366,000	
513	WORKERS' COMPENSATION INSURANCE	58,000	
514	TRUSTEES FEES & EXPENSES	8,300	
	CONSULTING SERVICES	**139,200**	**1.7%**
520	LEGAL - GENERAL	45,000	
522	ENGINEERING - GENERAL	69,000	
524	ACCOUNTING	9,800	
526	FINANCIAL	2,400	
528	PUBLIC RELATIONS	3,000	
525	WDC CONSULTANT	10,000	
	ADMINISTRATION & SUPPLIES	**331,353**	**4.0%**
530	DISTRICT INSURANCE	57,586	
531	MISCELLANEOUS FEES	46,900	
532	MEMBERSHIPS	115,967	
534	OFFICE SUPPLIES & EXPENSES	27,000	
536	MEETINGS & CONFERENCES	15,000	
538	COMMUNICATION SERVICES	17,700	
540	HEADQUARTERS MAINTENANCE	36,000	
542	DISTRICT RESIDENCES	14,200	
543	DOMESTIC WELLS MAINTENANCE	1,000	

RECLAMATION DISTRICT NO.108
2009 MAINTENANCE FUND BUDGET
EXPENSES Part 2 of 2

	MAINTENANCE	**1,204,000**	**14.6%**
550	CONTRACT MAINTENANCE SERVICES	96,000	
551	TELEMETRY/SCADA	7,000	
552	POWER & ENERGY	181,500	
553	DEEP WELLS MAINTENANCE	0	
554	FUEL & LUBRICANTS	139,000	
555	EQUIPMENT LEASES	0	
556	SHOP TOOL & SUPPLIES	35,500	
557	EQUIPMENT/VEHICLE-MAINT/REPAIR	93,000	
560	PUMPING PLANT MAINTENANCE	294,000	
562	IRRIGATION SYSTEM MAINTENANCE	180,000	
563	DRAINAGE SYSTEM MAINTENANCE	150,000	
564	BACK LEVEE MAINTENANCE	28,000	
570	**TRACT 6 FARMS**	**188,000**	**2.3%**
580	**CAPITAL OUTLAY**	**115,000**	**1.4%**
581	**WATER TRANSFER**	**37,000**	**0.4%**
582	**MISCELLANEOUS OPERATING**	**38,000**	**0.5%**
594	**MISCELLANEOUS NON-OPERATING**	**10,500**	**0.1%**
599	**FISH BARRIER PROJECT-DISTRICT**	**15,000**	**0.2%**
	PROJECT EXPENSES		
586A	LONG CRESTED WEIR	175,000	**2.1%**
586B	CO-OP WATER MEASUREMENT	0	**0.0%**
586C	SOLAR	3,450,000	**41.9%**
586D	WATER RECYCLE MGMT - SCADA	65,000	**0.8%**
586E	WATER RECYCLE EFFICIENCY PROJECT	4,000	**0.0%**
586F	BOYER PIPELINE	675,000	
597	COMBINE PUMP PLANT - CONSULTANT	101,000	**1.2%**
598	COMBINE PUMP PLANT - CONTRACTORS	68,450	**0.8%**
	TOTAL EXPENSES	**$8,236,003**	**91.8%**

4.6 MSR for Reclamation District 108

4.6.1 Growth and Population Projection MSR Determinations for the RD 108 Area

1-1) Population growth is not expected within RD 108 because the area is used for farming and is zoned for agriculture.

4.6.2 Capacity and Infrastructure MSR Determinations for Reclamation District 108

2-1) The District has adequate infrastructure and works to maintain the facilities.

4.6.3 Financial Ability MSR Determinations for Reclamation District 108

3-1) The District should work to provide financial information such as the Budget and Audit Reports on the District's website.

4.6.4 Opportunities for Shared Facilities MSR Determinations for Reclamation District 108

4-1) The District shares administration with the Sacramento River Westside Levee District and the Knights Landing Ridge Drainage District.

4-2) The District participates in water transfers on a year by year basis with priority given to water supply needs with the Colusa Basin.

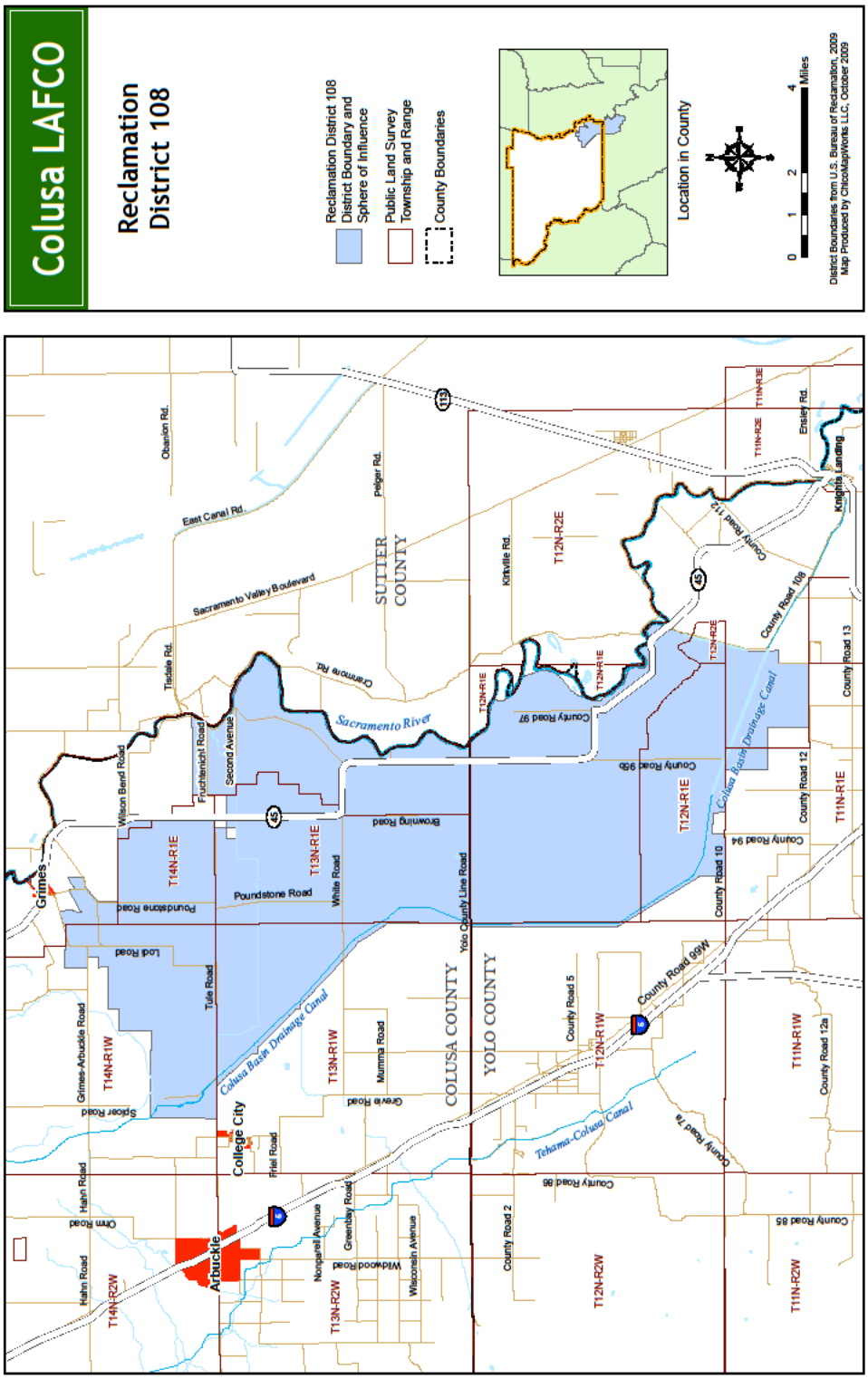
4-3) The District belongs to the Power and Water Resources Pooling Authority (PWRPA).

4.6.5 Government Structure and Accountability MSR Determinations for Reclamation District 108

5-1) The District has an excellent website to communicate with tax-payers, residents, and the public; however the website needs to be kept up to date.

5-2) The District should study the most efficient manner to provide administrative services.

5-3) The District adopts budgets and rate changes at hearings where the public is notified and invited. Information is placed in the local newspaper, when required.


Colusa LAFCO
Reclamation District 108
Reclamation District 108 District Boundary and Sphere of Influence
Public Land Survey Township and Range
County Boundaries
Location in County
0 1 2 4 Miles
District Boundaries from U.S. Bureau of Reclamation, 2009
Map Produced by ChicoMapWorks LLC, October 2009
SUTTER COUNTY
COLUSA COUNTY
YOLO COUNTY
Sacramento River
Colusa Basin Drainage Canal
Tehama-Colusa Canal
Grimes
College City
Arbuckle
Knights Landing
Poundstone Road
Sacramento Valley Boulevard
East Canal Rd.
Obanion Rd.
Pelger Rd.
Kirkville Rd.
Ensley Rd.
Tisdale Rd.
Cranmore Rd.
Fruchtenicht Road
Second Avenue
Wilson Bend Road
Bromling Road
White Road
Yolo County Line Road
Lodi Road
Tule Road
Grimes-Arbuckle Road
Spicer Road
Grevis Road
Mumma Road
Ariel Road
Hahn Road
Orm Road
Greenleaf Road
Nongaard Avenue
Wisconsin Avenue
Windwood Road
County Road 99W
County Road 109
County Road 112
County Road 97
County Road 95B
County Road 10
County Road 5
County Road 2
County Road 12
County Road 13
County Road 94
County Road 12a
County Road 78
County Road 85
County Road 86
T14N-R1W
T14N-R2W
T13N-R1E
T13N-R1W
T13N-R2W
T12N-R1E
T12N-R1W
T12N-R2E
T12N-R2W
T11N-R1E
T11N-R1W
T11N-R2E
T11N-R2W

5 RECLAMATION DISTRICT 479

5.1 Reclamation District 479 Background

5.1.1 Reclamation District 479 History

Reclamation District 479 is located south of Colusa and north of RD 108. The 5,951.97 acre District is almost completely within the Sacramento River West Side Levee District. Reclamation District 479 was formed in 1885.[57] Reclamation District 479 covers the southern part of the Mormon Basin, a part of the much larger Colusa Basin. The chief characteristic of these basins is that their edges or rims have been built up by alluvial deposits during flood periods so that the edges are higher than the central portion of the area.[58]

A history of Reclamation District 479 is provided by the Colusa County Auditor's Office as follows:[59]

> 1872-1909: The District did no reclamation work. The District depended on individual landowners to protect their lands.
>
> 1909: A plan was adopted to construct a levee along Sycamore Slough and Dry Slough to provide flood protection for all land in the District.
>
> 1915: A plan was adopted for the repair of breaks in the original levee system and its extension along Sycamore Slough. A plan was also adopted for a drainage system for the reclamation of District lands to remove rain and seepage water.
>
> 1935-1938: A substantial portion of the District was inundated with rain and seepage water which created a considerable expense to dewater the District.
>
> 1940-1942: A plan for drainage was prepared and adopted in 1942. Due to World War II rationing, only three small pumps could be installed. These pumps had only half the capacity called for by the plan and were adequate only for summer drainage.
>
> 1942-1943: The District constructed six miles of drainage ditches and a small pumping plant. The ditch system consists of a Main Canal extending about 8,000 feet east of Sycamore Slough and located immediately north of the Grimes-Arbuckle Highway. From the east end of the Main Canal, Lateral A extends north for two miles. About one mile below the end of Lateral A, it is joined by Lateral B which extends west about 6,600 feet to cross the Sycamore Slough

[57] Colusa LAFCO, Reclamation District 479 Sphere of Influence Study, 1984.
[58] Colusa County Auditor, Annual Audit for Calendar year Ended December 31, 2008, Reclamation District 479, April 7, 2009.
[59] Colusa County Auditor, Annual Audit for Calendar year Ended December 31, 2008, Reclamation District 479, April 7, 2009.

Road. From the east end of the Main Canal, Lateral C extends southerly for about 4,000 feet. Necessary culverts were installed in each ditch. Only a small length of ditch has been added since the original construction was done.

The pumping plant is located just east of the old Sycamore Slough Levee and just north of the Grimes-Arbuckle Highway. It consists of a concrete sump, with provision for four vertical, propeller-type pumps.

1958: The US Army Corps of Engineers rebuilt the Sycamore Slough Levee along the east edge of the 2047 Main Drain, which eliminated a portion of the heavy seepage from the 2047 Main Drain.

1993: A Groundwater Management Plan was adopted in 1993 to develop a groundwater management program for the groundwater resources within the District to benefit the landowners within the District.

Reclamation District 479 is primarily concerned with drain water and makes sure that all of the drain water enters the RD 2047 Canal. A map of RD 479 is shown at the end of this section.

5.1.2 Reclamation District 479 Board of Directors

There are three members of the RD 479 board of directors as follows:[60]

Director	Term Expires
Charles Marsh PO Box 725, Arbuckle, CA 95912	12/06/2013
Jim Wallace (appointed)	12/02/2011
Thomas Ingraham	12/02/2011

The Board meets two times per year in the spring and in September, and as often as needed at other times. The meetings are held at the Strain Ranch Office on West Hahn Road near Arbuckle at 10 am.[61]

5.1.3 Reclamation District 479 Contact Information

The contact information for Reclamation District 479 is as follows:

Shelley Miller, Secretary Reclamation District 479
730 Harris Street, Colusa, CA 95932

(530) 458-4849 (Wednesdays) Email: colusadrainmwc@rocketmail.com

[60] Colusa County Clerk, 530-458-0500, August 10, 2010.
[61] Reclamation District 479, Shelley Miller, Secretary, colusadrainmwc@rocketmail.com, September 28, 2009.

5.1.4 RD 479 Finances

The Draft Budget for Reclamation District 479 and the cash balance history (as presented by the District) are shown on the following pages. The District has never had a budget prior to 2009 and the budget process has not yet been completed. The District will approve a Budget on November 10, 2008.[62]

RECLAMATION DISTRICT 479 2010 BUDGET OPTIONS

	2010 Proposal A	**2010** Proposal B	**2010** Proposal C	**Average**	**2009** 10/7/ 09	**2008**	**2007**
Income:							
Assessments	101,240.00	90,800.00	85,840.00		91,219.96	51,769.98	28,689.04
						6,900.00	22,300.63
Interest	120.00	120.00	120.00		16.77	59.85	184.10
Finance Charges	100.00	100.00	100.00				
Uncategorized					1,635.00		
Total Income	**101,460.00**	**91,020.00**	**86,060.00**		**92,871.73**	**58,729.83**	**51,173.77**
Expenses:							
Accounting	2,500.00	2,500.00	2,500.00	2,025.00	2,925.00	1,525.00	1,800.00
Advertising				47.19			44.41
Bank Charge				20.00		30.00	
Dues & Fees	1,800.00	1,800.00	1,800.00	2,391.00	1,724.00	1,634.00	1,301.00
							1,143.00
Fuel	30,000.00	30,000.00	30,000.00	22,064.10	3,404.31	30,968.53	5,805.73
Legal	500.00	500.00	500.00	900.00		1,054.00	
Maint. & Repair							
Ditch	2,000.00	2,000.00	2,000.00	2,930.00			
Pumps	3,000.00	3,000.00	3,000.00	15,205.75			
Office Supplies	100.00	100.00	100.00	104.46	232.63	67.33	80.55
Postage	150.00	150.00	150.00	70.67	148.00	83.00	41.00
Rent ~ office space	1,200.00	1,200.00	1,200.00	600.00	600.00		
Utilities	27,000.00	27,000.00	27,000.00	16,010.15	18,631.67	23,655.90	14,847.26
Total Expenses	**68,250.00**	**68,250.00**	**68,250.00**	**48,272.52**	**27,665.61**	**59,017.76**	**25,062.95**
Net Profit or Loss	33,210.00	22,770.00	17,810.00	10,558.48	65,206.12	(287.93)	26,110.82
Drainage Charges:							
Flat Rate Assessment	14.00	14.00	12.00				

[62] Reclamation District 479, Shelley Miller, Secretary, colusadrainmwc@rocketmail.com, September 28, 2009.

Rice	6.00	4.00	6.00	Rice	18.00	15.00	13.00
Row Crop	5.00	3.00	3.00	Row Crop	15.00	12.00	10.00
Wheat or 2 Irrigations	3.00	1.00	-	Wheat/Bare	12.00	9.00	7.00
Decomp & Duck	6.00	4.00	4.00	Winter/Flood	16.00	11.00	11.00
Number of Acres:							
Assessment	5,220.00	5,220.00	5,220.00				
Rice	3,100.00	3,100.00	3,100.00	2,971.87	3,401.09	2,394.74	3,182.46
Row Crop	1,000.00	1,000.00	1,000.00	936.35	1,227.70	603.24	634.65
Wheat or 2 Irrigations	720.00	720.00	720.00	721.26	612.87	1,051.07	501.27
Duck & Decomp (Winter Flood)	400.00	400.00	400.00	265.14	264.40	540.67	123.38
Total Acres 5,951.97 acres	5,220.00 in RD479	5,220.00	5,220.00	4,894.61	5,506.06	4,589.72	4,441.76

RECLAMATION DISTRICT 479 CASH BALANCE						
	2009	**2008**	**2007**	**2006**	**2005**	**2004**
	15-Sep	**12-Dec**	**14-Dec**	**14-Dec**	**14-Dec**	**14-Dec**
CURRENT ASSETS:						
Wells Fargo Checking	$16,022.83	$1,342.45	$824.51	$1,980.01	$3,296.33	$1,081.55
Wells Fargo Money Market Account	$56,587.69	$37,935.92	$39,150.09	$11,808.63	$20,884.42	$17,802.90
Accounts Receivable	$0.80					
TOTAL CURRENT ASSETS:	**$72,611.32**	**$39,278.37**	**$39,974.60**	**$13,788.64**	**$24,180.75**	**$18,884.45**
CURRENT LIABILITIES:						
Accounts Payable	$1,134.24					
TOTAL CURRENT LIABILITIES:	**$1,134.24**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
NET CURRENT POSITION:	**$71,477.08**	**$39,278.37**	**$39,974.60**	**$13,788.64**	**$24,180.75**	**$18,884.45**

5.2 MSR for Reclamation District 479

5.2.1 Growth and Population Projection MSR Determinations for the Reclamation District 479 Area

1-1) Land within the RD 497 area is zoned for agriculture and little or no population growth is expected.

5.2.2 Capacity and Infrastructure MSR Determinations for Reclamation District 479

2-1) The District has minimal infrastructure and relies on the RD 2047 drain to convey drainage water to the Sacramento River.

5.2.3 Financial Ability MSR Determinations for Reclamation District 479

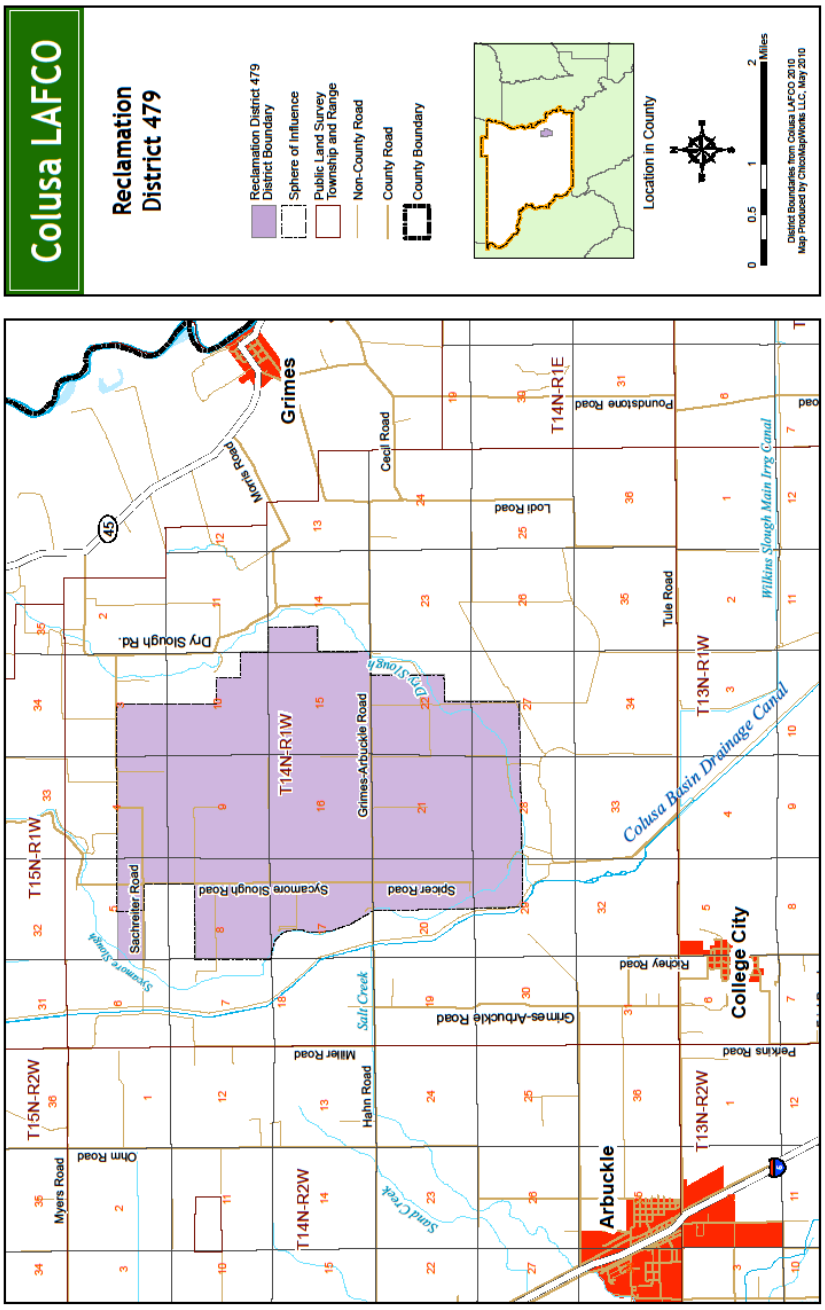
3-1) The District appears to have adequate finances but the financial accounting process needs to be improved.

5.2.4 Opportunities for Shared Facilities MSR Determinations for Reclamation District 479

4-1) The District should explore opportunities to share administration with a similar district.

5.2.5 Government Structure and Accountability MSR Determinations for Reclamation District 479

5-1) The District should establish a website to provide information to the landowners and the public.


Colusa LAFCO
Reclamation District 479
Reclamation District 479 District Boundary
Sphere of Influence
Public Land Survey Township and Range
Non-County Road
County Road
County Boundary
Location in County
0 0.5 1 2 Miles
District Boundaries from Colusa LAFCO 2010
Map Produced by ChicoMapWorks LLC, May 2010
Grimes
Arbuckle
College City
Morris Road
Cecil Road
Pounstone Road
Lodi Road
Tule Road
Wilkins Slough Main Irrg Canal
Dry Slough Rd.
Colusa Basin Drainage Canal
T14N-R1E
T13N-R1W
T14N-R1W
T15N-R1W
Grimes-Arbuckle Road
Sycamore Slough Road
Spicer Road
Sachreiter Road
Sycamore Slough
Salt Creek
Richey Road
Perkins Road
T13N-R2W
T14N-R2W
T15N-R2W
Miller Road
Hahn Road
Grimes-Arbuckle Road
Ohm Road
Myers Road
Sand Creek
45

6 RECLAMATION DISTRICT 1004

6.1 Reclamation District 1004 Background

6.1.1 RD 1004 Description

Reclamation District 1004 operates irrigation conveyances within its 23,000-acre jurisdiction primarily in Colusa County, with some land Glenn County. The District, formed in 1912,[63] is located east of the Sacramento River with its eastern boundary formed by Butte Creek along the Colusa-Sutter County Line. A map of the District is shown at the end of this section. Land in the District is farmed, primarily in rice.[64]

The District provides growers with water that is drawn from the Sacramento River at the Princeton pumping plant to the northwest of the District. Once irrigation water is used, it drains from fields within the District generally moving to the south and/or east towards Butte Creek.

Water is blocked from draining into Butte Creek by weirs and risers and is recirculated through the District for reuse. Butte Creek flows into the Sacramento River at the southern border of the District approximately 5.5 miles downstream from the City of Colusa.

In addition to agricultural water delivery, the District provides water for habitat maintenance to the National Audubon Society (NAS) and numerous other landowners that have established habitat as part of Natural Resources Conservation Service (NRCS) cost-share programs. Ducks Unlimited (DU) and the California Waterfowl Association (CWA) have and continue to fund several District facilities, including habitat areas consisting of permanent ponds, seasonal wetlands, millet fields, and uplands that provide wintering habitat and resting areas for ducks, geese and shorebirds. The wetlands produce waterfowl food and the upland areas provide habitat for geese, upland birds, and other wildlife species. Habitat land area and water requirements vary from year to year.[65]

Typical values are shown below:

Summary of Established Habitat Land and Water Requirements Reclamation District 1004		
Name	**Size (Acres)**	**Water Requirement (Acre Feet)**
Private Land Owners	2,880	8,000
National Audubon Society	480	1,335
TOTAL	**3,360**	**9,335**

[63] Colusa LAFCO, RD 1004 Sphere of Influence Study, 1984.
[64] Reclamation District 1004, "Use of Copper and Acrolein to Control Aquatic Weeds in Water Conveyances, CEQA Mitigated Negative Declaration," August 11, 2004, Prepared by Blankinship & Associates, Inc., 2940 Spafford St. Ste 110, Davis Ca 95616, Phone: 530.757.0941, Fax: 530.757.0940, www.envtox.com.
[65] Reclamation District 1004, "Use of Copper and Acrolein to Control Aquatic Weeds in Water Conveyances, CEQA Mitigated Negative Declaration," August 11, 2004, Prepared by Blankinship & Associates, Inc., 2940 Spafford St. Ste 110, Davis Ca 95616, Phone: 530.757.0941, Fax: 530.757.0940, www.envtox.com.

The District employs a staff of water operators who release water from District conveyances into growers' fields through gates and valves. The water operators ensure that enough water is flowing in the laterals to meet demand. Gates and valves in the delivery system are owned, operated and maintained by the landowners. Each field within the District and service area has a metered floodgate to determine water usage.[66]

6.1.2 RD 1004 Drumheller Slough Project

The mouth of Drumheller Slough debouches to Butte Creek approximately 1 mile south of Five Points, at the end of Putnam Road, in Colusa County. The objective of the Drumheller Slough Project is to improve adult salmonid migration into Butte Creek.

The Drumheller Slough outfall structure was constructed by RD 1004 to provide a barrier for preventing migratory adult fish from straying into Drumheller Slough. The structure consists of a dam across the mouth of Drumheller Slough just upstream of the confluence with Butte Creek.[67] The original structure consisted of an earthen concrete-reinforced weir, through which was inserted an 84 inch culvert with an upstream adjustable flashboard riser.

Adult fall-, late-fall, and spring-run salmon and steelhead are drawn into Drumheller Slough under various flow conditions. Fish entering Drumheller Slough generally are not able to exit, or are delayed in finding their way back into Butte Creek.

The barrier was previously installed by Reclamation District 1004; however, high flows diminished the capacity of the barrier to exclude salmon and steelhead. The structure will be rebuilt with increased capacity to withstand higher flows and allow a wider range of adjustment. Tracy Mitigation funding ($30,000) for design and permitting has been approved and RD 1004 has indicated that it will build the structure. Upgrading the structure was planned to eliminate diversion and stranding of Butte Creek adult fall-, late-fall-, and spring-run salmon and steelhead under controlled flow conditions.

The structure was initially constructed as an earthen berm with sacked concrete headwalls on the upstream and downstream faces. A 72-inch corrugated metal pipe with a stoplog riser on the upstream end was used to pass flow and create the differential required to act as a fish barrier. High flows in the winter of 1997-1998 washed out the western half of the facility.[68]

The Drumheller Slough Project involved replacing the existing facility with a more stable concrete overflow structure. The new structure has openings configured to the channel shape and a low overflow weir to minimize obstruction to winter drainage flows. To allow for closure of the openings to create the required barrier, the openings are fitted with stoplog slots. Stoplogs or bulkheads are manually installed and removed as required.

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[66] Reclamation District 1004, "Use of Copper and Acrolein to Control Aquatic Weeds in Water Conveyances, CEQA Mitigated Negative Declaration," August 11, 2004, Prepared by Blankinship & Associates, Inc., 2940 Spafford St. Ste 110, Davis Ca 95616, Phone: 530.757.0941, Fax: 530.757.0940, www.envtox.com.

[67] RD 1004, Draft Mitigated Negative Declaration/Finding of No Significant Impact, Drumheller Slough and White Mallard Outfall Project, State Lead Agency: Reclamation District No. 1004, June 26, 2000, page 2-1.

[68] RD 1004, Draft Mitigated Negative Declaration/Finding of No Significant Impact, Drumheller Slough and White Mallard Outfall Project, State Lead Agency: Reclamation District No. 1004, June 26, 2000, page 2-1.

The channel in the area of the facility is protected from erosion using riprap revetment. Riprap extends approximately 10 feet upstream and 20 feet downstream of the structure.[69]

6.1.3 Reclamation District 1004 Contact Information

The contact information for RD 1004 is as follows:

Reclamation District 1004
134 5th Street, Colusa, CA 95932

Manager: Cameron "Kelly" Boyd (530) 458-7459, (530) 458-4267 (FAX), or 682-0050
Email: rd1004@colusanet.com

6.1.4 Reclamation District 1004 Board of Directors

There are five members of the District board of directors as follows:[70]

Director	Term Expires
Jack Baber 736 11th Street, Colusa, CA 95932 (530) 458-4227	12/06/2013
Frank Rogers 2214 State Highway 20, Colusa, CA 95932 (530) 458-5488/458-8616	12/02/2011
Roger Borell 2032 Blevins Road, Yuba City, Ca 95993	12/02/2011
Jeff Moresco 42 Walnut Tree Court, Colusa CA 95932	12/06/2013
Ed Hulbert 2200 Wescott Road, Colusa CA 95932 (530) 458-4358	12/06/2013

The Board of Directors meets the 2nd Wednesday of each month at 1:30 p.m. at the District Office, 134 5th Street, Colusa, CA 95932. The District has four paid employees.[71]

6.1.5 RD 1004 Contract with USBR

Reclamation District 1004 has a contract with The United States to divert water from the Sacramento River.[72]

[69] RD 1004, Draft Mitigated Negative Declaration/Finding of No Significant Impact Drumheller Slough and White Mallard Outfall Project, State Lead Agency: Reclamation District No. 1004, June 26, 2000, page 2-4.
[70] Colusa County Clerk, 530-458-0500, August 10, 2010.
[71] Reclamation District 1004, RD1004@frontiernet.net, September 29, 2009.

Total CVP Water Purchased: 10,772 acre feet
Total Amount Paid to the Bureau of Reclamation: $32,274[73]

The District reports the following fees paid to the US Bureau of Reclamation:[74]

Administration and Benefit: $5.17 per acre foot (billed in January of each year).
Operations fee: $10.36 per acre foot (billed in January of each year).
Water fee: $9.97 per acre foot.

6.1.6 RD 1004 Budget

The 2009 Budget for RD 1004 with income and expenses is shown below and on the following page. The income is from water sales. The expenses are for maintenance of the office, the shop on the Colusa-Gridley Highway near Colusa, the canals, levees, and pumps.[75]

6.1.7 RD 1004 Maintenance Projects

The three year capital improvement plan is shown on the three pages following the Budget.[76] The District has to maintain the facilities to provide for drainage and irrigation water within the District.

Reclamation District 1004

	2009 Proposed Budget	**2008 Year End Projection**	**2008 Actual Adopted Budget**
INCOME			
Custom Work		$2,538	
Water Sales - Summer	$757,774	$757,989	$710,600
Water Sales - Winter	$339,004	$279,601	$317,900
Admin/Operations Chg.	$286,119	$227,988	$222,835
Material Purchased - Landowners		$1,037	
Gas Lease		$11,536	
Land Lease Income	$150,000	$150,000	$150,000
Interest Income	$39,992	$30,856	$40,000
Misc. Income		$1,839	
R.C./B.C.F. River Rest. Fees	$35,127	$35,158	$35,158
Gain/Loss on sale of Assets			
Fines		$1,500	
TOTAL INCOME RD 1004	**$1,608,016**	**$1,500,043**	**$1,476,493**

[72] US Bureau of Reclamation, http://www.usbr.gov/mp/cvpia/3404c/srsc/exhibits/reclamation/exh01_rec_spec_rd-1004_03-11-03_dft.pdf, September 5, 2009.
[73] http://archive.ewg.org/reports/Watersubsidies/subsidies_wd.php?wd=RECLAMATION+DISTRICT, September 5, 2009.
[74] Reclamation District 1004, RD1004@frontiernet.net, September 29, 2009.
[75] Reclamation District 1004, RD1004@frontiernet.net, September 29, 2009
[76] Reclamation District 1004, RD1004@frontiernet.net, September 29, 2009

Reclamation District 1004	2009 PROPOSED BUDGET	2008 YEAR END ACTUAL PROJECTION	2008 ADOPTED BUDGET
OPERATING EXPENSES			
Water Purchases	$ 244,875	$ 274,662	$ 245,350
Restoration Fund	102,713	86,482	100,125
Wages- Irrigation	146,076	136,393	134,100
Wages - Administrative	42,312	44,939	40,884
O.T. Wages - Irrigation	1,600	1,226	2,700
Payroll Tax Expense	18,000	14,680	14,000
Interest Expense	-	-	-
Retirement Benefits	7,428	5,338	5,400
Health/Dental Insurance	57,600	57,416	57,168
Liability/Property Ins.	13,500	11,285	11,644
State Compensation Ins.	6,100	6,878	5,000
Computer/Technical Service	1,800	820	700
Legal Fees	48,000	23,192	42,000
Engineering Fees	10,080	5,117	10,080
Other Prof. Fees	8,700	8,990	8,700
Janitorial	2,400	2,400	2,400
Office Supply/Expense	3,975	3,922	3,975
Postage	1,083	1,039	1,068
Utilities - Office	3,625	3,013	3,625
Utilities - Shop	5,640	5,795	4,050
Communications	6,000	5,136	6,600
Office Phone/Fax Expense	5,400	5,212	5,400
Office Rent Expense	9,120	9,120	9,120
Directors Fees	8,500	7,400	6,500
Administrative Expense	2,400	2,033	2,400
Safety & Hazard	4,825	4,659	4,825
Dues & Subscriptions	30,440	27,686	29,620
Taxes & Licenses	22,900	23,327	21,400
Travel & Mileage	600	-	600
Pumping - P.G.&E.	300,000	290,841	275,000
Pump Repair	7,500	20,308	5,000
Pump Maintenance	10,500	7,458	8,400
Pump Electrical Repair	6,000	-	6,000
Pumping Costs	-	-	-
Meter Repair & Maint.	14,000	13,442	14,000
Princeton Pump Facility Repair/Maint.	60,000	7,510	60,000
Canal Maintenance & Excavation	35,000	27,766	23,000
Aquatic Weed Control	55,000	57,724	50,000
Building and Grounds Repair	-	1,221	-
Equipment Rental	6,000	176	6,000
Vehicle Repair/Maintenance	4,000	3,923	4,800

Equipment Repair/Maint.	8,000	7,052	7,200
Fuel & Oil	25,000	28,061	25,000
Shop Supplies/Materials	15,000	7,067	6,000
Depreciation Expense	252,000	252,000	180,684
Butte Creek Bifurcation Op. & Maint.	1,000	10	3,000
Materials Purchased - Landowner	-	-	-
Miscellaneous Expense	2,400	-	1,800
Operating Lease	-	-	-
Levee Maintenance	31,000	9,509	12,500
White Mallard Maintenance	9,924	7,507	7,000
TOTAL OPERATING EXPENSES	**$1,658,016**	**$1,519,736**	**$1,474,818**
OTHER INCOME (EXPENSES)			
Net Cash Transfer from Operating Funds	50,000		
Gain (Loss) on Sale of Equip.	-	-	-
TOTAL OTHER INCOME (EXPENSES)	**$ 50,000.00**	**-**	**-**
NET INCOME - FUND ONE	-	$ (19,693)	$ 1,675

RECLAMATION DISTRICT 1004, 2009-2011 MAINTENANCE PLAN

ITEM AREA	**ACTION TAKEN**	**ESTIMATED COST**
2009 CANAL MAINTENANCE		
EAST LEVEE DRAIN	CLEAN 1 MILE	$10,000
DISTRICT DRAIN/N. CALIF. LEVEE	CLEAN 1 MILE	15,000
WEST BORROW PIT	CLEAN 1 MILE	10,000
	TOTAL CANAL MAINT. 2009	**$35,000**
2009 PUMP REPAIR		
PUMP # 7 AT POLE LINE	SOFT START/AUTO DRIP	$15,000
	TOTAL PUMP REPAIR 2009	**$15,000**
2009 CAPITAL IMPROVEMENTS		
PUMP #21	PUMPING STRUCTURE	$ 5,500
VARIOUS LOCATIONS	CONCRETE RISERS	3,500
DRUMHELLER/COUNTY LINE RD	NEW PIPE	8,500
SOUTH DISTRICT DRAIN	WEIR/DRAIN PIPE	4,500
PUMP # 7 AND #13	TWO MACE METERS	7,000
DISTRICT PROP. SEPTIC TANK	SHOP LEACH LINE	6,000
	TOTAL CAPITAL IMPROVES 2009	**$35,000**
2009 LEVEE MAINTENANCE		
MORGAN LEVEE	GRAVEL/ROAD BASE	$ 12,500
CALIF. LEVEE	SPOT GRAVEL	2,500
VARIOUS LOCATIONS	ROCK - EROSION CONTROL	3,500
ALL LEVEES	GRADER WORK	8,000
ALL LEVEES	TRASH/VINE REMOVAL	4,500

RECLAMATION DISTRICT 1004	**TOTAL COMBINED COST 2009**	**$116,000**
2010 CANAL MAINTENANCE		
Y DITCH	CLEAN 1 MILE	$10,000
BOAT CANAL	CLEAN 1 MILE	12,500
	TOTAL CANAL MAINT. 2010	**$22,500**
2010 PUMP REPAIR		
PUMP # 13	SOFT START/AUTO DRIP	$15,000
	TOTAL PUMP REPAIR 2010	**$15,000**
2010 CAPITAL IMPROVEMENTS		
VARIOUS LOCATIONS	CONCRETE RISERS	$ 3,500
SOUTH MAIN CANAL	NEW PIPE UNDER HWY	25,000
AVIS CANAL	SECONDARY WALL CONSTRUCTION	38,000
PUMP #14 AND #21	TWO MACE METERS	7,000
	TOTAL CAPITAL IMPROVES 2010	**$73,500**
2010 LEVEE MAINTENANCE		
MORGAN LEVEE	GRAVEL/ROAD BASE	$ 12,500
CALIFORNIA LEVEE	SPOT GRAVEL	2,500
VARIOUS LEVEE BANKS	TREE/BERRY REMOVAL	4,500
	TOTAL LEVEE MAINT. 2010	**19,500**
RECLAMATION DISTRICT 1004	**TOTAL COMBINED COST 2010**	**$130,500**
2011 CANAL MAINTENANCE		
AVIS CHANNEL	CLEAN ONE MILE	$ 18,000
DRUMHELLER	CLEAN ONE MILE	$ 18,000
	TOTAL CANAL MAINT. 2011	**$ 36,000**
2011 PUMP REPAIR		
BEHRING PUMPS	REDESIGN DISCHARGE PIPES	$ 20,000
	TOTAL PUMP REPAIR 2011	**$ 20,000**
2011 CAPITAL IMPROVEMENTS		
BROOKS WALKER	NEW SUMP INSTALLATION	$ 42,000
(PUMPS #10,11,12), PUMP #22	TWO MACE METERS	11,000
	TOTAL CAPITAL IMPROVES 2011	**$ 53,000**
2011 LEVEE MAINTENANCE		
MORGAN LEVEE	GRAVEL ROAD BASE	$ 12,500
CAPITAL LEVEE	SPOT GRAVEL	2,500
VARIOUS LEVEES	GRADER WORK	8,000
	TOTAL LEVEE MAINTENANCE 2011	**$ 23,000**
RECLAMATION DISTRICT 1004	**Combined Total 2011**	**$132,000**

RECLAMATION DISTRICT 1004
2009-2011 FACILITIES PLAN
SUMMARY SHEET

	2009	2010	2011
CANAL MAINTENANCE	$ 35,000.00	$ 22,500.00	$ 36,000.00
PUMP REPAIR	15,000.00	15,000.00	20,000.00
CAPITAL IMPROVEMENT	35,000.00	73,500.00	53,000.00

LEVEE MAINTENANCE	31,000.00	19,500.00	23,000.00
TOTAL	**$116,000.00**	**$130,500.00**	**$132,000.00**

6.2 MSR for Reclamation District 1004

6.2.1 Growth and Population Projection MSR Determinations for the RD 1004 Area

1-1) Population growth will be minimal within the Reclamation District 1004.

1-2) Land within Reclamation District 1004 is zoned for agriculture.

6.2.2 Capacity and Infrastructure MSR Determinations for Reclamation District 1004

2-1) Infrastructure for Reclamation District 1004 has been improved with the Drumheller Slough project.

2-2) The District has a three-year plan to maintain and improve the infrastructure.

6.2.3 Financial Ability MSR Determinations for Reclamation District 1004

3-1) Reclamation District 1004 maintains accurate financial records and budgets.

6.2.4 Opportunities for Shared Facilities MSR Determinations for Reclamation District 1004

4-1) The District maintains a relationship with the Bureau of Reclamation.

4-2) The District maintains a relationship with the National Audubon Society and Ducks Unlimited.

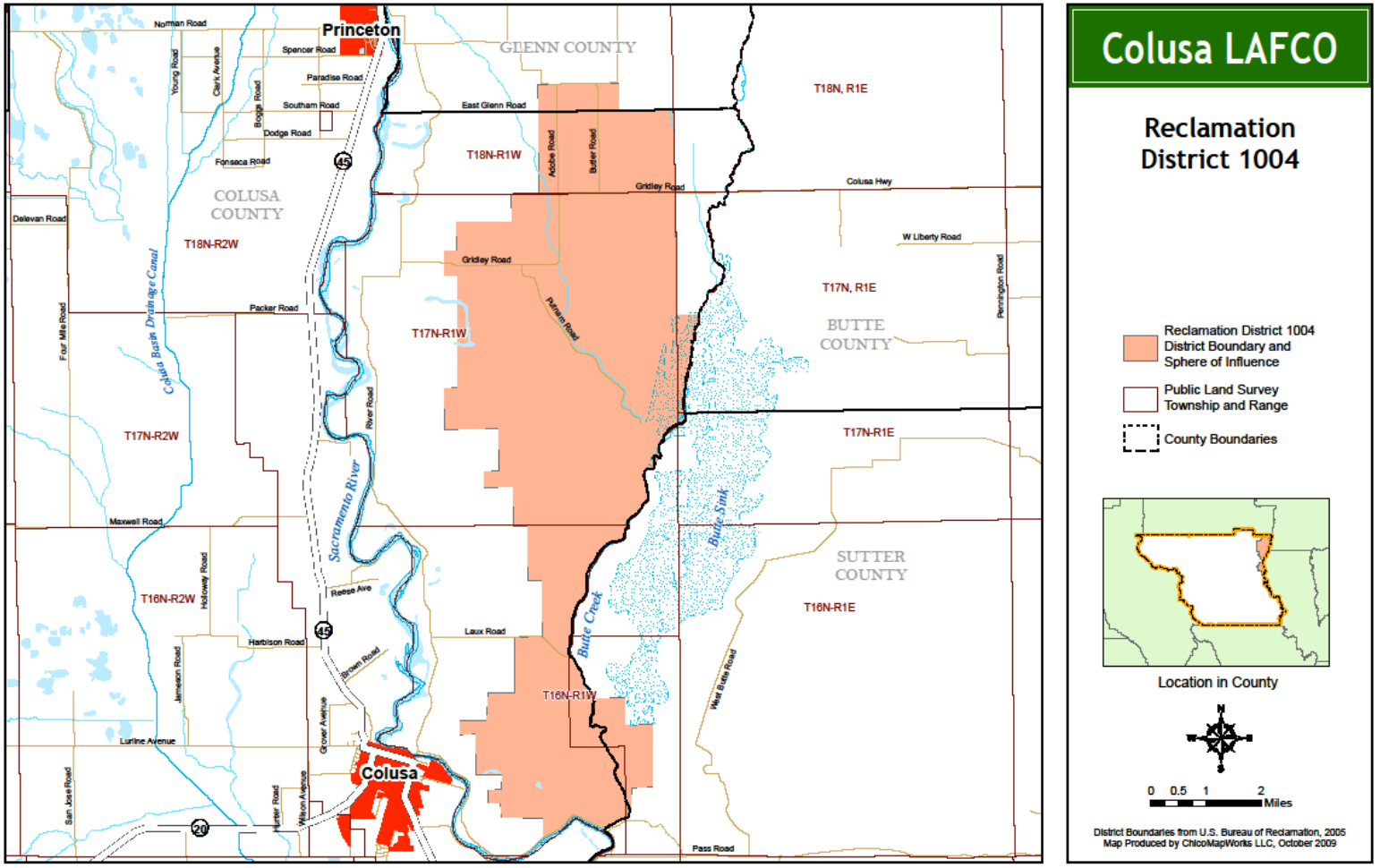
4-3) The District could explore sharing of equipment, facilities, and administrative functions with other Reclamation Districts in the area.

6.2.5 Government Structure and Accountability MSR Determinations for Reclamation District 1004

5-1) The District has regular Board meetings with printed agendas.

5-2) The District should maintain a website to keep the landowners in the District and members of the public informed about the District.

Adopted Municipal Service Review
Reclamation and Levee Districts
Colusa LAFCO Sept 2, 2010
Resolution 2010-0008



Colusa LAFCO

Reclamation District 1004

Reclamation District 1004 District Boundary and Sphere of Influence

Public Land Survey Township and Range

County Boundaries

Location in County

0 0.5 1 2 Miles

District Boundaries from U.S. Bureau of Reclamation, 2005
Map Produced by ChicoMapWorks LLC, October 2009

7 RECLAMATION DISTRICT 2047

7.1 Reclamation District 2047 Background

7.1.1 Reclamation District 2047 Overview

Reclamation District 2047 was formed in 1919. This District constructed the Colusa Basin Drain to deal with local flooding in the Colusa Basin. The Drain was originally conceived to operate as a bypass similar to the Sutter and Yolo Bypasses, but now the Colusa Basin Drain conveys both summer agricultural drainage water (primarily from rice fields) and winter flows to the Knights Landing outfall gates on the Sacramento River in Yolo County.[77]

The District is approximately 30 miles in length, with an average width of 11.5 miles and covers an area of nearly 230,000 acres.[78] A map of the District is shown at the end of this section.

7.1.2 Reclamation District 2047 History

Reclamation District 2047 prepared a history of the District which is summarized below in four sections:

1. Early History of RD 2047

As of 1905, no well-defined channel existed in the Colusa Basin. The District's plan, designed by District Engineer Charles de St. Maurice, was to construct a channel of varying width along existing natural drains or newly constructed channels from the northern limit of the District to a point at the northern end of Reclamation District 108's back levee borrow pit, north of College City.

Reclamation District 2047 was officially formed on December 16, 1919 for the purpose of developing adequate drainage facilities to alleviate flooding due to overflow of irrigation waters in the Upper Colusa Basin. In 1920 200,000 acres were under irrigation, and approximately 100,000 acres were planted to rice.

2. Construction of RD 2047 Drains

The Reclamation District 108 borrow pit was improved so it could serve as the main drain, taking water south approximately twenty miles to the pit's southern end. The drain would then empty into Reclamation District 787's borrow pit for a distance of five miles, terminating at the Sacramento River near the town of Knights Landing. A drainage easement was acquired along the north borrow pit of Reclamation District 787's levee to conduct drainage water to a proposed pumping plant at El Dorado Bend.

[77] "Draft Sacramento Valley Integrated Regional Water Management Plan," July 12, 2005, page 27.
[78] Reclamation District 2047, "Brief History and Responsibilities," May 31, 1996, page 1.

Various laterals were also constructed to drain lands along the main channel unable to drain directly into it. These extended west from the main drain, in some cases nearly as far as the Glenn-Colusa Irrigation District Main Canal. However, as conceived, the District was not allowed to pass water down the Knights Landing Ridge Cut into the Yolo Bypass, since no drainage flow rights were acquired.

The purpose of the drainage system was to provide gravity drainage, the outlet of which was into the Sacramento River near Knights Landing. During periods when gravity flow into the River was not possible due to high water levels, the gravity system was to be supplemented by pumping from the El Dorado Bend and the Rough and Ready Bend pumping plants.

Right-of-way for the construction of the main channel and laterals in the District was obtained from the various landowners by purchase. The right-of-way agreements between the District and the landowners contained no reference to water use or responsibility for flood damage from waters associated with the District. Some of the agreements contained requirements that the District construct wooden bridges across the channel for the farmer's access to his property. Many of these structures have since been removed.

Even though no specific mention of water use was included in the right-of-way agreements, the consensus within the District was that the landowners had the right to use any water crossing their property but that no obstruction could be allowed in the channel. In order to accomplish the drainage plan described above, it was necessary that the District obtain the rights to use certain improvements and works of various districts located between the southern end of Reclamation District 2047 and Knights Landing.

3. RD 2047 Hydraulic Capacity

As mentioned previously, the Colusa Basin Drain was designed to relieve flooding due to excessive irrigation drainage waters. On the assumption that 100,000 acres of rice land would be the maximum amount served by the District, the channel was designed for a maximum flow of 1,450 cubic feet per second (cfs). The water surface at the flow was taken as being one foot below adjacent lands to give some margin of safety during peak runoffs and also to preclude complaints from landowners not able to drain their lands. It was also assumed that one-half of the seasonal runoff from this rice acreage would occur within a period of 30 days beginning around September 15th and terminating on October 15th.

The Colusa Basin Drain was sized in proportion to the amount of land drained in various locations. The channel as it exists today at the State Highway 20 Bridge west of Colusa has a capacity of 2,100 cfs. It is obvious that the channel was never designed to provide for winter flood waters. It was recognized early that a flood control project would be too massive and expensive an undertaking.

4. RD 2047 Five-Party Agreement

In 1953, Reclamation District 2047 entered into an agreement called the "Five Party Agreement" with the Glenn-Colusa Irrigation District, Compton-Delevan Irrigation District, Provident Irrigation district, Princeton-Codora-Glenn Irrigation District, and Jacinto Irrigation district. Maxwell Irrigation District was added the following year. This agreement provided for consent

from Reclamation district 2047 for the recovery of drain water return flows from the District's drains in exchange for the irrigation districts' acceptance of the maintenance obligation of these drains within their boundaries. Compton-Delevan Irrigation District and Jacinto Irrigation District were subsequently consolidated into the Glenn-Colusa Irrigation District.

The assumption of the obligation for drainage maintenance by the irrigation districts relieved Reclamation District 2047 of what would have been a duplicate effort to provide maintenance. The parties to the agreement continue to be obligated to maintain all drainage channels owned by the Reclamation District that lie within their respective boundaries. The agreement was important for the irrigation districts in the settlement of water rights contracts with the US Bureau of Reclamation who at that time was asserting claim to the return flows from each contractor. The Bureau's recognition of the "Five Party Agreement" assisted in resolving this potential obstacle to settlement. Reclamation District 2047 benefited from transferring responsibility for drainage maintenance to the irrigation districts that were better able to provide funds for this purpose.

Reclamation District 2047 plans to extend the "Five Party Agreement" to include Willow Creek Mutual Water Company and the Colusa Drain Mutual Water Company, which would provide full coverage of the area within Reclamation District 2047 boundaries.[79]

7.1.3 Reclamation District 2047 Board of Directors

The Board of Trustees consists of seven elected members. The Board selects a Secretary to maintain the records and provide for the business of the District to be conducted. They also engage an attorney for legal advice. The Trustees have responsibility for the extensive tributary drainage channels in addition to the Main Drain.

Meetings are held quarterly where reports are made of the maintenance by the parties to the "Five Party Agreement"; items dealing with rights-of-way are reviewed; policy issues are discussed and resolved; and other business as appropriate is taken up. All meetings are open to the public.[80] The seven Trustees for Reclamation District 2047 are as follows:

Trustee		Term Expires
1. Arnold Andreotti,	PO Box 298, Colusa, CA 95932	12/04/2013
2. Donald Cecil, President,	PO Box 81, Willows, CA 95988	12/02/2011
3. Rick Simson,	7554 County Road 35, Glenn, CA 95943	12/02/2011
4. Manuel Barrett,	PO Box 22, Princeton, CA 95970	12/02/2011
5. John Garner,	PO Box 121, Princeton, CA 95970	12/02/2013
6. Gary Alves,	(530) 934-2764	12/04/2013
7. Dennis Clark,	7817 County Rd. 66, Princeton, CA 95970	12/04/2013

7.1.4 Reclamation District 2047 Contact Information

The contact information for Reclamation District 2047 is as follows:

[79]Reclamation District No. 2047, "Brief History and Responsibilities," May 31, 1996
[80] Reclamation District No. 2047, "Brief History and Responsibilities," May 31, 1996

Reclamation District 2047 c/o William Baber
30 Fairview Circle, Chico, CA 95928 (530) 899-8573
E-Mail: WHBLAF@aol.com

7.1.5 Reclamation District 2047 Budget

The Budget for Reclamation District 2047 is shown below. The District maintains funds with Colusa County and the Budget is published with the Colusa County Budget.

COLUSA COUNTY RECLAMATION DISTRICT 2047 FUND #03320

Account	Title	2007-2008 Actual	2008-2009 Proposed
10100	CASH IN TREASURY	249,080.69	
	REVENUE		
410100	PROP TAX-CURR SEC	30,513.27	29,742
410101	PROP TAX-CURR SEC--Other	19,394.00	15,000
410150	PROP TAX-CUR SUPP SEC	1,914.30	814
410151	PROP TAX-CUR SUPP SEC--Other	1,257.29	1,000
410200	PROP TAX-CUR UNSEC	2,730.59	2,987
410201	PROP TAX-CUR UNSEC--Other	770.93	700
410250	PROP TAX-CUR SUPP UNSEC	29.49	24
410300	PROP TAX-PY SECURED	(34.02)	(27)
410301	PROP TAX-PY SECURED--OTHER CO	(112.53)	(100)
410320	PROP TAX-PY SUPP SEC	141.44	170
410321	PROP TAX-PY SUPP SEC--Other	261.22	250
410400	PROP TAX-PY UNSEC	(1.34)	
410401	PROP TAX-PY UNSEC	7.89	
410450	PROP TAX-PY SUPP UNSEC	0.13	
410920	CO IN-LIEU TAXES	12.01	12
441900	INTEREST	9,263.23	9,000
441901	INTEREST--Other	182.38	150
454510	HOMEOWNERS PROP TAX	341.26	321
454511	HOMEOWNERS PROP TAX--Other	303.56	300
455800	WILDLIFE-FED IN LIEU	1,081.00	1,090
455801	WILDLIFE-FED IN LIEU--OTHER CO	512.78	500
479360	MISC REV--REFUND		
	Total Revenue	**68,568.88**	**61,933**
	EXPENDITURES		
51010	SALARIES AND WAGES	7,255.00	10,000
53100	INSURANCE	2,183.00	2,200
53150	MEMBERSHIPS	2,267.12	3,000
53170	OFFICE EXPENSE	1,552.00	2,000
53180	PROF/SPECIALIZED SERV-AUDIT	305.00	650
53180	PROF/SPECIALIZED SERV-BRENDA	200.40	
53190	PUBLICAT & LEGAL NOTICES	-	
53230	SPECIAL DEPT EXPENSES		300
53250	TRANSPORTATION/TRAVEL	988.98	1,200

53251	EDUCATION/TRAINING		200
	Total Expenditures	**14,751.50**	**19,550**
	Net Income/(Loss)	**53,817.38**	**42,383**

7.2 MSR for Reclamation District 2047

7.2.1 Growth and Population Projection MSR Determinations for the Reclamation District 2047 Area

2-1) Population projections for adjacent towns and cities are found in the appropriate county or city general plans. Population growth within the district boundaries will be minimal.

2-2) The District should maintain an active relationship with county and city planning departments in the area to make sure that the District goals are considered when land use changes and land use regulations are made.

7.2.2 Capacity and Infrastructure MSR Determinations for Reclamation District 2047

2-1) Infrastructure for the District is maintained by the Glenn-Colusa Irrigation District.

7.2.3 Financial Ability MSR Determinations for Reclamation District 2047

3-1) District expenditures are generally less than the income and the District has a reasonable reserve.

3-2) The Colusa County Auditor maintains the financial records and budget for the District.

7.2.4 Opportunities for Shared Facilities MSR Determinations for Reclamation District 2047

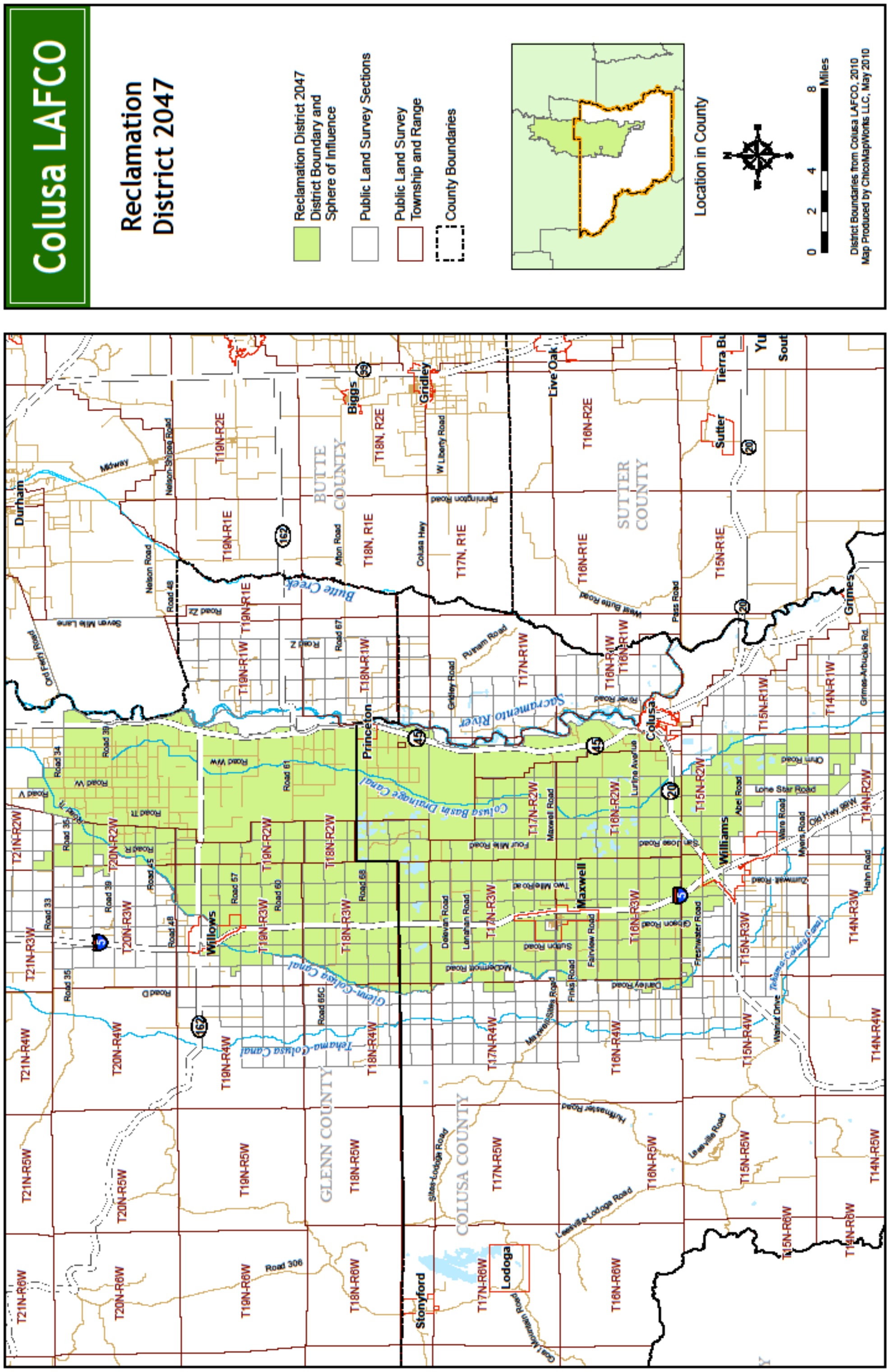
4-1) The District shares the facilities with the Glenn-Colusa Irrigation District.

4-2) The District uses the Colusa County Auditor to maintain financial records and budgets.

4-3) Reclamation District 479 uses the Colusa Basin Drain.

7.2.5 Government Structure and Accountability MSR Determinations for Reclamation District 2047

5-1) The District should have a website to communicate landowners and with the public.


Colusa LAFCO
Reclamation District 2047
Reclamation District 2047 District Boundary and Sphere of Influence
Public Land Survey Sections
Public Land Survey Township and Range
County Boundaries
Location in County
Miles
District Boundaries from Colusa LAFCO, 2010
Map Produced by ChicoMapWorks LLC, May 2010

8 SACRAMENTO RIVER WESTSIDE LEVEE DISTRICT

8.1 Sacramento River Westside Levee District Background

8.1.1 Sacramento River Westside Levee District Description

The Sacramento River Westside Levee District is responsible for maintenance of the west side of the levee along the Sacramento River form Colusa to Knights Landing. Except in the northern part of the Sacramento River Westside Levee District, the District overlaps with RD 479, RD 108, and the Knights Landing Ridge Drainage District. This is shown on a map at the end of this report. The District also includes RD 787 which is entirely within Yolo County.

The Sacramento River Westside Levee District was formed in 1915 by a special act of the State Legislature and contains 107,000 acres.[81] A map of the District is shown at the end of this section.

8.1.2 Sacramento River Westside Levee Board of Directors

The Sacramento River Westside Levee District Board of Directors is as follows:[82]

Director	Term Expires
Marty Stripling	12/04/2013
Frederick J. Durst	12/01/2011
Michael Steidlmayer	12/04/2011 appointed
Dan Tibbitts	12/01/2013
Tom Ellis	12/01/2011

8.1.3 Sacramento River Westside Levee Contact Information

The Sacramento River Westside Levee District Contact Information is as follows:

Lewis Bair, General Manager
Sacramento River Westside Levee District
PO Box 50, Grimes, CA 95950

(530) 437-2221 Email: rd108@rd108.org

[81] Colusa LAFCO, Sacramento River Westside Levee District Sphere of Influence Study, 1984.
[82] Colusa County Recorder, Phone 458-0513, October 30, 2009.

8.1.4 Sacramento River Westside Levee Budget

The Sacramento River Westside Levee District Budget is shown below. The District contracts with Reclamation District 108 to manage the District and to prepare and manage the Budget. Although the Budget shows expenses greater than income, there is a $158,246 beginning balance according to the District.[83]

SACRAMENTO RIVER WEST SIDE LEVEE DISTRICT BUDGET 2009

INCOME	
EARNED INTEREST	2,250
ASSESSMENTS - YOLO/COLUSA COUNTIES	238,824
IN LIEU ASESSMENTS-RD108	27,425
MISCELLANEOUS NON-OPERATING	
TOTAL INCOME:	**$268,499**
EXPENSES	
ADMINISTRATION:	**43,594**
COMMISSIONERS FEES AND EXPENSES	950
OFFICE MANAGEMENT AND STAFF	22,200
DISTRICT INSURANCE	2,653
OFFICE RENT AND SUPPLIES	811
MEMBERSHIPS & FEES	15,980
PUBLIC RELATIONS	1,000
PROFESSIONAL SERVICES:	**20,600**
LEGAL	6,000
ENGINEERING	12,000
ACCOUNTING	2,600
LEVEE MAINTENANCE:	**114,000**
WEED SPRAYING	16,000
RODENT CONTROL	19,000
LEVEE ROADS	5,000
LEVEE PATROL	12,000
VEGETATION MANAGEMENT	62,000
MISC. OPERATING	0
MISC. NON-OPERATING	0
UPPER SAC. PHASE V PROJECT/WARRANTS	**148,057**
TOTAL EXPENSES	**$326,251**

[83] Sacramento River Westside Levee District, Bev Walls, Phone: 530-437-2221, Email: bwalls@rd108.org, 10-28-09.

8.2 MSR for Sacramento River Westside Levee District

8.2.1 Growth and Population Projection MSR Determinations for the Sacramento River Westside Levee District Area

1-1) Population growth in the Sacramento River Westside Levee District will be minimal.

1-2) Land within the District is zoned for agriculture.

8.2.2 Capacity and Infrastructure MSR Determinations for the Sacramento River Westside Levee District

2-1) The Levee is maintained by staff from RD 108 on a contract basis.

8.2.3 Financial Ability MSR Determinations for Sacramento River Westside Levee District

3-1) Administration for the District is provided by the staff of RD 108 on a contract basis.

3-2) Expenses are greater than the income for 2009 according to the Budget because of payment of warrant issued for District cost share of Phase V Levee Improvement Project.[84]

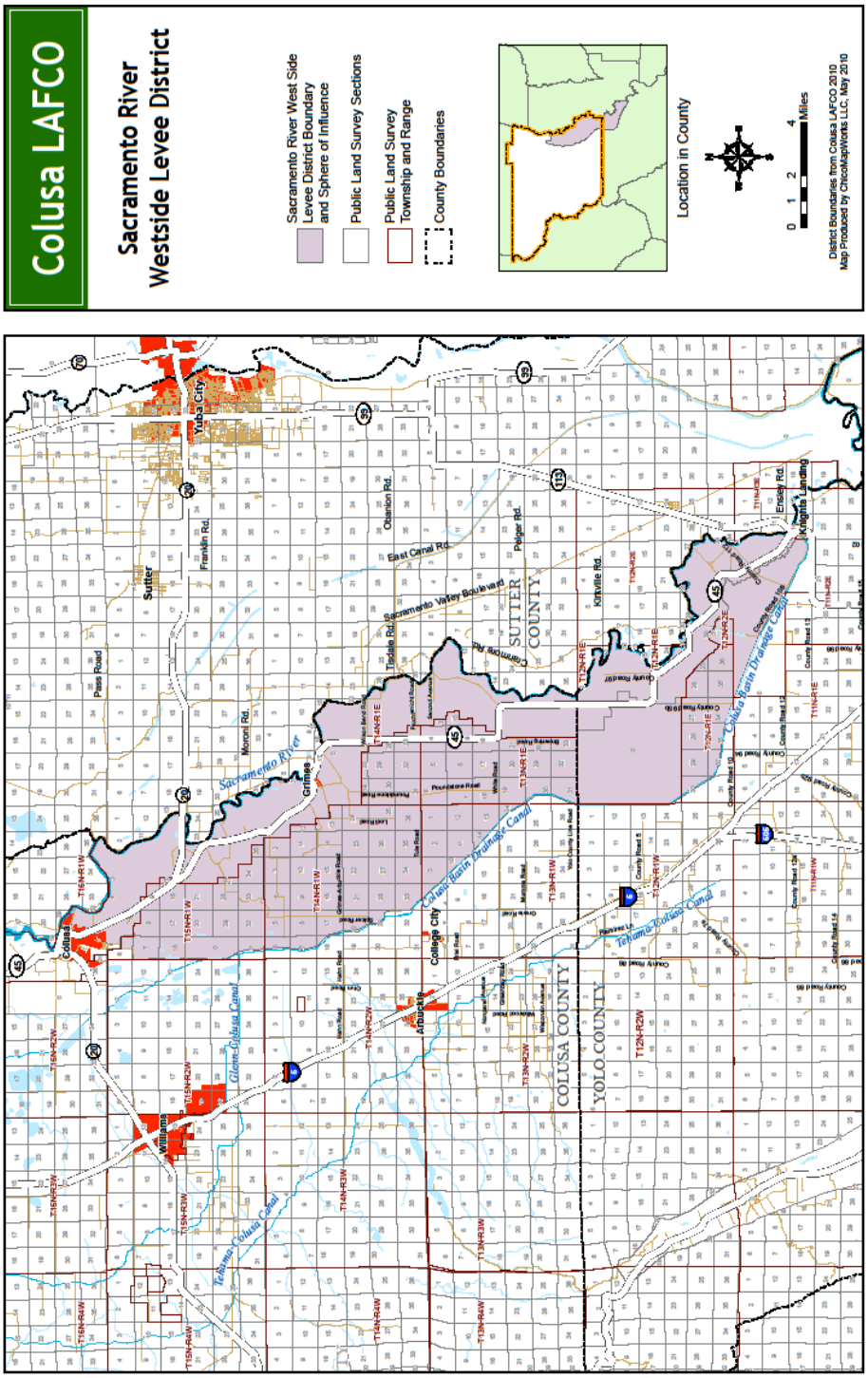
8.2.4 Opportunities for Shared Facilities MSR Determinations for Sacramento River Westside Levee District

4-1) The District shares staff and administration with RD 108.

8.2.5 Government Structure and Accountability MSR Determinations for Sacramento River Westside Levee District

5-1) The District is working on a web page to provide information for the landowners, tax payers and the public.

[84] Sacramento River Westside Levee District, August 9, 2010.


Colusa LAFCO
Sacramento River
Westside Levee District
Sacramento River West Side
Levee District Boundary
and Sphere of Influence
Public Land Survey Sections
Public Land Survey
Township and Range
County Boundaries
Location in County
Miles
District Boundaries from Colusa LAFCO 2010
Map Produced by ChicoMapWorks LLC, May 2010
SUTTER COUNTY
COLUSA COUNTY
YOLO COUNTY
Sacramento River
Colusa Basin Drainage Canal
Tehama-Colusa Canal
Glenn-Colusa Canal
East Canal Rd.
Sacramento Valley Boulevard
Yuba City
Sutter
Colusa
Williams
College City
Grimes
Knights Landing

9 CORTINA CREEK FLOOD CONTROL AND FLOODWATER CONSERVATION DISTRICT

9.1 Cortina Creek Flood Control and Floodwater Conservation District Background

9.1.1 Cortina Creek Flood Control and Floodwater Conservation District History

The Cortina Creek Flood Control and Floodwater Conservation District was formed in 1965 according to the Floodwater Conservation Law of 1931. The District contains 12,626 acres[85] and was inactive for about forty years but has recently become active again.

The banks of Cortina Creek have been maintained by the individual landowners along the Creek and there is a need for certain improvements and repairs.[86]

9.1.2 Cortina Creek Flood Control and Floodwater Conservation District Contact Information

Contact Information for Cortina Creek Flood Control and Floodwater Conservation District is as follows:

Christy Scofield, Director
Cortina Creek Flood Control and Floodwater Conservation District
PO Box 375, Arbuckle, California 95912

(530) 476-2323

9.1.3 Cortina Creek Flood Control and Floodwater Conservation District Board Members

Cortina Creek Board members were appointed in 2008 by Board of Supervisors Resolution No. 08-086. All terms are effective from date of appointment. The Directors are as follows:

Peter D. Peterson - 4 yr term
Cortina School Road, Williams, CA 95989
(530) 473-2015

Braly G. Zumwalt - 2 yr term
71 Sanborn Drive, Colusa, CA 95932
(530) 458-8334

Sherry Langrock - 4 yr term
1913 Cortina School Road, Williams, CA 95989
(530) 473-3571

Christy Scofield - 4 yr term

[85] Colusa LAFCO, Cortina Creek Flood Control and Floodwater Conservation District Formation, July 20, 1965.
[86] Cortina Creek Flood Control and Floodwater Conservation District, Christy Scofield, Director, Phone: 5430-476-2323, September 10, 2009.

Po Box 375, Arbuckle, CA 95912
(530) 476-2323

William B. Vann- 2 yr term[87]

The Board of Directors meets as needed. When meetings are necessary they are held at the Westside Water District Office located on State Highway 20, west of Williams. The District rents the space from the Westside Water District for $100 per year.

If legal counsel is needed the District will consult with the County Counsel.[88]

9.1.4 Cortina Creek Flood Control and Floodwater Conservation District Budget

The Cortina Creek Flood Control and Floodwater Conservation District tries to keep expenses to a minimum unless funds are spent on a flood control project. Since the District has no employees, the project work is contracted and is shown in the Budget as Services.

CORTINA CREEK FLOOD CONTROL AND FLOODWATER CONSERVATION DISTRICT[89]			
	2006-2007 Actual	**2007-2008 Actual**	**2008-2009 Budget**
Revenue			
Taxes	$12,864	$13,626	$14,898
Interest	$17,298	$19,047	$18,000
Other	$141	$135	$142
Total	$30,303	$32,805	$33,040
Expense			
Services	$195	$50,916	$195
Total	**$195**	**$50,916**	**$195**

The Cortina Creek Flood Control and Water Conservation District has an unreserved fund balance of $388,615 on June 30, 2008.[90]

[87] Colusa County, Board of Supervisors Office, Yolanda Tirado, Email: cocolusa@countyofcolusa.org, April 22, 2009.
[88] Cortina Creek Flood Control and Floodwater Conservation District, Christy Scofield, Director, Phone: 530-476-2323, September 10, 2009.
[89] Colusa County Final Budget for the year ending June 30, 2009.
[90] Colusa County Final Budget for the year ending June 30, 2009.

9.2 MSR for Cortina Creek Flood Control and Floodwater Conservation District

9.2.1 Growth and Population Projection MSR Determinations for the Cortina Creek Flood Control and Floodwater Conservation District Area

1-1) Population growth within the Cortina Creek Flood Control and Water Conservation District will be minimal.

1-2) Land within the District is planned and zoned for agriculture.

1-3) At the time of District formation, it was estimated that the District had a population of 25 with 19 registered voters.[91]

9.2.2 Capacity and Infrastructure MSR Determinations for the Cortina Creek Flood Control and Floodwater Conservation District

2-1) The District does not spend funds on infrastructure on a regular basis according to the Budget.

9.2.3 Financial Ability MSR Determinations for the Cortina Creek Flood Control and Floodwater Conservation District

3-1) District funds are maintained with Colusa County.

3-2) The District has adequate financial reserves.

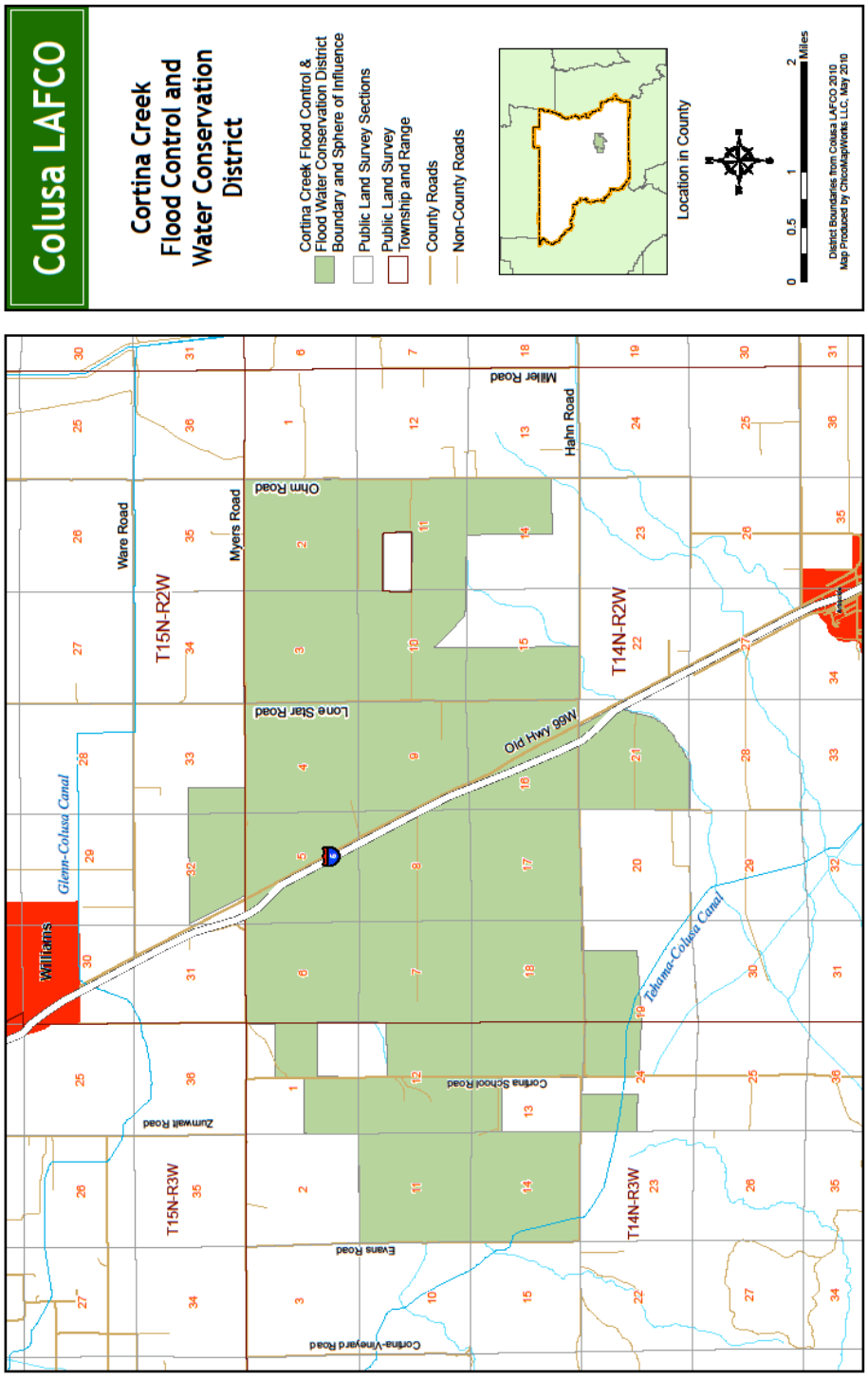
9.2.4 Opportunities for Shared Facilities MSR Determinations for the Cortina Creek Flood Control and Floodwater Conservation District

4-1) The District uses the Colusa County Auditor to maintain financial records.

9.2.5 Government Structure and Accountability MSR Determinations for the Cortina Creek Flood Control and Floodwater Conservation District

5-1) The District should maintain a website to provide information on the District to landowners, the public and taxpayers.

[91] Colusa LAFCO, Cortina Creek Flood Control and Floodwater Conservation District Formation, July 20, 1965.


Colusa LAFCO
Cortina Creek Flood Control and Water Conservation District
Cortina Creek Flood Control & Flood Water Conservation District Boundary and Sphere of Influence
Public Land Survey Sections
Public Land Survey Township and Range
County Roads
Non-County Roads
Location in County
0 0.5 1 2 Miles
District Boundaries from Colusa LAFCO 2010
Map Produced by CrossMapWorks LLC, May 2010
Williams
Glenn-Colusa Canal
Ware Road
Myers Road
Ohm Road
Lone Star Road
Old Hwy 99W
Miller Road
Hahn Road
Tehama-Colusa Canal
Cortina School Road
Zumwalt Road
Evans Road
Cortina-Vineyard Road
T15N-R2W
T14N-R2W
T15N-R3W
T14N-R3W

10 KNIGHTS LANDING RIDGE DRAINAGE DISTRICT

10.1 Knights Landing Ridge Drainage District Background

10.1.1 Knights Landing Ridge Drainage District Description

The Knights Landing Ridge Drainage District was formed in 1913[92] and has 72,000 acres with no population.[93] The District shares administration with Reclamation District 108 and Sacramento River Westside Levee District. The District overlaps RD 108 and also overlaps the Sacramento River Westside Levee District except that in the very southern part of the Knights Landing Ridge Drainage District there is no overlap. The majority of the land is within Yolo County so the Yolo LAFCO has jurisdiction. This information is included for the sake of completeness.

10.1.2 Knights Landing Ridge Drainage District Contact Information

The contact information for the Knights Landing Ridge Drainage District is as follows:

Knights Landing Ridge Drainage District, Lewis Bair, General Manager
PO Box 50, Grimes, CA 95950

(530) 437-2221 or 437-2248 email: rd108@rd108.org

10.1.3 Knights Landing Ridge Drainage District Board of Directors

The Board of Directors for the Knights Landing Ridge Drainage District is as follows:[94]

Jim Heidrick, Pres.	2013
Herb Pollock	2013
Frederick Durst	2011
Marty Stripling	2011
Dan Tibbitts	2011

10.1.4 Knights Landing Ridge Drainage District Inspection Reports

The State of California, Department of Water Resources, Division of Flood Management, Flood Project Integrity and Inspection Branch inspects the Levees quarterly. The inspection reports are available on the internet at: http://cdec.water.ca.gov/cgi-progs/products/NA0008_SP2009.pdf

[92] Yolo County Local Agency Formation Commission, Knights Landing Ridge Drainage District, Sphere of Influence Study, January 14, 1985.
[93] Yolo County Local Agency Formation Commission, 625 Court Street, Room 202, Woodland, California 95695, Municipal Service Review and Sphere of Influence Study Yolo County Public Water and Reclamation Districts, *Prepared by:* Dudek and Associates, Inc., 605 Third Street, Encinitas, California 92024, March 2005, p.2.
[94] Knights Landing Ridge Drainage District, Phone 530-437-2221, September 30, 2009,8/9/10.

The inspection report for spring 2009 rated most places as "M" (Minimally Acceptable) because of erosion sites mapped by DWR.[95] The District contracts with Reclamation District 108 to maintain the Levee on a contract basis. The District has an Assurance Agreement with the Central Valley Flood Protection Board for maintenance of the south levee of Sycamore Slough from the junction of Knights Landing Ridge Cut to the Knights Landing outfall gates.[96]

10.1.5 Knights Landing Ridge Drainage District Finances

The Budget for the Knights Landing Ridge Drainage District is shown below. Although the Expenses shown are greater than the Income, the District reports a beginning balance $725,707.[97]

KNIGHTS LANDING RIDGE DRAINAGE DISTRICT 2009 BUDGET

INCOME	
Dividends & Interest	7,100
Castel Levee Maintenance	9,616
Assessments - Yolo/Colusa	72,078
Assessments - RD 108 In Lieu	11,277
Miscellaneous Non-Operating	0
TOTAL INCOME:	**$100,071**
EXPENSES	
ADMINISTRATION:	**19,439**
Commissioners Fees	500
Office Management and Staff	10,726
District Insurance	2,665
Office Rent and Supplies	600
Membership & Fees	4,948
PROFESSIONAL SERVICES:	**10,200**
Legal	3,600
Engineering	4,000
Accounting	2,600
LEVEE MAINTENANCE:	**38,836**
Weed Spraying	5,500
Vegetation Management	8,000
Rodent Control	4,000
Levee Roads	10,000
Levee Patrol	2,000
Castel Levee Maintenance	9,336
Miscellaneous Operating	0
Mid-Valley Project-Phase III	34,000
TOTAL EXPENSES	**$102,475**

[95] State of California, Department of Water Resources, Division of Flood Management, Flood Project Integrity & Inspection Branch, http://cdec.water.ca.gov/cgi-progs/products/NA0008_SP2009.pdf, September 5, 2009.
[96] Central Valley Flood Protection Board, The Resources Agency – State of California, 3310 El Camino Avenue, Room LL40, Sacramento, California 95821, Phone (916) 574-0609. Fax (916) 574-0682 *http://www.RecBd.ca.gov* http://www.recbd.ca.gov/meetings/2008/3-21-2008Agenda.pdf, September 5, 2009.
[97] Knights Landing Ridge Drainage District, Bev Walls, Phone: 530-437-2221, E-Mail: bwalls@rd108.org, 10-28-09.

10.2 MSR for Knights Landing Ridge Drainage District

10.2.1 Growth and Population Projection MSR Determinations for the Knights Landing Ridge Area

1-1) Land within the Knights Landing Ridge Drainage District is zoned for agriculture and is not likely to experience population growth.

10.2.2 Capacity and Infrastructure MSR Determinations for the Knights Landing Ridge Drainage District

2-1) The Knights Landing Ridge Drainage District has adequate capacity to maintain drainage for the area.

10.2.3 Financial Ability MSR Determinations for Knights Landing Ridge Drainage District

3-1) The Knights Landing Ridge Drainage District has adequate financial capacity and the financial records are well maintained.

3-2) The Budget for 2009 shows expenses greater than income. The additional income is in reserve for the District cost share of the Phase III Levee Improvement Project.[98]

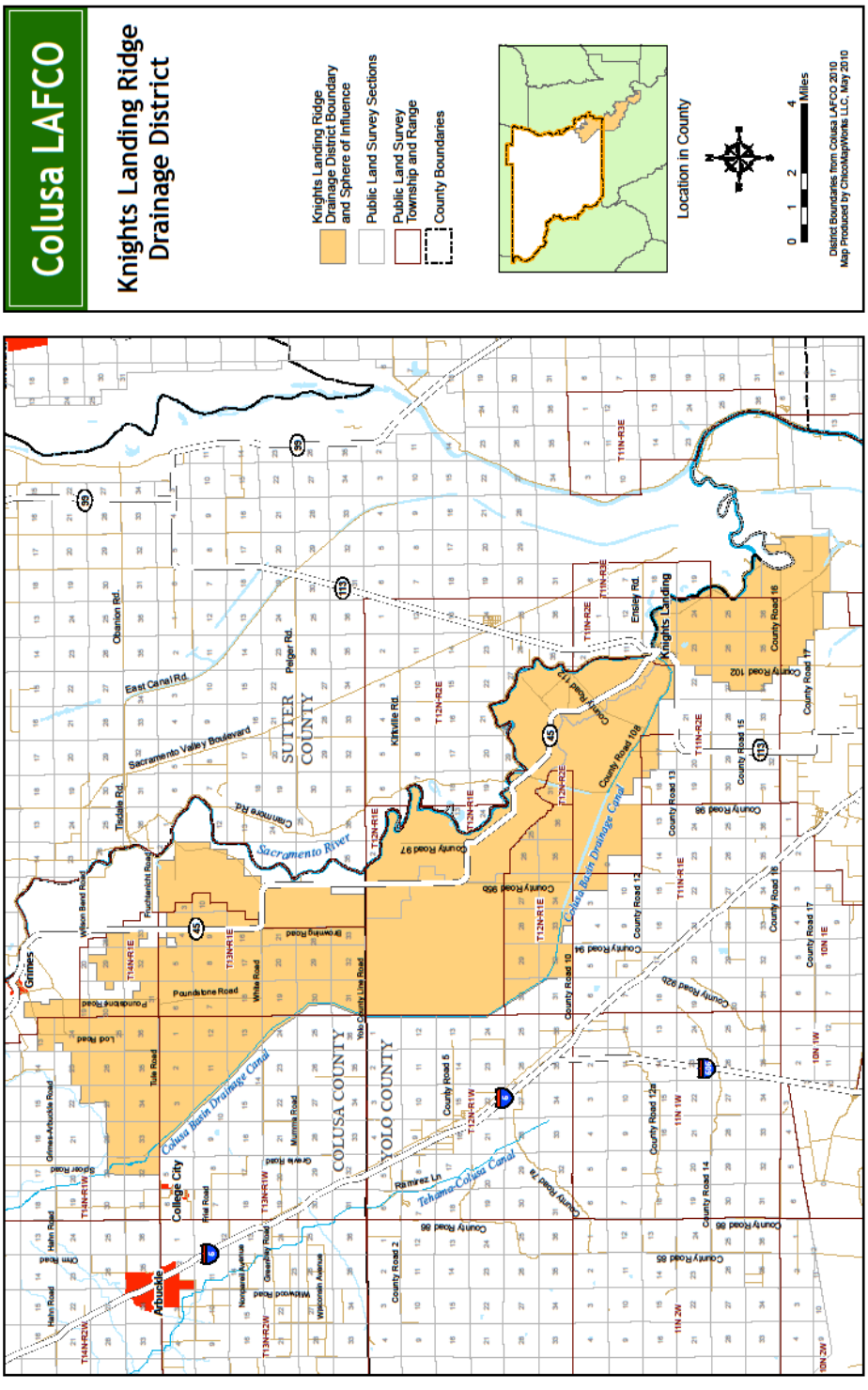
10.2.4 Opportunities for Shared Facilities MSR Determinations for Knights Landing Ridge Drainage District

4-1) Knights Landing Ridge Drainage District shares administration with Reclamation District 108.

10.2.5 Government Structure and Accountability MSR Determinations for Knights Landing Ridge Drainage District

5-1) The District is in the process of building a web page to provide information about the District for landowners and the public.

[98] Knights Landing Ridge Drainage District, 8-9-10.


Colusa LAFCO
Knights Landing Ridge Drainage District
Knights Landing Ridge Drainage District Boundary and Sphere of Influence
Public Land Survey Sections
Public Land Survey Township and Range
County Boundaries
Location in County
0 1 2 4 Miles
District Boundaries from Colusa LAFCO 2010
Map Produced by ChicoMapWorks LLC, May 2010
SUTTER COUNTY
COLUSA COUNTY
YOLO COUNTY
Sacramento River
Colusa Basin Drainage Canal
Tehama-Colusa Canal
Knights Landing
College City
Arbuckle
Grimes
East Canal Rd.
Sacramento Valley Boulevard
Pleasant Grove Road
Poundstone Road
Lod Road
Rule Road
Ramirez Ln
Ensley Rd.
Kirkville Rd.
Peiger Rd.
Obanion Rd.
Tisdale Rd.
Cranmore Rd.
Wilson Bend Road
Fleshwelgh Road
Grimes-Arbuckle Road
Glenn Road
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11 COLUSA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

11.1 Colusa County Flood Control and Water Conservation District Background

The Colusa County Flood Control and Water Conservation District was formed by an act of the California State Legislature on September 20, 1983. The District includes most of the County of Colusa. The area of the County on the East side of the Sacramento River (42,499 acres) was detached in 1987 by Colusa LAFCO Resolution 87-04. The Colusa County Board of Supervisors is the Board of Directors for the District.

The District started to establish two Zones of Benefit, one north of the City of Colusa along the west side of the Sacramento River and one including part of the City of Colusa and additional land to the south. However, no tax assessment was ever enacted and the zones of benefit were never recorded with the State Board of Equalization.[99] Since no tax assessment was established for this District, the Board of Supervisors must fund any activities with General Fund money. The Board of Supervisors did construct a levee west of Colusa, The Powell Slough Levee constructed in 2000. The County did have severe flooding problems in 1998 but has not had the financial resources to deal with these issues.[100]

11.2 MSR for Colusa County Flood Control and Water Conservation District

11.2.1 Growth and Population Projection MSR Determinations for the Colusa County Flood Control and Water Conservation District

1-1) Problems related to flood control and drainage will restrict population growth in certain parts of the County.

11.2.2 Capacity and Infrastructure MSR Determinations for the Colusa County Flood Control and Water Conservation District

2-1) The Colusa County Flood Control and Water Conservation District has minimal infrastructure and no capacity due to lack of funds.

11.2.3 Financial Ability MSR Determinations for Colusa County Flood Control and Water Conservation District

3-1) The financial ability of the Colusa County Flood Control and Water Conservation District is limited by Proposition 218 which requires a vote prior to implementing any new taxes.

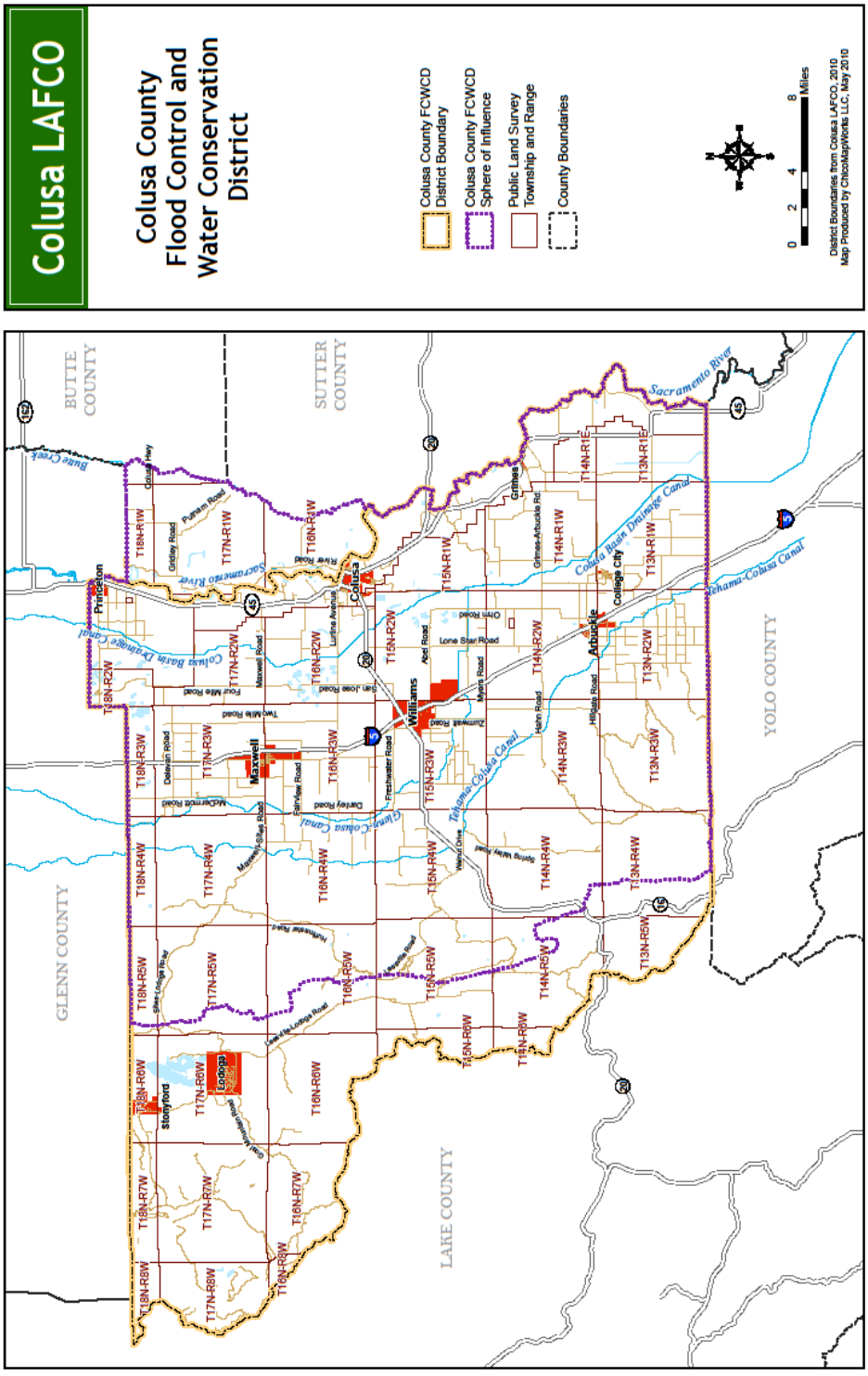
11.2.4 Opportunities for Shared Facilities MSR Determinations for Colusa County Flood Control and Water Conservation District

4-1) The Colusa County Flood Control and Water Conservation District should work with the other flood control, reclamation, and levee districts within the County.

[99] Colusa LAFCO, Correspondence from Jan Mariano to Gary Plunkett, February 27, 1985.
[100] Colusa County Public Works Department, Jon Wrysinski, Phone: 530-458-0470, October 5, 2009.

11.2.5 Government Structure and Accountability MSR Determinations for Colusa County Flood Control and Water Conservation District

5-1) The Board of Supervisors follows the Brown Act and legal notice requirements.


Colusa LAFCO
Colusa County
Flood Control and
Water Conservation
District
Colusa County FCWCD
District Boundary
Colusa County FCWCD
Sphere of Influence
Public Land Survey
Township and Range
County Boundaries
0 2 4 8 Miles
District Boundaries from Colusa LAFCO, 2010
Map Produced by ChicoMapWorks LLC, May 2010
BUTTE COUNTY
SUTTER COUNTY
GLENN COUNTY
LAKE COUNTY
YOLO COUNTY
Sacramento River
Colusa Basin Drainage Canal
Tehama-Colusa Canal
Glenn-Colusa Canal
Princeton
Colusa
Williams
Maxwell
Arbuckle
College City
Stonyford
Lodoga

APPENDIX A - COLUSA COUNTY POPULATION GROWTH PROJECTIONS

The Colusa County population is expected to increase as follows:

Colusa County Population Projections

Year	Projected Population	Percentage Increase
2000	18,923	
2010	22,697	20%
2020	26,337	16%
2030	29,353	11%
2040	32,499	11%
2050	35,544	9%

(California State Department of Finance and the Great Valley Center)

APPENDIX B - FINANCIAL COMPARISON OF RECLAMATION DISTRICTS

Independent Special District Name	Activity	2005-2006 Enterprise Operating Revenues	Enterprise Non-Operating Revenues	Non-Enterprise General Purpose Revenues	Total Inter-Governmental Revenues
Reclamation District 1004	Water Enterprise	$1,262,140	$183,225		0
Reclamation District 108	Land Reclamation and Levee Maintenance			$4,380,283	$1,443,108
Reclamation District 108	Water Enterprise	$2,059,726	$18,917		0
Reclamation District 2047	Land Reclamation and Levee Maintenance			$49,820	$1,710
Reclamation District 479	Drainage and Drainage Maintenance			$55,117	0
Sacramento River Westside Levee District (Colusa)	Land Reclamation and Levee Maintenance			$213,421	0

http://www.sco.ca.gov/ard/local/locrep/districts/lafco/lafcofy0506.xls

APPENDIX C - ACREAGE FOR EACH DISTRICT

District	Acres	County
Reclamation District 108	34,313.48	Colusa
Reclamation District 108	24,506.16	Yolo
Reclamation District 108 Total	58,819.64	
Reclamation District 479	6,132.54	Colusa
Reclamation District 1004	22,717.22	Colusa
Reclamation District 1004	472.83	Glenn
Reclamation District 1004 Total	23,190.05	
Reclamation District 2047	135,058.07	Colusa
Reclamation District 2047	97,766.06	Glenn
Reclamation District 2047 Total	232,824.13	
Sacramento Westside Levee District	74,568.44	Colusa
Sacramento Westside Levee District	30,738.93	Yolo
Sacramento Westside Levee District Total	105,307.37	
Cortina Creek Flood Control and WC District	12,923.38	Colusa
Knights Landing Ridge Drainage District	43,399.23	Yolo
Knights Landing Ridge Drainage District	29,919.60	Colusa
Knights Landing Ridge Drainage District Total	73,318.83	

APPENDIX D - LOCAL GOVERNMENT ISSUES

1 Municipal Financial Constraints

Municipal service providers are constrained in their capacity to finance services by the inability to increase property taxes, requirements for voter approval for new or increased taxes, and requirements of voter approval for parcel taxes and assessments used to finance services. Municipalities must obtain majority voter approval to increase or impose new general taxes and two-thirds voter approval for special taxes.

Limitations on property tax rates and increases in taxable property values are financing constraints. Property tax revenues are subject to a formulaic allocation and are vulnerable to State budget needs. Agencies formed since the adoption of Proposition 13 in 1978 often lack adequate financing.

1.1 California Local Government Finance Background

The financial ability of special districts to provide services is affected by financial constraints. Special district service providers rely on a variety of revenue sources to fund operating costs as follows:

- Property Taxes
- Benefit Assessments
- Special Taxes
- Proposition 172 Funds
- Other contributions from district general funds

As a funding source, property taxes are constrained by State initiatives that have been passed by voters over the years and special legislation. Seven of these measures are explained below:

A. Proposition 13

Proposition 13 (which California voters approved in 1978) has the following three impacts:

- Limits the *ad valorem* property tax rate
- Limits growth of the assessed value of property
- Requires voter approval of certain local taxes

Generally, this measure fixes the *ad valorem* tax at one percent of value, except for taxes to repay certain voter approved bonded indebtedness. In response to the adoption of Proposition 13, the Legislature enacted Assembly Bill 8 (AB 8) in 1979 to establish property tax allocation formulas.

B. AB 8

Generally, AB 8 allocates property tax revenue to the local agencies within each tax rate area based on the proportion each agency received during the three fiscal years preceding adoption of Proposition 13. This allocation formula benefits local agencies that had relatively high tax rates at the time Proposition 13 was enacted.

C. Proposition 98

Proposition 98, which California voters approved in 1988, requires the State to maintain a minimum level of school funding. In 1992 and 1993, the Legislature began shifting billions of local property taxes to schools in response to State budget deficits. Local property taxes were diverted from local governments into the Educational Revenue Augmentation Fund (ERAF) and

transferred to school districts and community college districts to reduce the amount paid by the State general fund. Local agencies throughout the State lost significant property tax revenue due to this shift. Proposition 172 was enacted to help offset property tax revenue losses of cities and counties that were shifted to the ERAF for schools in 1992.

D. Proposition 172

Proposition 172, enacted in 1993, provides the revenue of a half-cent sales tax to counties and cities for public safety purposes, including police, fire, district attorneys, corrections and lifeguards. Proposition 172 also requires cities and counties to continue providing public safety funding at or above the amount provided in FY 92-93.

E. Proposition 218

Proposition 218, which California voters approved in 1996, requires voter- or property owner-approval of increased local taxes, assessments, and property-related fees. A two-thirds affirmative vote is required to impose a Special Tax (for example, a tax for a specific purpose such as a fire protection district). However, majority voter approval is required for imposing or increasing general taxes such as business license or utility taxes, which can be used for any governmental purpose. These requirements do not apply to user fees, development impact fees, and Mello-Roos districts.

F. Mello-Roos Community Facilities Act

The Mello-Roos Community Facilities Act of 1982 allows any county, city, special district, school district, or joint powers authority to establish a Mello-Roos Community Facilities District (CFD) which allows for financing of public improvements and services. The services and improvements that Mello-Roos CFDs can finance include streets, sewer systems and other basic infrastructure, police protection, fire protection, ambulance services, schools, parks, libraries, museums, and other cultural facilities. By law, the CFD is also entitled to recover expenses needed to form the CFD and administer the annual special taxes and bonded debt.

A CFD is created by a sponsoring local government agency. The proposed district will include all properties that will benefit from the improvements to be constructed or the services to be provided. A CFD cannot be formed without a two-thirds majority vote of residents living within the proposed boundaries. Or, if there are fewer than 12 residents, the vote is instead conducted of current landowners. In many cases, that may be a single owner or developer. Once approved, a Special Tax Lien is placed against each property in the CFD. Property owners then pay a Special Tax each year. If the project cost is high, municipal bonds will be sold by the CFD to provide the large amount of money initially needed to build the improvements or fund the services.

The Special Tax cannot be directly based on the value of the property. Special Taxes instead are based on mathematical formulas that take into account property characteristics such as use of the property, square footage of the structure, and lot size. The formula is defined at the time of formation, and will include a maximum special tax amount and a percentage maximum annual increase. If bonds were issued by the CFD, special taxes will be charged annually until the bonds are paid off in full. Often, after bonds are paid off, a CFD will continue to charge a reduced fee to maintain the improvements.

G. Development Impact Fees

Counties, cities, special districts, school districts, and private utilities may impose development impact fees on new construction for purposes of defraying the cost of putting in place public infrastructure and services to support new development. To impose development impact fees, a jurisdiction must justify the fees as an offset to the impact of future development on facilities. This usually requires a special financial study. The fees must be committed within five years to the projects for which they were collected, and the district, city or county must keep separate funds for each development impact fee.

1.2 Financing Opportunities that Require Voter Approval

Financing opportunities that require voter approval include the following:

Special taxes such as parcel taxes
Increases in general taxes such as utility taxes
Sales and use taxes
Business license taxes
Transient occupancy taxes

Communities may elect to form business improvement districts to finance supplemental services, or Mello-Roos districts to finance development-related infrastructure extension. Agencies may finance facilities with voter-approved (general obligation) bonded indebtedness.

1.3 Financing Opportunities that Do Not Require Voter Approval

Financing opportunities that do not require voter approval include imposition of or increases in fees to more fully recover the costs of providing services, including user fees and Development Impact Fees to recover the actual cost of services provided and infrastructure.

Development Impact Fees and user fees must be based on reasonable costs, and may be imposed and increased without voter approval. Development Impact Fees may not be used to subsidize operating costs. Agencies may also finance many types of facility improvements through bond instruments that do not require voter approval.

Water rates and rate structures are not subject to regulation by other agencies. Utility providers may increase rates annually, and often do so. Generally, there is no voter approval requirement for rate increases, although notification of utility users is required. Water providers must maintain an enterprise fund for the respective utility separate from other funds, and may not use revenues to finance unrelated governmental activities.

2 Public Management Standards

While public sector management standards do vary depending on the size and scope of an organization, there are minimum standards. Well-managed organizations do the following eight activities:

1. Evaluate employees annually.
2. Prepare a budget before the beginning of the fiscal year.
3. Conduct periodic financial audits to safeguard the public trust.
4. Maintain current financial records.
5. Periodically evaluate rates and fees.

6. Plan and budget for capital replacement needs.
7. Conduct advance planning for future growth.
8. Make best efforts to meet regulatory requirements.

Most of the professionally managed and staffed agencies implement many of these best management practices. LAFCO encourages all local agencies to conduct timely financial record-keeping for each function and make financial information available to the public.

3 Public Participation in Government

The Brown Act (California Government Code Section 54950 et seq.) is intended to insure that public boards shall take their actions openly and that deliberations shall be conducted openly. The Brown Act establishes requirements for the following:

- Open meetings
- Agendas that describe the business to be conducted at the meeting
- Notice for meetings
- Meaningful opportunity for the public to comment
- Few exceptions for meeting in closed sessions and reports of items discussed in closed sessions

According to California Government Section 54959

> *Each member of a legislative body who attends a meeting of that legislative body where action is taken in violation of any provision of this chapter, and where the member intends to deprive the public of information to which the member knows or has reason to know the public is entitled under this chapter, is guilty of a misdemeanor.*

Section 54960 states the following:

> *(a) The district attorney or any interested person may commence an action by mandamus, injunction or declaratory relief for the purpose of stopping or preventing violations or threatened violations of this chapter by members of the legislative body of a local agency or to determine the applicability of this chapter to actions or threatened future action of the legislative body*

APPENDIX E COMPARISON OF DISTRICTS

District	Function
RD 108	The District delivers water from the Sacramento River to nearly 48,000 acres of land within northern Yolo County and southern Colusa County.
RD 479	Reclamation District 479 is primarily concerned with drain water and makes sure that all of the drain water enters the RD 2047 Canal.
RD 1004	Reclamation District 1004 operates irrigation conveyances within its 23,000-acre jurisdiction located east of the Sacramento River with its eastern boundary formed by Butte Creek along the Colusa-Sutter County Line.
RD 2047	Reclamation District 2047 constructed the Colusa Basin which conveys both summer agricultural drainage water (primarily from rice fields) and winter flows to the Knights Landing outfall gates on the Sacramento River in Yolo County.
Knights Landing Ridge Drainage District	The Knights Landing Ridge Drainage District maintains certain levees along the Sacramento River and facilitates drainage through contracts with RD 108.
Cortina Creek Flood Control and WC District	The Cortina Creek Flood Control and WC District maintains the banks of Cortina Creek on a contract basis as needed.
Sacramento River Westside Levee District	The Sacramento River Westside Levee District maintains levees along the Sacramento River by contracting with RD 108.
Colusa County Flood Control and Water Conservation District	The Colusa County Flood Control and Water Conservation District could by law perform any measures necessary to promote flood control and drainage including levee maintenance; however, the District has no funds and so does not perform any function at this time.

Colusa Basin Drainage District	The CA State Legislature formed the Colusa Basin Drainage District in 1987 to address flooding and winter drainage, irrigation drainage and subsidence problems in the Colusa Basin Watershed.
SB 1086	The overall goal of the management program for the Sacramento River Conservation Area (SB 1086) is to preserve remaining riparian habitat and reestablish a continuous riparian ecosystem along the Sacramento River between Redding and Chico, and to reestablish riparian vegetation along the river from Chico to Verona. This will be accomplished through this incentive-based, voluntary river management plan.
DWR	DWR is responsible for levee inspection and rates the reclamation districts' maintenance activities. If maintenance is inadequate, DWR may form a maintenance area, conduct the maintenance directly and charge property owners for associated costs. This is the case in the part of Colusa County known as Maintenance Area 12.
Central Valley Flood Protection Board (CVFPB	The Central Valley Flood Protection Board (CVFPB) was formerly known as the State Reclamation Board. The Central Valley Flood Protection Board's mission is to control flooding along the Sacramento and San Joaquin Rivers and their tributaries in cooperation with the United States Army Corps of Engineers to provide public safety through flood protection in the Central Valley. The Board cooperates with various agencies of the federal, State, and local governments in establishing, planning, constructing, operating, and maintaining flood control works. The Board also maintains the integrity of the existing flood control system and designated floodways through its regulatory authority by issuing permits for encroachments that comply with Board standards.[101]

[101] State of California, http://www.ebudget.ca.gov/StateAgencyBudgets/3000/3860/program_description_35.html, October 28, 2009.

APPENDIX F COMPARISON TABLE OF FEES, ASSESSMENTS AND TAXES

Colusa County Reclamation, Drainage, Flood Control and Levee Districts Fees/Assessments/Taxes	
District	**Fees/Assessments/Taxes**
Reclamation District 108[102]	Landowners purchase water for irrigation. Rice irrigation water is $62.00/acre/year. Other crops are $15.00/acre for first irrigation, $8.75/acre for each subsequent irrigation.
Reclamation District 479[103]	The District charges a per acre benefit assessment for drainage levied to the landowners within the District as follows: Rice drainage $18.00 per acre Row crops, all other crops $15.00 per acre Bare land, wheat $12.00 per acre Winter Flooding $16.00 per acre
Reclamation District 1004	The District charges $5.37/acre administration fee and $10.22/acre operations fee which is collected in January. The farmers pay $9.65/acre-foot for water which is also collected in January. (Water is metered and refunds are made if less water is used.)[104]
Reclamation District 2047[105]	The District receives 0.000931% of Secured Taxes generated by the Countywide rate. Revenue for fiscal year ended 6-30-08 was $30,513.
Sacramento River Westside Levee District[106]	$270,000 in special assessments is collected by Colusa and Yolo Counties along with property taxes. A District Valuation was prepared by the Engineer for the District in 1980. Landowners are assessed 0.422 per $100 of the District Valuation with a minimum payment of $25.00.
Cortina Creek Flood Control and Floodwater Conservation	The District receives 0.0581% of Secured Taxes generated by the Countywide rate. Revenue for fiscal year ended 6-30-09 was

[102] Reclamation District 108, Cathy Busch, Secretary, Phone 530-437-2221, September 7, 2010
[103] Colusa County Auditor-Controller, Reclamation District 479, Annual Audit for Calendar Year Ended December 31, 2009, April 22, 2010.
[104] Reclamation District 1004, Manager Cameron "Kelly" Boyd, Phone: 530-458-7459, Cell Phone: 530-682-0050, September 9, 2010.
[105] Glenn County Department of Finance, Phone: 530-934-6476, September 9, 2010.
[106] Sacramento River Westside Levee District, Cathy Busch, Secretary, Phone 530-437-2221, September 7, 2010

District[107]	$29,535.
Knights Landing Ridge Drainage District[108]	$72,400 in special assessments is collected by Colusa and Yolo Counties along with property taxes. A District Valuation was prepared by the Engineer for the District in 1979. Landowners are assessed 0.174 per $100 of the District Valuation with a minimum payment of $25.00.
Colusa County Flood Control and Water Conservation District	This district is considered "Inactive" and has no activity.[109]

State Maintenance Districts 1 and 12 (assessment areas)	The State Maintenance areas are charged assessment fees based on the money spent by the State in the previous year. When the State sends the County the bill, the cost is divided up between the parcels according to the size and benefit received and added to the property tax bills.[110]

[107] Colusa County Auditor-Controller, Annual Audit for the period ended June 30, 2009, February 8, 2010.
[108] Knights Landing Ridge Drainage District, Cathy Busch, Secretary, Phone 530-437-2221, September 7, 2010
[109] Colusa County Auditor-Controller, Janet S. Dawley, Property Tax Manager/Special District Auditor, E-Mail: jdawley@countyofcolusa.org, September 8, 2010.
[110] Colusa County Auditor-Controller, Janet S. Dawley, Property Tax Manager/Special District Auditor, Phone, 530-458-0400, September 7, 2010.

ABBREVIATIONS

AB	Assembly Bill
ACOE	US Army Corps of Engineers
BOR	Bureau of Reclamation
CEQA	California Environmental Quality Act
CFD	Community Facilities District
cfs	cubic feet per second
CKH Act	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CVFPB	Central Valley Flood Protection Board (State of California)
CVP	Central Valley Project
CWA	California Waterfowl Association
DFG	Department of Fish and Game (California)
DU	Ducks Unlimited
DWR	Department of Water Resources (California)
EPA	Environmental Protection Agency (US)
ERAF	Educational Revenue Augmentation Fund
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FY	Fiscal Year
GWH	Giga-watt hours (power)
KLRDD	Knights Landing Ridge Drainage District
LAFCO	Local Agency Formation Commission
LOMR	Letter of Map Revision (FEMA)

MSR	Municipal Service Review (LAFCO)
MW	Mega-watts (power)
MWD	Metropolitan Water District
NAS	National Audubon Society
NCWA	Northern California Water Association
NEPA	National Environmental Protection Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
PWRPA	Power and Water Resources Pooling Authority
RD	Reclamation District
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SDCWA	San Diego County Water Agency
SOI	Sphere of Influence (LAFCO)
SRFCP	Sacramento River Flood Control Project
SRWLD	Sacramento River Westside Levee District
SWRCB	State Water Resources Control Board
SWP	State Water Project
TMDL	Total Maximum Daily Load (of pollutants)
US	United States
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service

DEFINITIONS

Accretion: Sediments carried by a stream and deposited along banks or surrounding areas.[111]

Acre-foot (acre-ft): The volume of water required to cover 1 acre of land (43,560 square feet) to a depth of 1 foot. One acre-foot of water is equal to 325,851 gallons or 1,233 cubic meters of water.[112]

Agriculture: Use of land for the production of food and/or fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

Aquifer: An underground, water-bearing layer of earth (porous rock, sand, or gravel) through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Bank Protection: A method of erosion control in which materials (usually rock revetment) are placed along the banks of a river in order to prevent encroachment on adjacent land.[113]

Bank Stabilization: The prevention of channel migration through bank protection.

Bond: An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

Bureau of Reclamation (USBR, Reclamation, BOR): The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.[114]

California Environmental Quality Act (CEQA): A State Law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

Central Valley Project (CVP): Agricultural water supply system that is operated and maintained by the Federal Bureau of Reclamation; water from the Sacramento River is captured and conveyed from Lake Shasta to the San Joaquin Valley. Initial features of the project were built primarily to protect the Central Valley from crippling water shortages and menacing floods, but the CVP also improves Sacramento River navigation, supplies domestic and industrial water, generates electric power, conserves fish and wildlife, creates opportunities for recreation, and enhances water quality.[115]

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[111] http://www.sacramentoriver.org/glossary.php?glossary_id=11&Strangecode=4707eeb981ba8b00c86e8a38e96423a9 October 28, 2009.
[112] http://ga.water.usgs.gov/edu/dictionary.html
[113] http://www.sacramentoriver.org/glossary.php?glossary_id=16, October 28, 2009.
[114] http://www.usbr.gov/library/glossary/#hmr
[115] http://www.usbr.gov/dataweb/html/cvp.html

Community Facilities District: Under the Mello-Roos Community Facilities Act of 1982 (Section 53311 et seq.), a legislative body may create within its jurisdiction a special tax district that can finance tax-exempt bonds for the planning, design, acquisition, construction, and/or operation of public facilities, as well as public services for district residents. Special taxes levied solely within the district are used to repay the bonds.

Community Services District (CSD): A geographic sub-area of a county used for planning and delivery of parks, recreation, and other human services based on an assessment of the service needs of the population in that sub-area. A CSD is a taxation district with independent administration.

Domestic water use: Water used for household purposes such as drinking, food preparation, bathing, washing clothes, dishes, and dogs, flushing toilets, and watering lawns and gardens. About 85% of domestic water is delivered to homes by a public-supply facility, such as a county water department. About 15% of the nation's population supplies their own water, mainly from wells.[116]

Endangered Species: An endangered species is a species with so few surviving individuals that it is in danger of becoming extinct.

Flood, 100-year: A 100-year flood does not refer to a flood that occurs once every 100 years, but to a flood level with a 1% chance of being equaled or exceeded in any given year.[117]

Floodplain: The relatively flat area along the sides of a river which is naturally subject to flooding.

Floodway: The river zone that could theoretically (based on surveying data and hydraulic calculations) convey the 100-year flood with only a one-foot rise of water level above the height of the unconstricted flood; construction is generally prohibited in these areas.

Formation: A laterally continuous rock unit with a distinctive set of characteristics that make it possible to recognize and map from one outcrop or well to another. A formation is the basic rock unit of stratigraphy. [118]

Gravity flow: Flow of water in a pipe on a descending path.

Groundwater: Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Basin: A ground water reservoir, defined by an overlying land surface and the underlying aquifers that contain water stored in the reservoir. In some cases, the boundaries of successively deeper aquifers may differ and make it difficult to define the limits of the basin.[119]

Habitat: The environment of a plant or animal species.

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[116] http://ga.water.usgs.gov/edu/dictionary.html
[117] http://ga.water.usgs.gov/edu/dictionary.html
[118] http://geology.com/dictionary/glossary-f.shtml
[119] http://rubicon.water.ca.gov/v1cwp/glssry.html

Hydrology: The science concerned with the properties, distributions and characteristics of the water in relation to the earth.

Impact Fee: A fee, also called a development fee, levied on the developer of a project by a county, or other public agency as compensation for otherwise-unmitigated impacts the project will produce. California Government Code Section 66000 et seq. specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Infrastructure: Public services and facilities such as sewage-disposal systems, water supply systems, and other utility systems, schools, and roads.
Land Use Classification: A system for classifying and designating the appropriate use of properties.
Leapfrog Development: New development separated from existing development by substantial vacant land.

Levee: An embankment designed to prevent the flooding of a river; may be natural or human made.

Levee Toe: A Levee Toe is the outer edge of the levee base where it meets the levee grade.

Local Agency Formation Commission (LAFCO): A five-or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals. The LAFCO members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCOs include two representatives of special districts.

Mitigation: An action designed to avoid, minimize, reduce or compensate for a significant impact to the environment.

Natural Levee: Naturally occurring deposits along the sides of a river that constrain frequent floods.

One-Hundred-Year Floodplain: The relatively flat portion of the river channel that has a one percent chance of being inundated by flood waters in any given year.

Project Works: Project works include levees, bank protection projects, weirs, pumping plants, floodways, and any other related flood control works or rights-of-way that have been constructed using State or Federal funds.

Riparian Habitat: An area composed of native riparian vegetation that provides habitat for wildlife.

Sacramento River Conservation Area (SRCA): The 222 miles of the Sacramento River and the adjacent 77,155 acres of land extending from Keswick Dam in Shasta County south to the town of Verona in Sutter County.

Senate Bill 1086 (SB 1086): Legislation authored by Senator Jim Nielsen that authorized the formation of the SB 1086 Advisory Council to oversee issues related to the Sacramento River.

Service Area: A service area is a geographical land area served by a distribution system of a water or other agency.[120]

Set-Back Levee: Levees that are constructed at a distance from the river channel in order to allow the river to occupy a portion of its floodplain; these levees are usually smaller in size than levees placed immediately adjacent to the river channel.

Slough: A naturally occurring side or overflow channel that holds water.

Sphere of Influence (SOI): The probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission (LAFCO) of the county.

State Water Project (SWP): The water storage and conveyance system that is operated and maintained by the California Department of Water Resources.

Water year: Period of time beginning October 1 of one year and ending September 30 of the following year and designated by the calendar year in which it ends. A calendar year used for water calculations. The US Bureau of Reclamation water year is March 1st to February 28th and October 1st to September 30th is the water account year.

Watershed: The total area above a given point on a watercourse that contributes water to its flow; the entire area from which a river receives its water supply. The watershed may also be referred to as the catchment area or catchment basin.

Weir: A notch or depression in a dam or other water barrier through which the flow of water is either measured or regulated.

Wetland: Lands that are transitional between terrestrial and aquatic systems, "covered all or part of the year with salt water or fresh water, excluding streams, lakes, and the open ocean."[121]

[120] http://rubicon.water.ca.gov/v1cwp/glssry.html
[121] Miller, G. Tyler Jr., "Living in the Environment, An Introduction to Environmental Science," Wadsworth Publishing Company, 7th Edition, 1992 (Glossary).

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Data Sources for Maps

Name	Acres	Source
Reclamation District 108	58,819.64	Downloaded from http://casil.ucdavis.edu/casil/ (the GIS data source for CA) Federal water district boundaries from US Bureau of Reclamation 2009
Reclamation District 479	6,132.54	Digitized from paper map and fax provided by Reclamation District 479.
Reclamation District 1004	23,190.05	Digitized from U.S. Bureau of Reclamation 2004 pdf map found online at www.usbr.gov/mp/
Reclamation District 2047	232,824.13	Digitized from paper map, Colusa County LAFCO 1985, verified by Glenn-Colusa Irrigation District, Ben Pennock, District Engineer, 11-02-09.
Cortina Creek Flood Control and Floodwater Control District	12,923.38	Digitized from paper map, Colusa LAFCO 1985.
Knights Landing Ridge Drainage District	73,318.83	Digitized from paper map, Colusa LAFCO 1985.
Sacramento Westside Levee District	105,307.37	Digitized from paper map, Colusa LAFCO 1985.

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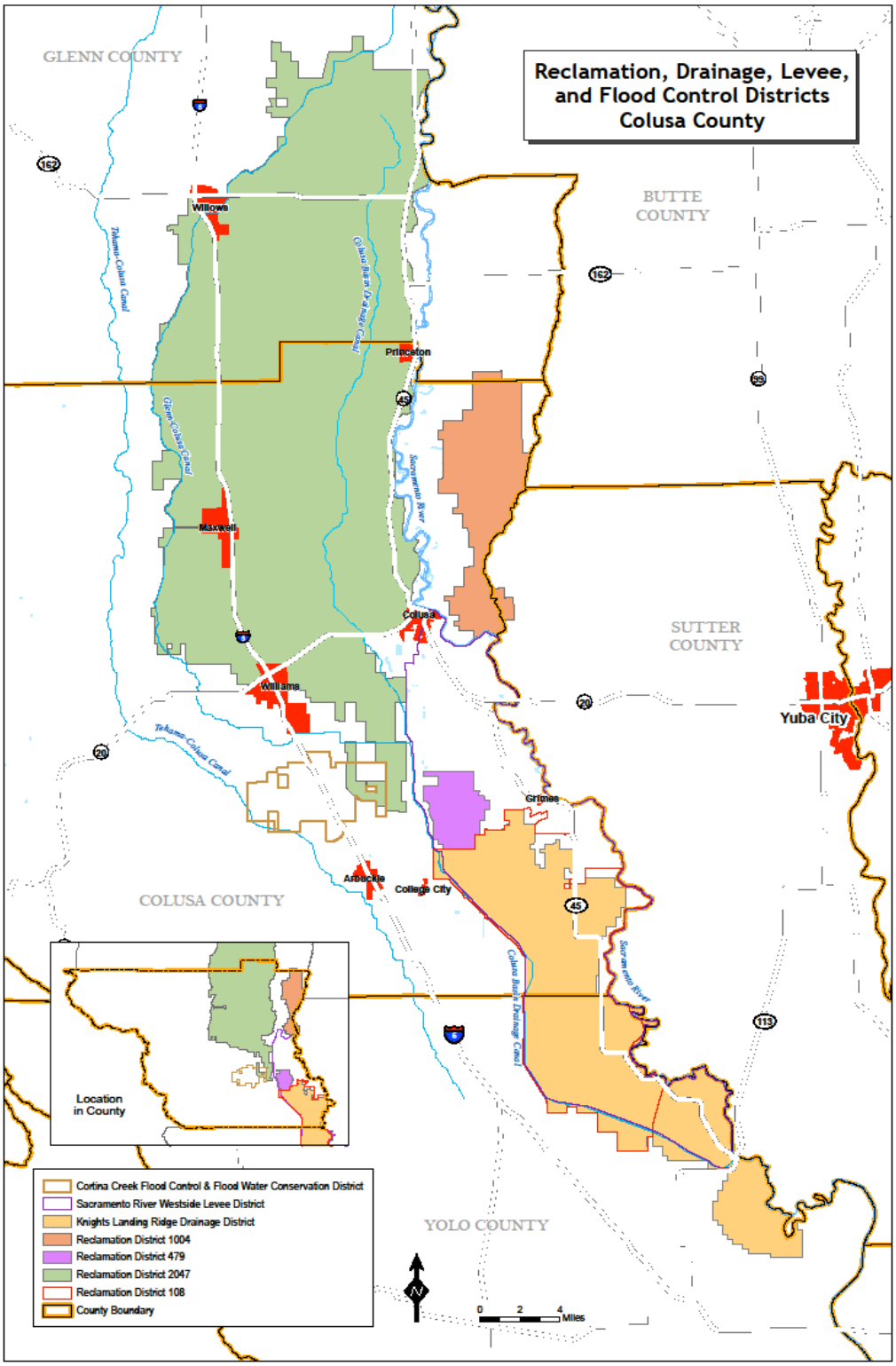
Reclamation, Drainage, Levee, and Flood Control Districts
Colusa County
GLENN COUNTY
BUTTE COUNTY
SUTTER COUNTY
COLUSA COUNTY
YOLO COUNTY
Willows
Princeton
Maxwell
Colusa
Williams
Arbuckle
College City
Grimes
Yuba City
Tehama-Colusa Canal
Glenn-Colusa Canal
Colusa Basin Drainage Canal
Sacramento River
Location in County
Cortina Creek Flood Control & Flood Water Conservation District
Sacramento River Westside Levee District
Knights Landing Ridge Drainage District
Reclamation District 1004
Reclamation District 479
Reclamation District 2047
Reclamation District 108
County Boundary
0 2 4 Miles