RECLANATION Managing Water in the West

Mid-Pacific Region
Year in Review
2004



U. S. Department of the Interior Bureau of Reclamation



2004

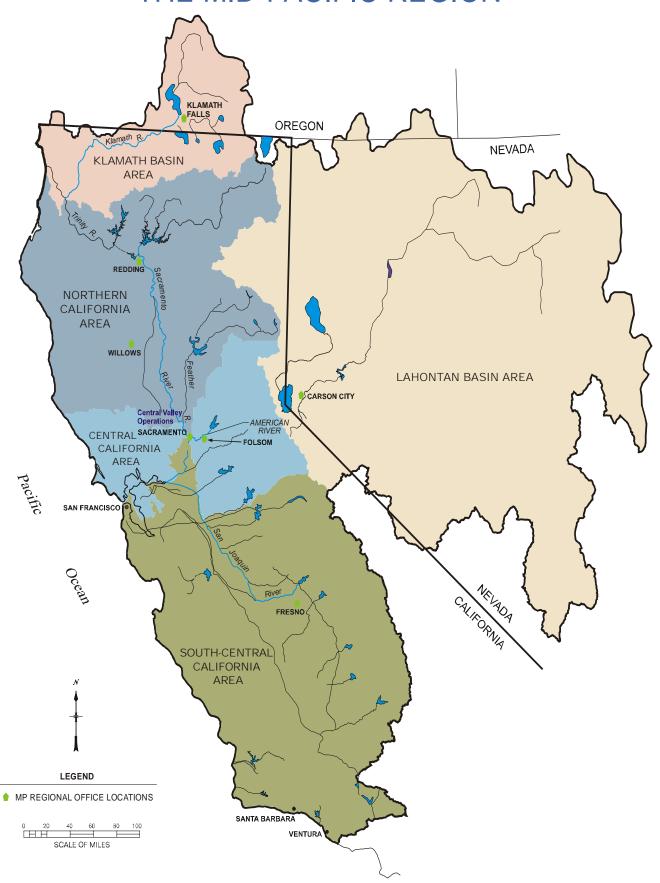
Mid-Pacific Region YEAR IN REVIEW



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.

THE MID-PACIFIC REGION



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FORWARD



Kirk C. Rodgers Regional Director

"A Century of Water for the West" is a poignant reminder of the hard work thousands of our men and women have performed to achieve economic prosperity for the 17 Western states." Just a couple of years ago in 2002, a historic page turned in Reclamation's history. On June 17 of that year, Reclamation turned 100, and its motto, "A Century of Water for the West," was created to remind us of the hard work that many thousands of our men and women have performed to achieve economic prosperity for the 17 Western states.

Just 3 years after President Theodore Roosevelt signed the Reclamation Act on June 17, 1902, a congressional delegation led by Nevada Senator Francis G. Newlands, sponsor of the 1902 Reclamation Act (the Mid-Pacific Region's Newlands Project bears his name), dedicated Derby Diversion Dam in western Nevada. When the dam's gates were opened, water flowed into the Truckee Canal and into a Federally-controlled Reclamation project for the very first time. History was made.

During the next 60 years, huge irrigation projects were built, including the Mid-Pacific Region's Central Valley Project, which created agricultural and industrial profits, prosperity, and huge population growth. With the completion of these projects, approaches to managing water resources became more complex. Reclamation's activities expanded to incorporate many mandates reflected in laws such as the Wild and Scenic Rivers Act (1968), the National Environmental Policy Act (1969), the Clean Water Act amendments to the Water Pollution Control Act (1972 and 1976), the Endangered Species Act (1973), and the Central Valley Project Improvement Act (1992). These changes culminated in creating a new mission statement reflecting our updated operational mandate: "To manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public."

So as Reclamation enters the third year of its second century of service, its primary goal is meeting the increasing water and power demands of the West's burgeoning population and protecting the environment and the American people's long-term investment in infrastructure. To accomplish that goal, we are working very hard to find ways to meet the needs for limited water and power supplies, to provide incentives for water conservation and water reuse, and to form and nurture partnerships with State and local entities and consult with Native American tribes to provide for long-term sustainable use of water resources.

We are now meeting a challenging mix of Federal and State regulatory mandates, providing for public input, warding off litigation, and complying with court orders. We do this while maintaining a focus on our primary goal: Providing reliable water and power to sustain the economy while continuing to protect the environment.

I hope you'll take the time to read this review of our achievements, accomplishments, and activities that took place during 2004. It shows that the Mid-Pacific Region's people have a work ethic that directly contributes to our natural resources sustainability.

Kirk C. Rodgers Regional Director Mid-Pacific Region

THE ORGANIZATION

The Mid-Pacific Region includes offices headquartered in Sacramento and throughout the Region's huge territory. Its biggest asset remains its people who work hard to distribute water and power supplies, nurture conservation and water reuse, form partnerships with stakeholders, and consult with Native Americans to provide for the sustainable use of water resources.

Who and Where We Are

The Mid-Pacific Region is one of the five Reclamation regions that accomplish water planning, operations, and management activities. Established by the Secretary of the Interior in 1942, the Region includes lands in central and northern California, northern Nevada, and southern Oregon. To manage the Region's projects in these widely scattered and diverse areas, Reclamation has established Area Offices in Folsom, California (Central California Area Office), Fresno, California (South-Central California Area Office), and Shasta Lake, California (Northern California Area Office); Klamath Falls, Oregon (Klamath Basin Area Office); and Carson City, Nevada (Lahontan Basin Area Office).

What We Do

The Mid-Pacific Region strives to develop and implement a balanced approach to water allocation, serving users while protecting the environment. Reclamation manages and operates California's largest and best-known water project, the Central Valley Project, as well as California's Cachuma, Orland, Santa Maria, Solano, and Ventura River Projects; Oregon's Klamath Project; and Nevada's Newlands, Humboldt, Washoe, and Truckee Storage Projects. All projects share in the complexity and competition that grow out of scarcity of water in the West. The Region's challenge is to balance competing and often conflicting needs among water uses including urban and industrial use, agriculture, fish and wildlife habitat, water quality, wetlands, endangered species issues, Native American Tribal Trust issues, power generation, and recreation.

Our Employees

At the end of fiscal year 2004, the Mid-Pacific Region employed a staff of 930 permanent employees. Project managers take the lead in developing water policies, negotiating contracts, and implementing habitat improvements. Operations and maintenance personnel make water management decisions, monitor facilities instrumentation, oversee generator rewinds, and develop computer control programs. Support staff members provide design, construction, data processing, human resources, procurement, budget, and other essential services. Whether professional, administrative, technical, clerical, or blue-collar, employees all work diligently to support the Region's overall critical mission requirements relating to water and natural resource management.



Folsom Powerplant workers

The Region's challenge is to balance competing and often conflicting needs among water uses and users.

Water Fact

President Theodore Roosevelt signed the **Reclamation Act** in June 1902 that created the U.S. **Reclamation Service** (renamed the Bureau of Reclamation in 1923). Between 1903 and 1906, 27 Reclamation projects authorized in the The Newlands Project in Nevada, in what is now the Mid-Pacific Region, was the first.

Below is a table listing permanent staff members located throughout California, Nevada, and Oregon:

Office	Location	Employees
Mid-Pacific Regional Office	Sacramento, CA	371
Central Valley Operations Office	Sacramento, CA	55
Mid-Pacific Construction Office	Willows, CA	44
	Weaverville, CA	2
	Redding, CA	1
Lahontan Basin Area Office	Carson City, NV	26
	Truckee, CA	1
	Fallon, NV	3
Klamath Basin Area Office	Klamath Falls, OR	30
Central California Area Office	Folsom, CA	96
Lake Berryessa	Napa, CA	15
New Melones	Sonora, CA	13
New Melones	Jamestown, CA	5
Northern California Area Office	Redding, CA	120
Red Bluff	Red Bluff, CA	13
Willows	Willows, CA	10
Elk Creek	Elk Creek, CA	5
Weaverville	Weaverville, CA	11
South-Central California Area Office	Fresno, CA	52
Tracy	Byron, CA	42
Friant	Friant, CA	12
Cachuma	Santa Barbara, CA	3
	Total	930



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Special Projects Office (MP-120)

The Special Projects Office serves as the primary point of contact for the Region to develop and coordinate policy and action plans for a broad range of highvisibility programs which include the CALFED Bay-Delta Program and the Central Valley Project Improvement Act. Staff members implement the Region's policies in these areas and develop feasible and workable alternatives to proposed actions. The office functions as a coordination bridge between many entities including Reclamation offices; various Department of the Interior bureaus; and other Federal, State, public, private, and Congressional entities.

Office of Public Affairs (MP-140)

The Public Affairs Office manages the Mid-Pacific Region's public affairs, public involvement, and public education projects along with many internal employee information activities. Other responsibilities include meeting management, presentation planning, and exhibit development. The Public Affairs Officer is the Region's spokesperson, and the office is the point of contact for the news media, the public, and elected officials and their staffs. Staff members write speeches, briefing papers and news releases, and design fact sheets, brochures, newsletters, annual reports, and other materials related to ongoing Regional projects and activities. Staff design and implement communication plans and strategies for the public, Reclamation employees, and the news media, and provide oversight for the development and implementation of the Internet. Public Affairs manages the Foreign Visitor Program and coordinates tours for members of Congress and congressional staff members. Staff also provide audiovisual services (including film-based and digital photography and videography) while maintaining the Region's photo library.

Division of Environmental Affairs (MP-150)

Division staff ensure compliance with a variety of environmental statutes and provide policy and procedural guidance to other divisions and Area Offices. The major controversial environmental issues center on the application and interpretation of the National Environmental Policy Act and the Endangered Species Act. The division is responsible for Region-wide compliance with the National Historic Preservation Act, hazardous materials statutes, data management, and wetlands and endangered species programs. The division also serves as lead for the Interagency Ecological Program.

Office of Safety, Health, and Security (MP-160)

The staff provide support for the Region's Occupational Safety and Health (OSH), Security, and Accessibility programs, equipment and facilities, and contractor operations for the protection of employees and visitors. The division staff ensure the Region's operations comply with Federal and Agency OSH standards and assist in implementing supplemental policy needed to ensure a safe and healthful work environment. Office personnel provide technical guidance to field safety professionals, conduct accident investigations and OSH program evaluations, and promote safe work practices. The security staff work to ensure the physical security of Reclamation facilities, employees, and operations. The accessibility staff work to make Reclamation facilities and operations accessible to all individuals.

MID-PACIFIC REGION



Sutter Wildlife Refuge

Water Fact

The Central Valley
Project is one of
the largest water
storage and transport
systems in the world.
Its benefits extend
worldwide.

Division of Design and Construction (MP-200)

Division staff members work closely with the Denver Technical Service Center, Area Offices, outside entities, and others to provide a range of technical engineering, geologic, photogrammetric, and mapping support services. The division serves as the lead for the Regional Dam Safety Program. The staff prepare designs and specifications for new construction and for the modification or repair of existing facilities, provide engineering consultation services and engineering technical support for planning studies, and provide engineering support during construction. Staff also perform subsurface investigations and geologic analysis to support engineering designs, water resource planning efforts, operation and maintenance activities, and construction activities. Staff provide ground-water and geohydrologic support for all aspects of ground-water issues. The division's survey and photogrammetric mapping section supports design, planning, and structural monitoring activities.



Sacramento River diverter

Division of Resources Management (MP-400)

The division's personnel are responsible for Regional activities related to water rights, administration of water service contracts, Central Valley Project Improvement Act and Reclamation Reform Act compliance evaluations, real estate, Native American Affairs, land resources management, irrigation and drainage, Geographic Information Systems, and land classification. Division staff members are responsible for a broad range of programs including water acquisition; water conservation; water rights for the Delta Division, the San Luis Unit, and the San Felipe Division; title transfer; anadromous fish screens; Contra Costa Pumping Plant mitigation; Suisun Marsh; Regional recreation and wetlands coordination; maintenance of the Region's facilities; Replacements, Additions, and Extraordinary Maintenance Program activities; Emergency Management Program; Native American Technical Assistance Program, water transfer activities; examination of facilities; and negotiation of long-term water service renewal contracts and renewal of the Sacramento River Settlement Contracts.

Human Resources Office (MP-500)

The Human Resources Office functions as the Servicing Personnel Office for the Region's employees and offices and advises management on human resource issues. Staff members provide organizational and position analysis, diversity consultation, and recruitment and staffing activities. They also provide advisory services for employee conduct and performance issues, complaints, and grievances. Staff negotiate and administer collective bargaining agreements with employee unions, oversee employee training and development programs, coordinate payroll activities, and advise employees on retirement and benefit programs.

Division of Planning (MP-700)

The Division of Planning's primary responsibility is the preparation of multipurpose water resource studies and plans for use in conserving water, land, power, and other associated natural resources. Planning staff members conduct strategic planning and formulate alternatives and recommendations for resource studies. They are responsible for maintaining and improving Central Valley Project (CVP) delivery capabilities through the CVP Yield Feasibility Investigation Program, along with evaluating improvements to water supply reliability through CALFED participation. Planning staff is responsible for the review, application, development, and maintenance of mathematical computer models used for evaluating surface water supply and reliability, ground water, sediment transport, water quality and temperature, and associated fishery impacts. Planning staff engages in review and use of models related to computer applications, hydrologic data development, project planning and management related to research coordination, and documentation of study results.

Business Resources Center (BRC) (MP-3000)

The BRC is the Mid-Pacific Region's principal supplier of financial, information technology, and other administrative services and expertise. The BRC's mission is to provide its customers with the information, expert business advice, and supplies for services needed to successfully manage operations and serve their customers. The BRC staff also provide specialized support to Central Valley Project water and power contractors and other Federal agencies, such as the U.S. Fish and Wildlife Service. The BRC's functions include information technology management, budgeting, accounting, water rate setting, internal audits, property and records management, and acquisitions. During 2004, the BRC aggressively pursued its purpose of providing the services the Region needed to accomplish its goals.

Central California Area Office (CCAO)

The CCAO main office is located 23 miles east of Sacramento within the Folsom city limits and has field offices at New Melones and Lake Berryessa. CCAO staff manage water and land resources in 12 counties. Its jurisdiction extends from the California coast to the crest of the Sierras and from the American River Basin in the north to the Stanislaus River in the south. Staff members are responsible for Folsom Dam, Folsom Lake, and Powerplant; Nimbus Fish Hatchery, Nimbus Dam, Lake Natoma, and Powerplant; New Melones Dam, Lake, and Powerplant; Monticello Dam, Lake Berryessa, and Powerplant; Putah Creek Diversion Dam; the Folsom-South and Putah South Canals; Sweeny Creek, Suisun Creek, McCoy Creek, and Green Valley Wasteways. CCAO manages the recreation areas at Lake Berryessa and New Melones Lake and has a long-term lease with the California Department of Parks and Recreation for Folsom Lake and Lake Natoma recreation management.



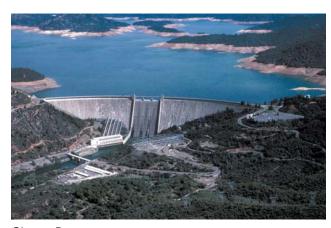
Folsom Lake offers many recreational opportunities.



Aerial view of the "A" canal fish screen and associated facilities.



Lake Tahoe Dam



Shasta Dam

Klamath Basin Area Office (KBAO)

Located in south-central Oregon and north-central and northwestern California, the Klamath Project was authorized in May 1905 for irrigation of up to 240,000 acres of family farms and ranches. Storage reservoirs are impounded by Link River Dam, Clear Lake Dam, and Gerber Dam, which provide 1,095,000 acrefeet of active storage in the Klamath River and Lost River Basins. More than 1,400 miles of canals and drains provide water for users, including two National Wildlife Refuges. Additional water-regulating facilities include Anderson-Rose Dam, Malone Diversion Dam, Lost River Diversion Dam and Channel, Miller Diversion Dam, Klamath Straits Drain, and the Tule Lake Tunnel and pump.

Lahontan Basin Area Office (LBAO)

Headquartered in Carson City, Nevada's capital, LBAO covers about 80,000 square miles in northern Nevada and northeastern California. The area extends from the Truckee, Carson, and Walker River drainages on the eastern slope of the Sierra Nevada range to the Great Basin National Park in eastern Nevada and from the Oregon-Nevada border to within 60 miles of Las Vegas. LBAO staff are responsible for four Reclamation projects: the Newlands Project which includes Lake Tahoe Dam and Reservoir, Derby Diversion Dam, and Lahontan Dam and Reservoir; the Washoe Project which includes Stampede Dam and Reservoir, Prosser Creek Dam and Reservoir, Derby Dam Fish Passage, Marble Bluff Dam, and Pyramid Lake Fishway; the Truckee River Storage Project which includes Boca Dam and Reservoir; and the Humboldt Project which includes Rye Patch Dam and Reservoir.

Northern California Area Office (NCAO)

NCAO staff administer Reclamation lands, water service, and repayment contracts from north of Sacramento to the Klamath Basin in Oregon. The office is headquartered at Shasta Dam. Shasta Dam is the second largest concrete dam in the country and impounds California's largest reservoir with a capacity of 4.5 million acre feet. Field offices are located in Willows, Red Bluff, and Weaverville, California. NCAO staff oversee Shasta and Trinity Dams, powerplants, and reservoirs. NCAO also staffs the Trinity River Restoration Program office in the Trinity Basin. NCAO staff members administer the Trinity River Fish Hatchery, the Livingston Stone National Fish Hatchery, and the Coleman National Fish Hatchery; Keswick Dam, Reservoir, and Powerplant; Lewiston Dam, Lake, and Powerplant; Judge Francis Carr Power Plant; Clair A. Hill Whiskeytown Dam and Lake; Stony Gorge Dam and Reservoir; East Park Dam and Reservoir; the Red Bluff Diversion Dam; the Corning Canal and Corning Pumping Plant; and the Tehema-Colusa Canal.

South-Central California Area Office (SCCAO)

SCCAO staff manage Reclamation activities from the Sacramento-San Joaquin Delta south to the Tehachapi Mountains and the south coastal counties of Santa Barbara and Ventura. The office has jurisdiction over 2.5 million acres of irrigated land which accounts for 25 percent of Reclamation-wide total irrigated acreage. SCCAO staff administer approximately 75 water service and repayment contracts. Staff members are responsible for water conservation for the Central Valley Project Delta Division, San Luis Unit, and San Felipe Division; and make water supply declarations for the Friant Division and the Cachuma Project. SCCAO's facilities include the Delta Cross Channel Canal, Contra Costa Canal, Tracy Pumping Plant, Delta-Mendota Canal, B. F. Sisk San Luis Dam and Reservoir, O'Neill Dam and Forebay, San Luis Canal, Friant Dam and Millerton Lake, Friant-Kern Canal, Madera Canal, Twitchell Dam, Bradbury Dam and Lake Cachuma, and Casitas Dam and Lake Casitas.



Friant-Kern Canal

Central Valley Operations Office (CVO)

CVO staff manage the Central Valley Project (CVP) daily operations from the Sacramento Joint Operations Center (JOC), which is shared with the State Water Project (SWP) Operations Office, the Division of Flood Management of the California Department of Water Resources (DWR), the National Oceanic and Atmospheric Administration's National Weather Service Regional Office, and the River Forecast Center (RFC). This close proximity is crucial to the CVP and SWP's coordinated operation. CVO staff perform operations in forecasting and managing water supply operations, water quality and salinity, instream flows, and San Joaquin/Sacramento River Bay-Delta conditions. Staff members make the annual water allocation to irrigation and urban CVP contractors, and coordinate flood operations with DWR, the RFC, and the U.S. Army Corps of Engineers. CVO staff forecast hourly, daily, and monthly hydroelectric power generation and coordinate daily generation and project-use schedules. CVO staff perform forecasting with the Western Area Power Administration, the power marketing agency for Reclamation's surplus power products. Staff also monitor and operate CVP powerplants and facilities from the centralized control system in the JOC.



Sacramento River

Mid-Pacific Construction Office (MPCO)

The Mid-Pacific Construction Office (MPCO) manages all pre-construction, on-site construction, and construction contract administration on new construction, rehabilitating existing facilities, extraordinary maintenance, concrete structures and buildings, safety of dams modifications, hazardous waste cleanup and closure, fish screens, temperature control devices, fish facilities, canals and pipelines, pumping facilities, and storage dams and reservoirs throughout the Mid-Pacific Region. During 2004, MPCO maintained field stations at Folsom Dam (Folsom, California), Shasta Dam (Redding, California), Placer County Water Agency Pumping Plant (Auburn, California), Link River Fish Ladder (Klamath Falls, Oregon), Trinity River Restoration Office (Weaverville, California), and New Melones Dam (Calaveras County, California).



Construction of the American River Pump Station Project underway in 2004.

HIGHLIGHTS

The Mid-Pacific Region's employees are engaged in a myriad of activities to ensure its customers receive high-quality services. Achievements during 2004 span many areas. On the following pages are the year's highlights.

American River Pump Station Project

As part of the initial construction of the Auburn Dam, Reclamation removed a pumping plant belonging to the Placer County Water Agency (PCWA) that was used to convey water supplies from PCWA's Middle Fork Project. Reclamation and PCWA entered into an agreement that obligated Reclamation to provide a temporary pumping facility. Reclamation, PCWA, and the State of California are now constructing a replacement pumping plant.

On October 6, 2003, the Steve Manning Construction Company of Redding, California, started work on Phase I of the American River Pump Station Project on the north fork of the American River near Auburn, California. The \$17 million contract, in conjunction with Phase II scheduled to begin in late 2005, will make up to 35,000 acre-feet of American River water available to the PCWA's service area. In addition to the pumping station, the project includes an intake tunnel, wet well, and discharge pipeline. The project will restore the currently unwatered riverbed created when the river was diverted through a tunnel in 1977 in anticipation of building Auburn Dam. Excavation for the project will involve some 750,000 cubic yards of material. The goal is to have the new pumping plant functional in 2006 and the project completed in 2007.

For additional information, contact the Mid-Pacific Construction Office at 530-934-7066 (TDD 530-934-1345).

American River Water Education Center (ARWEC)

The ARWEC at Folsom Dam furthers Reclamation's mission by providing educational programs and information on water resources and water conservation to school groups and other diverse community groups. ARWEC has been welcoming visitors for more than 6 years. ARWEC's primary purpose is to promote water conservation awareness. This is accomplished through interactive exhibits, tours, a water efficient garden, and participation in public outreach which includes special events and off-site programs. ARWEC is operated as a partnership with the California Department of Parks and Recreation.

ARWEC provided educational programs to more than 13,000 individuals in 2004. An additional 4,015 children and adults received water conservation messages. ARWEC sponsored the Annual Get W.E.T. event (Water Education Today) with various water agencies participating in a family day event that attracted 300 people. ARWEC helped organize and participated in the American River Salmon Festival that resulted in 3,500 participants. ARWEC also participated in Creek Week making 150 community contacts. ARWEC trained volunteers to provide quality programs contributing 1,783 hours in 2004.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Auburn Project Lands/Auburn State Recreation Area - Fire Management Plan Strategy

Reclamation manages 26,000 acres of the American River Watershed as part of the Auburn Dam and Reservoir Project, originally authorized by Congress in 1965. Much of this area runs adjacent to the communities of Auburn and Foresthill, California, along with other residential developments. The oak-chaparral environment within this area can be highly combustible under certain dry conditions, and the risk of wildland fires is a major concern as residential and recreational activity continues to increase.

Because of these concerns, through management agreements with the California Departments of Forestry and Fire Protection and California Department of Parks and Recreation, Reclamation is developing a Comprehensive Fire Management Plan for the Auburn Project Lands. A Fuels Management Action Plan has been implemented. Local fire departments and several local private citizen groups are continuing to work with project partners as the initial phase of a 16-mile shaded fuel break project nears completion.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Business Resource Center Activities (BRC)

Information Technology (IT)

The BRC established a pilot laboratory for testing and evaluating Interior's new standard IT infrastructure, the Active Directory. BRC staff also laid the groundwork for installing a new operating system on Regional computers and continued process improvement of data integrity and reporting for Reclamation's Water Operation Record Keeping System.

The BRC also established and implemented standard processes for monitoring and controlling hardware and software purchases and provided managers with the capability of monitoring desktop software within their organizations.

The Regional IT Security Manager consolidated necessary actions for key IT systems, such as the Mid-Pacific General Support Systems, to receive certification and accreditation. As a result, the Region is in conformance with the Federal Information Security Management Act and Reclamation-wide security schedules and commitments.

Budget Services

The budget formulation process is being continually improved upon to provide more managerial involvement in the decision-making process. The Regional Director identified unobligated carryover funds as a critical budget management item in 2004. The BRC, in coordination with Mid-Pacific Regional offices, reduced unobligated carryover balances to the lowest level in several years, resulting in more effective management of Federal funds.

Water Fact

The Central Valley
Project annually
delivers about
7 million acre-feet
of water.
It irrigates more
than 3 million acres
of California farmland and provides
water to about
2 million urban
consumers.

Financial Integrity

The BRC provides accounting services for the Region, including preparing project financial statements, processing \$444 million in cash receipts, managing a \$53 million working capital fund, ensuring implementation of accounting policies and standards, and providing guidance and support for the annual financial statement audit. The fiscal year 2004 audit of Reclamation's consolidated financial statements, which includes the accounting records for the Region, resulted in a timely and unqualified ("clean") audit opinion. Controls over construction-in-progress, along with structures and facilities accounts, are areas where audit findings were reported; however, the findings were not of such significance as to impact the fair presentation of the financial statements. The BRC took actions to address findings and improve processes for accruals and undelivered orders.

Reclamation's leadership firmly believes that the timely implementation of Inspector General and Government Accountability Office audit recommendations is essential to improve efficiency and effectiveness in its programs and operations and to achieve financial integrity and accountability goals. As a result, Reclamation has instituted a comprehensive audit follow-up program to ensure that audit recommendations are implemented in a timely manner. The BRC continued to participate in Reclamation's efforts to implement Departmental and Bureau-wide recommendations.

Water Ratesetting and Cost Recovery

To meet customer needs, the BRC's Ratesetting Services office completed and posted the draft 2005 Central Valley Project water rates on the Internet on October 1, 2004. This effort provided Reclamation's 220-plus water contractors with detailed information on data used to develop the rates and each water contractor's net results of operations, including supporting data, for the most recent fiscal year (2003).

There were two additional significant workloads accomplished this year. The first was completing a lengthy retroactive adjustment for the Sly Park Dam and Sugar Pine Dam title transfers requiring the annual recalculation of both irrigation and Municipal and Industrial (M&I) individual water service contractors' net results of operation from 1962 through 2003. The second was extensive staff effort and involvement in the City of Fresno, et al. v. United States, et al. lawsuit requiring numerous recalculated settlement scenarios for M&I individual water service contractors' net results of operation from 1949 through 2002.

Records Management and Freedom of Information Act (FOIA)

The BRC was heavily involved during 2004 in supporting the Regional Office staff and Regional Solicitor by providing the administrative records for two Federal lawsuits: Natural Resources Defense Counsel v. Rodgers, and Laub et al. v Norton et al. No. CVFF 00-6601 (CALFED). BRC staff researched active, inactive, and archival files, and provided more than 800,000 pages of documents for specialist and attorney review. BRC staff used a newly-developed database

to manage documents involved in these litigations, saving hundreds of staff hours that would normally have been spent tracking and searching for documents. As a result of the increasing frequency of litigation, the BRC developed a standard operating procedure to assist customers and internal staff in handling future litigations in a smoother and more standard way.

The BRC also processed 43 requests under FOIA. More than 5,000 pages of information were reviewed to determine whether the information should have been released to the requestor or withheld.

Aquisition

The BRC's Acquisition Services Office continues to maintain a vigorous Business and Economic Development program that actively seeks and assists small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and womenowned small business concerns in participating in the contracting process.

President's Management Agenda (PMA)

The BRC is the Region's coordinator for implementation of the PMA and has the lead responsibility on such items as Budget-Performance Integration, Government Performance and Results Act reporting, and financial reporting integrity. The BRC also coordinates the Regional efforts in "Getting to Green," helping the Region and Reclamation to improve overall operations in light of the PMA.

For additional information, contact the Business Resources Center at 916-978-5550 (TDD 916-978-5608).

CALFED Bay-Delta Program

CALFED is a collaborative effort among 24 Federal and State agencies and representatives of California's environmental, urban, and agricultural communities to improve water quality, fish and wildlife habitat, and water supply reliability in the Delta, the hub of the State's water distribution system. The Delta is one of California's unique and valuable resources, providing drinking water for more than 22 million Californians and supplying irrigation water for the State's \$27 billion agricultural industry. Its levees protect farms, homes, and infrastructure. As the largest wetland habitat and estuary in the West, the Delta also supports 750 plant and animal species, some found nowhere else on the planet. Ultimately, California's trillion-dollar economy, the seventh largest in the world, is at risk if environmental and water management problems to restore the ecosystem are not resolved. CALFED is the largest and most comprehensive water-management plan in the nation and is being hailed as a national model of collaborative resource management.



Delta aerial

Efforts to address the problems collaboratively in the Delta began more than 10 years ago when State and Federal agencies with management and regulatory responsibility in the Delta Estuary signed a Framework Agreement in June 1994 setting forth the Operating Principles for developing a long-term solution to the Delta's problems. Phase I concentrated on identifying and defining the problems confronting the Delta system and providing three alternatives for further analyses in Phase II. Under Phase II, a preferred program alternative was developed and a comprehensive environmental review process on a broad level was conducted, resulting in the release of the Final Programmatic Environmental Impact Statement/Environmental Impact Report in July 2000. The Record of Decision was then signed on August 28, 2000, beginning Stage I of Phase III – the first 7 years of a 30-year long-term implementation plan to restore the Delta ecosystem and improve water management.

On October 25, 2004, after 4 years of Congressional negotiations, the President signed landmark bipartisan legislation that reauthorized CALFED and authorized \$389 million in new Federal appropriations for this major environmental initiative to restore California's critical Delta estuary while also addressing the needs of urban and agricultural waters users. CALFED agencies have spent \$1 billion over the last decade to significantly improve the ecological health of the Delta watershed by restoring and protecting habitat and enhancing the environment for fisheries and wetlands. This legislation ensures that CALFED will continue species and ecosystem restoration using the best available science, along with driving forward State and Federal efforts to modernize California's watermanagement infrastructure.

As one of 11 participating Federal CALFED agencies, Reclamation has implementation responsibility for water supply reliability, storage, water use efficiency, water transfers, the Environmental Water Account (EWA), and conveyance actions. During 2004, Reclamation made major progress in moving forward the storage investigations for four potential storage projects, advancing key conveyance projects through the Delta Improvements Package, facilitating water transfers, investing in water conservation projects, and protecting fish and reducing conflicts at Delta pumping facilities through the use of the EWA. Reclamation, along with other CALFED agencies, signed an agreement to extend the EWA through 2007 while a long-term EWA is being negotiated. They also signed an amendment to the CALFED Conservation Agreement extending the regulatory commitments through 2007. Reclamation additionally participated as one of the six Federal agencies on the California Bay-Delta Authority Board - the State governing body for the CALFED Program.

For additional information, contact the Special Projects Office at 916-978-5024 (TDD 916-978-5608).

Central Valley Automated Control System (CVACS)

Reclamation's CVACS provides the technology essential to the real-time coordination of hydroelectric power generation and water releases with

interrelated infrastructures operated by other Federal, State, and local agencies. CVACS is a network of sensors and automation equipment enabling reliable, cost-effective generation of electric power; optimizing available water supply; and efficiently managing water release operations for flood control, water quality, and environmental protection purposes.

For 2004, the Office of the Inspector General reviewed 20 Information Technology Systems in Interior for the Annual Evaluation of the Department of the Interior Information Security Program. CVACS was the only system with no Federal Information Security Management Act weaknesses identified. In addition, Reclamation installed a modern receiver for our hydrometerological and water quality telemetry retiring an obsolete interconnection provided by the California Department of Water Resources. Reclamation implemented several technology improvements supporting Western-Reclamation joint efforts to reengineer Central Valley Project (CVP) power operations business practices for the 2005 transition to the Sacramento Municipal Utility District Control Area. This will result in less cost of CVP operation, and CVP generators will perform a greater role in providing power system regulation and reserves.

For additional information, contact the Central Valley Operations Office at 916-979-2180 (TDD 916-979-2183).

Central Valley Project (CVP) Water and Power Operations

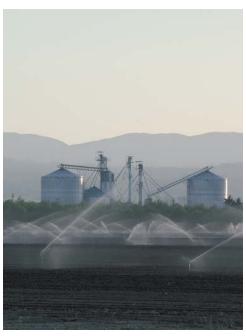
Water Operations

In the 2004 Water Year, classified as "below normal" in the Sacramento River basin, Reclamation managed the CVP to meet project water and power demands and also the Central Valley Project Improvement Act's requirements, the Endangered Species Act (ESA) Biological Opinions (BO), CALFED objectives, and the water rights decision for the Delta (D-1641).

The CVP supported a water supply allocation of 100 percent for north-of-Delta agricultural and north-of-Delta urban project water users, 70 percent for south-of-Delta agricultural project water users, and 95 percent for south-of-Delta urban water users. Allocations were 100 percent for the water rights settlement contract holders, exchange contractors, and wildlife refuges. Reclamation also facilitated water transfers to CVP water districts.

In other actions, Reclamation continued coordination with the California Department of Water Resources (DWR) and other CALFED agencies in developing a proposal for improving the CVP and State Water Project (SWP) integrated operations. These integrated operations consider the South Delta Improvement Plan, flexibility in the Coordinated Operating Agreement with DWR, optimizing the San Luis Reservoir operations, and proposed Delta-Mendota Canal (DMC)/California Aqueduct (CA) Intertie operation.

Reclamation completed work on the CVP Operations Criteria and Plan (OCAP) and Biological Assessment (BA) with the documents posted on the web June 30, 2004.



Agriculture in the Central Valley



Agriculture in the southern San Joaquin valley depends upon CVP-provided water.

The OCAP was prepared for consultation under the ESA to serve as a baseline description of the facilities and operating environment of the CVP and SWP. The BA included several new projects under formal consultation including: The Trinity River flows, Freeport diversion and DMC/CA Intertie.

There are also some items under early consultation, including the operations of the 8,500 cubic feet per second (cfs) Banks State pumping plant and permanent barriers, further integration of the CVP and SWP, and an assumption of a long-term EWA. New BOs were received from the U.S. Fish and Wildlife Service on Delta smelt dated July 30, 2004, and National Oceanic and Atmospheric Administration's National Marine Fisheries Service for winter-run and spring-run Chinook salmon, steelhead, and coho salmon dated October 22, 2004.

The CVP participated in various environmental programs during 2004. Reclamation is a co-lead agency in the annual Vernalis Adaptive Management Plan (VAMP), an ongoing 12-year program to evaluate the effects of pulse flows and export

reductions on the San Joaquin River salmonids' outmigration through the Delta. The 2004 VAMP required meeting a flow target at Vernalis of 3,200 cfs and a combined CVP/SWP export reduction to 1,500 cfs. The CVP operations accounted for dedication of 800,000 acre-feet of yield annually for restoring fish and wildlife habitat in accordance with CVPIA Section 3406(b)(2) and the Interior's May 2003 Decision on Implementation of Section 3406(b)(2).

In 2004, EWA water was used to compensate the CVP for environmental actions. In a separate environmental action, Reclamation acquired and released approximately 36,700 acre-feet of additional water at Lewiston Dam to the Trinity River in late August and September to assist in minimizing fish losses on the Klamath River, due to potentially high river temperatures and low flow.

Reclamation also continued to play an active role in the State Water Resources Control Board's periodic review of the Water Quality Control Plan for the Delta estuary and other water rights hearings and proceedings.

Reclamation implemented a Recirculation Study in August 2004 to evaluate the effectiveness of using the pumping at Tracy Pumping Plant and release of water from the DMC to the San Joaquin River for water quality and flow purposes.

In June 2004, a levee failure occurred on Upper Jones Tract in the Delta. Reclamation and DWR worked cooperatively to manage the SWP and CVP to minimize impacts to the Delta, the environment, and water users.

For additional information, contact the Central Valley Operations Office at 916-979-2180 (TDD 916-979-2183).

Power Operations

CVO employees substantially completed the power generation optimization routine that was to be used beginning January 1, 2005, for scheduling CVP generation. This tool will enable CVO energy pre-schedulers to develop optimal water/power schedules that produce energy to cover project pumping needs and a portion of the CVP power customer loads.

Extensive efforts were under way in 2004 in preparation of the expiration of the Pacific Gas & Electric (PG&E) contract that integrated the CVP hydroelectric generation with PG&E's resources since the late 1960s. A part of this preparation also involved the CVP generation and transmission system transitioning from the California Independent System Operator's (CAISO) control area into the Sacramento Municipal Utility District's control area. Such a move will result in less cost of CVP operation versus operating under the CAISO control area. CVP generators will perform a greater role in providing power system regulation and reserves.

In fiscal year 2004, the Region also was preparing to transition from wide-band analog radio systems used throughout the area for operations and maintenance activities. Interior mandates required digital narrow band radios to be operational by January 1, 2005. Essentially all MP Region's radios were replaced and made ready for this new requirement.

In order to provide load forecasting and scheduling related to project use pumping loads, installation of a new automated meter reading system was initiated. This involved replacing meters at 90 canal-side pumping stations with meters that could be remotely polled and adding radios to permit this polling. The 30-minute interval meter readings will be aggregated to an additional 85 project use meters data provided by Western Area Power Administration to Reclamation. This process results in more accurate forecasting and scheduling data to be developed that is based on past usage.

For additional information, contact the Central Valley Operations Office at 916-979-2180 (TDD 916-979-2183).

Delta-Mendota Canal (DMC)/California Aqueduct (CA) Intertie

The DMC/CA Intertie consists of constructing and operating a pumping plant and pipeline connection between the two canals. The DMC/CA Intertie alignment is proposed near DMC milepost 7.2, where the DMC and CA are about 500 feet apart.

The Intertie would be used in a number of ways to achieve multiple benefits, including meeting current water supply demands, allowing for Central Valley Project (CVP) Delta export and conveyance facility maintenance and repair, and providing operational flexibility to respond to emergencies. The Intertie would allow flow in both directions, which would provide additional flexibility to both CVP and State Water Project operations.



Power lines distribute electricity produced by CVP hydropower generators.



The Delta-Mendota Canal

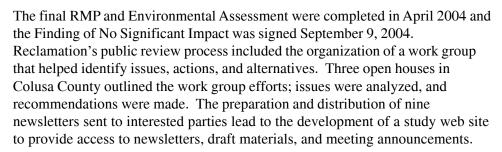
The Intertie includes a 400 cfs pumping plant at the DMC that would allow up to 400 cfs to be pumped from the DMC to the CA. Up to 900 cfs flow could be conveyed from the CA to the DMC using gravity flow.

In 2004, Reclamation continued to develop the project design and issued a draft Environmental Assessment/Initial Statement for public comment. Reclamation finalized the environmental documentation in early 2005, and expects to initiate construction in 2005.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

East Park Reservoir Resource Management

The East Park Resource Management Plan (RMP) presents three different management alternatives to maintain the primitive nature of the East Park Reservoir area, located 33 miles southwest of Orland, California. The RMP preferred alternative outlines various strategies to continue current management activities. The RMP preferred alternative also outlines new management strategies to consider additional agreements and partnerships to enhance and protect the area's resources while protecting public health and safety. Consideration of new management strategies is necessary in order to correct a number of health and safety problems, including overcrowding on holiday weekends. The document provides guidance towards improving the environmental and recreational conditions around the reservoir.



For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Folsom Dam Road Access

On February 28, 2003, Reclamation closed the road across Folsom Dam for an indefinite period of time to preserve and protect the core mission of the Central California Area Office's facilities (flood control and water supply) and the downstream public. This action was the result of a security review conducted by the Defense Threat Reduction Agency (DTRA) and subsequent analysis and evaluation of DTRA's recommendations by Reclamation and Interior. Reclamation released a Draft and a Final Environmental Impact Statement (EIS) for the Folsom Dam Road Restricted Access action. The EIS described the



East Park Dam and Reservoir



Folsom Dam Road closed in 2003

environmental effects of the preferred alternative, the no-action alternative and two additional alternatives for a partial road opening. The comment period closed January 18, 2005. The Record of Decision is expected to be issued in spring 2005.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Folsom Dam Road Bridge

The Folsom Dam Road was closed indefinitely for security reasons on February 28, 2003, to preserve and protect the core mission of the facility and for the safety of the public. The Energy and Water Appropriations Act for 2004 authorizes the U.S. Army Corps of Engineers (USACE) to design and construct a permanent Folsom Dam Road bridge. The City of Folsom wants the USACE to complete the project and have the bridge open to traffic by the end of calendar year 2007.

USACE is currently examining potential alignments, some of which will likely require some of Reclamation's buildings, facilities, and offices near Folsom Dam to be replaced. Reclamation continued to work closely with the USACE on a new bridge below Folsom Dam in 2004 and is awaiting a decision from the USACE on the alignment.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Freeport Regional Water Project

Reclamation and the Freeport Regional Water Authority (FRWA) prepared a joint Environmental Impact Report/Environmental Impact Statement for the project which will help meet local and regional water supply needs. The Central California Area Office provided Reclamation's project management and completed a Record of Decision in early January 2005.

Reclamation's decision is to proceed with the preferred alternative, Alternative 5, as proposed by the FRWA. Reclamation's Federal Action is to provide for the diversion of Central Valley Project (CVP) water as identified in the East Bay Municipal Utility District's Amendatory Contract at Reclamation's diversion point near Freeport on the Sacramento River, provide for assignment of 30,000 acrefeet of CVP water from the Sacramento Municipal Utility District to the Sacramento County Water Agency, and provide for the use of the Folsom South Canal by the FRWA.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Water Fact

The primary flood control feature on the American River is Folsom Dam and Reservoir. The dam has many times demonstrated its ability to harness and control potentially devastating floods on the American River. Since its completion in 1956, Folsom Dam has prevented some \$4.8 billion in flood damage.



Bacon Island in the Delta is being evaluated as a water storage reservoir.

In-Delta Storage (IDS) Investigation

The California Department of Water Resources (DWR) is conducting the IDS Investigation under the CALFED Surface Storage Program to evaluate surface storage in the Delta.

Reclamation's involvement in the planning study is providing technical assistance and review since Federal feasibility study authority does not exist.

The IDS project involves converting two Delta islands, Webb Tract and Bacon Island (11,000 total acres), into water storage reservoirs and managing two islands, Bouldin Island and Holland Tract (9,000 total acres), as wetland and wildlife habitat.

The IDS Program Draft Report, May 2002, found that the Delta Wetlands Project, as proposed by Delta Wetlands Properties, is generally well planned but project modifications and further evaluation were needed to make the project acceptable for public ownership. Assessment of the Delta Wetlands design raised several concerns relative to risk of structural failure, environmental mitigation, construction methods, and potential for reduced water quality. A preliminary reengineered alternative was developed to address these concerns based on State and Federal design standards for public ownership.

DWR released the IDS Draft State Feasibility Report in February 2004. DWR is continuing technical studies of risk (failure of levees in the Delta), design, water operations, environmental impacts, benefits, and costs.

The project cost is estimated at \$774 million. A first estimate of average annual cost was at \$60 million or \$484 per acre-foot; however, this does not include the cost associated with delivering water supply to water users. Future work includes refinement of the estimated costs and benefits using an improved economic model. DWR will then make a recommendation on the future of the IDS project, given the new information.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Klamath Project

By late May 2004, it became apparent that inflows into Upper Klamath Lake were falling well below predicted values. An agreement with the U.S. Fish and Wildlife Service for flexibility in operating lake levels avoided the suspension of deliveries. Lower than expected inflows dictated a change in "Year Type" from "Below Average" to "Dry" for Upper Klamath Lake. This change in year type lowered the required deliveries to the river to allow the appropriate Klamath Project (Project) operation and still remain in compliance with the current Biological Opinions on suckers and Coho salmon.

In addition to ground-water pumping provided by the Klamath Project Pilot Water Bank, irrigators supplemented the Project supply of surface water with groundwater to meet the Project's overall needs without compensation. The Klamath Water Users Organization reminded the basin irrigators to use water wisely.

With all parties working together, the Project operated to the benefit of irrigators and endangered species in 2004.

For additional information, contact the Klamath Basin Area Office at 541-883-6935 (TDD 541-883-6935).

Lake Berryessa Programs

Visitor Services Plan (VSP) Effort

In 2000, Reclamation began the Lake Berryessa VSP to determine the type of facilities and services needed for future long-term operations. These services include day use needs, long-and shortterm RV and trailer sites, marina and concession operations, and food services. The purpose of the VSP is to develop a comprehensive plan for the re-development and management of visitor services that support diverse recreational opportunities at the lake in compliance with applicable Federal, State, and local laws, regulations, policies, and codes.

The Draft Environmental Impact Statement (DEIS) was released for a 90-day public comment period on October 31, 2003. In response to Napa County's request, Reclamation extended the comment period by another 45 days to March 22, 2004, to further address preliminary concerns. Due to the closure of Reclamation internet service, the comment period was extended for an additional 30 days to April 22, 2004. Reclamation then reopened the DEIS comment period for 45 days in early 2005 to consider additional economic information that differs from results presented in Reclamation's economic feasibility under the preferred alternative.



Lake Berryessa recreation

Seven concessionaires have had contracts with Reclamation since the late 1950s to manage recreation at Lake Berryessa. Six of the contracts expire in 2008/ 2009; Pleasure Cove Resort's Interim Contract expires December 2007. The current services include 1,300 long-term sites (mostly privately owned trailers), 688 short-term sites (RV parks and campsites), marinas and boat ramps, and picnic areas. The concession contracts, in place since the 1950s, will expire in 2008/2009 at which time new contract opportunities will be developed for competitive bid. The existing concessionaires do not have preferential rights and will compete with other interested parties.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Collaborative and Resource Management Efforts

The Lake Berryessa Field Office works actively in several collaborative partnership groups and builds individual partnerships that increase its ability to effectively manage the recreational, cultural, and natural resources under its purview. These groups include partners ranging from private citizens and landowners to non-governmental organizations to local, county, State, tribal, and Federal governments. The geographic range of the field office's outreach efforts focuses on watershed partners in the Blue Ridge Berryessa Natural

MID-PACIFIC REGION

Water Fact

The Central Valley
Project is made up
of 20 dams and
reservoirs,
11 powerplants,
500 miles of major
canals and aqueducts,
3 fish hatcheries,
and assorted tunnels
and conduits.

Area, the Lake Berryessa Watershed Partnership, and the Putah Creek Discovery Corridor.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205)

Outreach and Partnerships

Much of the focus of the Field Office's outreach and partnership efforts has been in the arenas of public safety, public education and outreach, management planning, recreational enhancement, natural and cultural resource conservation, water use and conservation, and collaborative consensus-building related to the office's management goals. Major benefits to these partnerships include building a positive rapport with communities important to the success of lake-wide planning and management efforts; improving the capability to provide effective educational outreach to improve water safety and resource stewardship for both current and future generations of lake visitors and water users; and increasing the capability to effectively and scientifically manage cultural and natural resources by establishing good working relationships and expanding the base of expertise to solve common issues.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

Lake Solano Park Partnership

One of Lake Berryessa Field Office's closest and most productive 30-year partnerships is with Lake Solano Park and the Solano County Park Department. Lake Solano Park is a central location along the Putah Creek watershed, directly managed by Solano County Parks and owned by Reclamation. Staff from the Field Office has been actively involved in the creation of the themes, plans, and designs for the proposed Lake Solano Park Regional Visitor Center that will serve the common goals of the Putah Creek Discovery Corridor partnership described below. The Field Office staff also share resources such as training and expertise; assisting each other with special events; and providing educational, interpretive, and patrol services to the community to create a productive working relationship and build a positive rapport with both the local community and county government.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

Putah Creek Discovery Corridor (PCDC) Partnership

The PCDC partnership focuses primarily on "inspiring appreciation and respect for the diverse resources of the Putah Creek corridor through coordinated public outreach and learning opportunities." Lake Berryessa Field Office staff are involved in the steering committee that coordinates the partnership activities and in a variety of subcommittees involved in creating the regional education message, providing direct education to hundreds of area school children each year, providing a consistent message of stewardship and conservation ethics to visitors throughout the corridor, and creating a gateway visitor center at Lake Solano Park.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

Blue Ridge Berryessa Natural Area (BRBNA) Partnership

The BRBNA is an open partnership currently encompassing more than 100 partners that "promotes the conservation and enhancement of the expansive landscape that comprises the BRBNA by encouraging the sensitive management of its natural, agricultural, recreational, archaeological, and historical resources." Specific projects that the Lake Berryessa Field Office is involved in through the BRBNA include resource-appropriate trail planning and implementation around Lake Berryessa, stewardship projects such as weed abatement and habitat restoration projects around the lake and in jointly managed properties, and providing outreach and educational materials and presentations that espouse the BRBNA messages and goals throughout the region. Field Office staff also actively participate on the steering committee to guide and enhance group activities and participation. Field Office representatives are actively involved in several separate task groups and partnerships related to resource management. These include participation in task groups to eradicate exotic plant species and provide native and culturally important plant restoration, and monitor sensitive and protected species such osprey and bald eagle nesting areas.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

Native American Affairs

Personnel from Reclamation's Lake Berryessa Field Office worked with the Bureau of Land Management (BLM), Ukiah Office, for the third year to host the 2004 Cortina Rancheria Wintun Youth Environmental Campout. Reclamation's responsibility for hosting this event has been to provide the event site, assist in planning, and provide staff as needed for logistical support. This year the event gained national attention, and representatives from the Environmental Protection Agency Region 6, the National Environmental Tribal Council, and the National Tribal Air Association were in attendance. Cortina presented awards to Reclamation, BLM, California State Parks, and Sacramento State University for present and future participation. The campouts began in 1999, when the Cortina Tribe realized the importance of reaching their own youth to take an active roll in preserving the sacred trust of their lands. It was then that they realized that the concept was not only an interest with their Tribe but of many others, so they began working to encourage the participation of additional Tribes. The relationship has evolved into one of trust, respect, and mutual contribution of time and resources. The good will and cooperation that has been achieved through this project is something Reclamation can be proud of.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

Take a Kid Fishing

Reclamation co-sponsored the event on July 17, 2004, with the Lake Berryessa Watershed Partnership, Napa County Division of Environmental Affairs, and the Fairfield Suisun Bass Reapers. The event lasted approximately 6 hours

with 25 children participating in the fishing derby. The children were given bags filled with fishing equipment, t-shirts, coloring books, and certificates for their participation.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

NAPA Underwater Cleanup

On National Lands Day, Sept. 18, 2004, the Napa Dive Sports provided a great service for Reclamation: This is the second year the group participated in an underwater clean up at Pope Creek Bridge. Forty divers filled 35 garbage bags with trash collected from the bottom of the lake, and all but two bags were filled with recycled goods. The most interesting item pulled out of the lake was a homemade boat with a jet ski engine. Reclamation provided a boat and staff to monitor the entrance to the cove for the divers' protection. The Napa County Sheriffs' Boat Patrol, along with three kayaks and a zodiac provided by private citizens, also participated in the collection of trash and monitoring of the divers.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).

Davis Aquatic Master Swim

The Davis Aquatic Masters Swim is an exceptionally well-run event, and staff at the Lake Berryessa Field Office enjoyed making Reclamation's facilities available to the dedicated swimmers of the region. The 23rd annual event of the open water swim was held at Lake Berryessa on June 4, 2004, with approximately 2,500 participants. The Davis Swim event at Oaks Shores Day Use area is a prime example of the use of public lands at its best.

For additional information, contact the Lake Berryessa Field Office at 707-966-2111 (TDD 707-966-0205).



Los Vagueros Reservoir

Los Vaqueros Expansion Studies

The Los Vaqueros Reservoir expansion of up to 400,000 acrefeet is a project identified in the CALFED Record of Decision for further investigation that could provide water quality and water supply reliability benefits to Bay Area water users. Planning studies were initiated in 2001. As the owners of the reservoir, Contra Costa Water District (CCWD) is the lead Project Manager for the studies. Reclamation is the National Environmental Policy Act and planning study lead. The California Department of Water Resources is funding the studies and acts as a Study Manager with CCWD.

In 2003, with passage of Public Law 108-7 Sec. 215, Reclamation received Feasibility Study Authority. An Initial Alternatives Report is scheduled to be completed in mid-2005. A draft feasibility study is scheduled for late 2006.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Lower Butte Creek Project

Reclamation is serving as the National Environmental Policy Act lead for an extensive fishery restoration effort in northern California's Lower Butte Creek, one of the Sacramento Valley's premier spring-run Chinook salmon streams. The restoration effort involves upgrading some 31 dams, outfalls, and other structures in the Butte Sink/Butte Slough/Sutter Bypass portions of Butte Creek.

The Lower Butte Creek Project is funded by CALFED and led by Ducks Unlimited and the California Waterfowl Association. It began with an effort by The Nature Conservancy to explore what might be achieved voluntarily in the unajudicated reaches of Butte Creek, then one of the more important spawning streams for spring-run Chinook. Great success has already resulted from restoration efforts further upstream, leading to a tenfold increases in the sizes of the runs, and Butte Creek now has the largest run, by far, of the tributaries with pure spring-run populations.



Lower Butte Creek

Work is already underway in parts of the Butte Sink and on the west side of the Sutter Bypass, and agreement has substantially been achieved on how to proceed on the east side of the Bypass, including integration of the restoration programs with water supply improvements for the Sutter Wildlife Refuge.

The project is notable for its complexity, the number of collaborators, and the extensive cooperation within an area with critical flood control, fishery, wildlife, and agricultural functions.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Safety, Health, and Security Programs

Occupational Safety and Health (OSH) Program

In 2004, the OSH program's focus was on electrical safety, benchmarking the program baseline, and establishing a Regional rope-access work policy. Implementation of the flame-resistant clothing policy and additional electrical policy on qualified electrical workers was developed with input from across the Region. The process used to identify OSH goals each year has successfully encouraged sub-units within each Area Office and the Region to establish their "own" Safety & Health goals under the broader goals established by Interior, Reclamation, and the Region.

Water **Fact**

The Central Valley Project was originally proposed by the California State Legislature in 1933. In 1937, the Bureau of Reclamation took over the CVP.

Security Program

The Region continued to place considerable emphasis on critical security areas, including facility protection and operational security improvements, and moved to implement a wide range of other measures. Additionally, the Region hired security specialists at selected field locations.

Accessibility Program

The Region progressed in the accessibility program, moving toward meeting Reclamation's goal of having all requisite Bureau facilities accessible to people with disabilities by 2010. The Region ended the year with almost 20 percent of places of employment and 10 percent of recreation areas fully accessible to people with disabilities and expects the pace to retrofit facilities to accelerate in later years.

For additional information, contact the Regional OSH at 916-978-5575 (TDD 916-978-5608).

Mercury Study at Folsom Lake and New Melones Lake

A mercury study was conducted during 2004 at Folsom Lake and New Melones Lake to determine if mercury was being mobilized through the food chain and concentrating in the fish as demonstrated in previous testing at Lake Natoma. Partners included the Mid-Pacific Region Office of Environmental Affairs, the U.S. Geological Survey and the State of California Department of Fish and Game.

The sampling design and collection of the various species of fish were completed in September and October 2004. Fish processing and analysis took place in January 2005. The results will allow Reclamation to either post a fish consumption advisory or provide negative data to the State of California monitoring agencies.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Northern California Area Office (NCAO) **Activities**

Safety Program at Shasta Dam

Material Safety Data Sheet (MSDS)/Hazardous Material Program

A software program has been purchased to assist with the hazardous materials inventory and location of these hazardous materials at NCAO. The software program enables employees to know the exact location of the hazardous materials, the quantity, and computer version of the MSDS. This item had been on NCAO's Goals and Accomplishments Plan for 2 years and is now completed.

CO2 Alarm Systems

Since the implementation of the CO2 Alarm System at Shasta Powerplant, the Safety Office has made the CO2 Alarm System installation for outlying plants a priority. This project was completed in September 2004. All outlying plants have audible alarms tied into the existing fire alarm system but with a different sounding annunciator and visual alarms in the turbine pit areas so employees will be able to see that there is an emergency and respond accordingly.

NCAO Safety Committee

The reestablishment of the NCAO Safety Committee has been a true asset to the safety program. Within the short time since reestablishment, the Committee has met challenges and accomplished many different issues such as abating items on the Operations and Maintenance Crew Safety Deficiency Listing, started the process for purchasing a much-needed forklift and lowboy trailer, and prevented a tripping and public safety hazard on the dam roadway by placing covers over the Gantry Crane tracks.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Outreach Program at Shasta Dam

Guides at Shasta Dam expanded their outreach program during 2004. Launching the new *Yearn to Learn* program, more than 7,000 Shasta County school children from more than 100 schools had the opportunity to learn more about the importance of water and the role Shasta Dam plays in managing our most precious resource.

Realizing the importance of education in fulfilling Reclamation's goals, this innovative program was developed to provide area children and their teachers with a broad range of lessons and activities, all based on State standards. Curriculum is designed to meet the needs of all grade levels and includes lessons on a variety of water-related topics, showcasing Shasta Dam's role in managing water, power, and environmental needs. Classroom programs, alone or in conjunction with a tour of Shasta Dam, give students a solid foundation which can be built upon year after year.



School children enjoy the Yearn to Learn program.

Because of budget and transportation issues, visits to schools are important, and in some cases the only exposure students will have to Reclamation. Outreach programs can be a great way for Reclamation to get its message out, effectively including the community in its daily operations.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Water Fact

Of California's 71 million acre-feet of usable surface water: 36% - Flows into the ocean 28% - Used by agriculture 28% - Wild and Scenic Rivers. Delta outflow, wetlands 7% - Used by cities and industries 1% - Other uses

Catch a Special Thrill (C.A.S.T.) for Kids

NCAO hosted the fifth annual C.A.S.T for Kids event on Saturday, June 12, 2004, on Shasta Lake. This year's event was the largest yet with 55 children and 40 bass boats. For 1 day, children with a wide range of disabilities were able to leave their special needs on the bank and just have fun being a kid. Each child was paired with an experienced bass angler and their bass boat for a morning on the lake.

This was an extraordinary opportunity to experience a day of fishing, emphasizing the importance of using our natural resources wisely, while fostering a lifelong love of the outdoors.

The C.A.S.T. for Kids Foundation and Reclamation joined together with more than 250 participants and local sponsors to make this day happen. The support of the community was tremendous through many hours of preparation, coordination, and dedication from beginning to end.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Emergency Management Activities

In 2004, all recommendations from the 2003 Lewiston and Trinity Dam "After Action" Exercise Evaluation Report written by the Region's Emergency Management Section were reviewed. Improvements and enhancement of NCAO's management and response were made. An Emergency Operations Center (EOC) Manual was created based on experiences learned through the 2003 exercise and standard Incident Command System (ICS) procedures. The EOC was stocked with supplies needed in the event of an incident. The EOC and manual were both exercised to establish if a viable document and workable center had been created. The California Department of Forestry (CDF) also provided a day of training to key personnel on the ICS.

In June 2004, NCAO conducted a multi-agency Emergency Action Plan functional exercise for Whiskeytown Lake. Before the exercise, a small design team consisting of NCAO and Regional Office staff and local, State, and Federal emergency responders and agencies worked on developing a realistic exercise to ascertain how well they worked together and possible problems. Participants included the Shasta County Sheriff's Department, the California Highway Patrol, Record Searchlight Newspaper, KRCR Channel 7 News Department, CDF, City of Redding Electric, Shasta County Fire, California Department of Transportation, Shasta County Department of Education, and the National Park Service. The design team assisted with conducting the exercise, as well as observing and evaluating the plan.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

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Security Activities

NCAO continues to evaluate security operations and how they are functioning to meet current and future needs. NCAO continues to work closely with the Denver Security, Safety, and Law Enforcement office on a course of action plan for guard force staffing levels and funding for security hardening of Shasta and Keswick facilities. NCAO employees are encouraged to take security seriously and report all suspicious incidents. A suspicious incident training guide was distributed to all staff members as a reference.

NCAO maintains a resource contact list to keep employees abreast of terrorist activities. The list includes the Joint Terrorism Task Force, Sacramento Office; U.S. Immigration and Customs Enforcement, Redding Office; Federal Bureau of Investigation, Redding Office; Mid-Pacific Region Law Enforcement Officer; Security, Safety, and Law Enforcement-Denver; and other local law enforcement agencies.

At Shasta Dam and Powerplant, concrete barriers were installed at the approach to the east abutment of the dam crest to curtail vehicle ingress and egress, and a closure order was implemented to provide for protection of Federal property and to ensure public safety at Reclamation facilities. The Shasta County Sheriff's Office held a training exercise for facility familiarization. At Keswick Dam and Powerplant, a closure order was finalized near year's end for the protection of Federal property and to ensure public safety at Reclamation facilities. A more secure gate was also installed at Whiskeytown Dam on a road leading into the compound below the dam.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Shasta Dam Tours Continue with Extra Security

Foot traffic and tours continue to be allowed across Shasta Dam. Modifications at the tour tower, a magnetometer, and a security presence during tours have all changed the way Reclamation guides conduct the tour program.

All guides have gone through Tourism Safety Training, and the Standard Operating Procedures and Guidelines were revised. Extra efforts have been made to establish a tour route that allows the public to experience the dam without compromising the facility's security.

Reclamation's priorities are to provide for the safety of the visitors, employees, and its facilities. Considerable security modifications and precautions have been put in place to ensure this goal is met and still offer the public a chance to tour the dam.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Native American Affairs

In 2004, the Mid-Pacific Region's Native American Affairs Technical Assistance Program provided \$290,000 in funding assistance to eight federally recognized tribes for a variety of water resource needs. The projects ranged from water quality assessments for drinking water, ecosystems, and fisheries, to water contamination studies.

The federally recognized tribes assisted in 2004 were the Yurok Tribe, Karuk Tribe, South Fork Band Council of the Te-Moak Western Shoshone Indians, Duckwater Shoshone Tribe, Summit Lake Paiute Tribe, Elem Indian Colony (Pomo), Tule River Tribe (Yokut), and the Big Sandy Rancheria (Western Mono).

In 2003, the Yurok Tribes completed annual reports on water resource-related projects to improve water quality and fisheries using funding from the Mid-Pacific Region's Native American Affairs Technical Assistance Program.

CALFED tribal activities in 2004 included MP Region Division of Resources Management Native American Affairs Office's participation with several federally recognized California tribes in tribal information meetings on the Upper San Joaquin River Basin Storage Investigation, North-of-Delta Offstream Storage Investigation, and the Shasta Lake Water Resources Investigation. The North-of-Delta meetings included the Cortina Rancheria, Colusa Rancheria, Grindstone Rancheria, and Paskenta Band of Nomlaki Indians.

The Shasta meetings included the Pit River Tribe and the Winnemem Wintu group (also invited were the Colusa Rancheria, Redding Rancheria, Paskenta Band of Nomlaki Indians and the Cortina Rancheria. The San Joaquin meetings included the Friant tribes: Cold Springs Rancheria, Picayune Rancheria, Table Mountain Rancheria, North Fork Rancheria, Big Sandy Rancheria, and the Santa Rosa Rancheria. Reclamation also provided a field tour of the Upper San Joaquin River Basin Storage Investigation to Friant tribes on April 19, 2004.

Activities under the Indian Self-Determination and Education Assistance Act, Title IV Self-Governance (Public Law 93-638) included Annual Funding Agreements with the Yurok, Karuk, and Duckwater Shoshone Tribes for the purposes of collecting data to improve tribal fisheries, water quality and water resource development (respectively).

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Newlands Project Operating Criteria and Procedures (OCAP)

Irrigation and municipal diversions from the Truckee River have decreased the flow in the river, the only source of water for Pyramid Lake, a desert terminal lake in northern Nevada. The decreases in flow have contributed to a significant decline in the lake's elevation and to the listing of the cui-ui as endangered and the Lahontan cutthroat trout as threatened. Among the many entities diverting water from the Truckee River is Reclamation's Newlands Project. The

Newlands Project provides water to approximately 60,000 acres in the Lahontan Valley, and uses include Indian and non-Indian agriculture and wetlands.

The OCAP, first implemented in 1967 and most recently modified in 1997, are intended to provide sufficient water to Newlands Project water users to satisfy their water rights while maximizing the use of Carson River water and minimizing use of Truckee River water. The Lahontan Basin Area Office, in consultation with affected parties, administers the OCAP. In 2004, diversions of Truckee River water to the Newlands Project took place all year.

The possibilities of future diversions are heavily dependent on the amount of snow received in the Carson River basin and the resultant Carson River water supply for the Newlands Project.



Truckee River

The OCAP sets target efficiencies for water deliveries in the Newlands Project. The Truckee-Carson Irrigation District (TCID), the entity that operates and maintains the Newlands Project, exceeded efficiency targets in the 2000, 2001, 2002, 2003, and 2004 irrigation seasons. These accomplishments are due to improved water management techniques and improved water measurement implemented by TCID and Reclamation.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).

New Melones Lake Resource Area

New Melones Lake Marina Concessions Management

The New Melones Lake Marina operators continue to work to bring the marina facilities into compliance with the findings of the Safety, Health, and Administrative Review completed in 2003. Reclamation staff have completed safety and environmental inspections, biannual public health evaluations, and quarterly operations and facility inspections at the marina.

Reclamation contracted to have an extensive Marina Fee Comparability Analysis performed. This detailed analysis of fees at 16 similar properties throughout the West was used by New Melones staff to analyze and approve rates charged to the public for services at the New Melones Lake Marina.

National Recreation Reservation Service at New Melones Lake

New Melones Lake became Reclamation's pilot participant in the National Recreation Reservation Service (NRRS). The NRRS is an inter-agency reservation service that provides an innovative, easy way for the public to reserve Federal recreation facilities and activities. More than 280 individual campsites and two group campgrounds in both the Tuttletown and Glory Hole Recreation Areas were made available for reservations in 2004.



Camping at New Melones Lake

Campground visitors made 2,361 reservations from April through September 2004.

New Melones staff made a monumental effort to create the procedures and infrastructure necessary to implement NRRS by April 1, 2004. Park rangers and volunteer camp hosts carry out the daily duties necessary to administer the reservation service.

New Melones Natural Resource Management and Conservation

A plant survey was completed by the California Native Plant Society as a part of the ongoing interim management planning for the Peoria Mountain Wildlife Area. A contract has been awarded to complete the Environmental Assessment necessary to implement the interim management plan for this highly utilized, sensitive resource area.

Educational links were forged with a local school to plant acorns and maintain seedlings in heavily impacted campground areas. A local Boy Scout troop continues to collect recyclable materials from stations throughout the recreation areas.

New Melones has also entered into a partnership with the Fire Safety Council to reduce fire risk along the Highway 108 corridor within the area's boundaries.

Solar panels have been installed to provide clean, renewable energy for the Visitor Center, maintenance buildings, and the administrative building.

Safety at New Melones Lake

New Melones park ranger staff responded to many emergency incidents in 2004, including attempted suicide, heart attacks, boating accidents, vehicle accidents, wildfires, campground disturbances, and vandalism. Rangers prepared for these emergencies by receiving training in medical first response, personal self-defense, automatic external defibrillators, water rescue, and incident command.

New Melones installed eight new Americans With Disabilities Act compliant aluminum courtesy docks at all three boat ramps, which has greatly increased visitor safety, reduced public boat damage, and allowed for a safer docking experience.

Continued summer drops in lake elevation have allowed park rangers an opportunity to gather Global Positioning System coordinates on boating hazards and kept the maintenance staff busy placing and moving buoys to keep the public safe. Park rangers are using the recently acquired data to update the New Melones Waterway Hazard Marking Plan.

Recreation Management at New Melones Lake

Reclamation staff operate and manage the facilities at New Melones Lake to provide more than 300 campsites, three boat launch areas, six day use areas, two group campgrounds, and a group picnic area on the 15,000 land acres. New Melones hosted more than 730,000 visitors in 2004.

A new group picnic site in the Tuttletown Recreation Area was 2004's National Public Lands Day Project. It was the product of many weeks of planning and material gathering, climaxed by a productive workday performed by a team of 30 volunteers and park staff. The new picnic area will be available for reservations through the National Recreation Reservation System.

Action Plans for accessibility improvements were completed with the help of the Technical Service Center and Region staff. Continuing to upgrade and construct universally accessible facilities continues to be a priority of Reclamation staff.

New Melones Lake Interpretive Programs

More than 11,000 visitors were reached by the interpretive programs at New Melones Lake in 2004. Park ranger staff hosted 86 interpretive events. Year round interpretive programs, which consist of Ranger-led hikes and walks, evening lecture programs, Saturday Night Campfire programs, and the daily operations of the Visitor Center and museum, have been complemented with the addition of Saturday Morning Children's Crafts program and the continuing development of educational outreach programs.

Conservation and responsible stewardship are the major themes of the New Melones Lake interpretive program.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Regional Workforce Profile

At the end of fiscal year 2004 (September 30, 2004), the Mid-Pacific Region's total employment stood at 997 employees of which 930 were permanent employees.

This permanent workforce is comprised of 62 percent males and 38 percent females. The organization is evenly split with 50 percent being White males and the other 50 percent represented as female or minority. Considering race or ethnicity, 8 percent of the workforce identifies themselves as Hispanic or Latino, with the remaining non-Hispanic or Latino workforce identifying themselves as follows: 78 percent White; 6 percent Black or African-American; 7 percent Asian, Native Hawaiian, or Pacific Islander; and 1 percent American Indian or Alaska Native.

The Region has worked closely with agencies and institutions seeking to employ people with disabilities, with 8 percent of its workforce claiming some form of disabling condition. The Mid-Pacific Region continues to support hiring veterans with approximately 30 percent of the permanent workforce claiming veteran status. Of our veterans, approximately 6 percent are identified as disabled with 2.5 percent having a 30 percent or more compensable disability.

For additional information, contact the Human Resources Office at 916-978-5471 (TDD 916-978-5491).

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Agricultural drainage

San Luis Drainage Feature Re-evaluation

Reclamation is developing a plan to provide drainage service to the Central Valley Project's San Luis Unit (Unit). Over the past 4 decades, Reclamation has formulated and reformulated different plans to provide drainage service to the Unit pursuant to Section 1(a) of the San Luis Act. In 1995, a Federal judge held that the San Luis Act mandated that Interior provide drainage and ordered Reclamation to apply for a discharge permit to complete the San Luis Drain to the Delta (Sumner Peck Ranch, Inc. et. al. v. Bureau of Reclamation, et. al.).

In April 2001, Reclamation, on behalf of Interior, completed a "Plan of Action" outlining a strategy to provide drainage to the Unit. A comprehensive review of all drainage service options defined in previous years is being conducted including a review of drainage water treatment technologies developed in recent years. The project's purpose is to provide agricultural drainage service to the Unit that achieves long-term sustainable salt and water balance in the root zone of irrigated lands. A long-term, sustainable salt and water balance is needed to ensure sustainable agriculture in the Unit and the region. In December 2001, a Preliminary Alternatives Report was completed outlining potential alternatives to provide drainage for water in-valley and out-of-valley.

A Plan Formulation Report was completed in December 2002 that set forth the analysis of alternatives for providing drainage service to the Unit. Because of Stakeholder comments, Reclamation prepared a Supplemental Plan Formulation Report in 2004. The Supplement included alternatives for land retirement. In coordination with Stakeholders, Reclamation submitted a new Plan of Action Schedule to the Court. A Scoping Report was completed in July 2004. The major findings of the Supplemental Plan Formulation Report were as follows:

- By 2050, approximately 379,000 acres will need drainage service (343,000 acres in the Unit and 36,000 acres in the northerly area outside the Unit).
- Cost-effective on-farm and in-district drainwater reduction measures and regional drainwater reuse could reduce drainage volumes by nearly 80 percent.
- Retire all or part of irrigable lands as a method for providing drainage service to these lands.

In February 2004, with the concurrence of parties to the litigation, Reclamation developed and filed an *Amended Plan of Action* with the Court outlining the incorporation of land retirement among the drainage service alternatives. In July 2004, Reclamation published an Addendum to the Plan Formulation Report describing the formulation of three additional alternatives that include varying levels of land retirement that will be evaluated in the draft Environmental Impact Statement (EIS) to be published in 2005. A final EIS and Record of Decision are expected to be completed by June 2006.

Implementing any drainage service plan will require further Congressional action to increase the authorized appropriation cap under the San Luis Act. Reclamation will continue to refine the proposed action's components, provide

additional engineering detail, and complete the proposed action and alternatives environmental review.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608) or the South-Central California Area Office at 559-487-5116 (TDD 559-487-5933).

San Luis Lowpoint Improvement Project

The San Luis Lowpoint Improvement Project is identified as a complementary action in the CALFED Record of Decision. Working under a grant from the State of California, the Santa Clara Valley Water District (SCVWD) has undertaken the role of implementing agency for this project. SCVWD has been conducting engineering feasibility studies and an Environmental Impact Statement/Environmental Impact Report.

Reclamation has agreed to be the National Environmental Policy Act lead for this study. Beginning in early 2005, Reclamation will become the lead for the Federal feasibility study and will begin to work with SCVWD to develop a plan of study. Funding for Reclamation's participation on this study may come from the Central Valley Project Yield Investigation.

In 2004, Reclamation initiated an Appraisal Study. It is scheduled for completion in early 2005. A plan of study for the feasibility study is scheduled to be completed in late 2005.

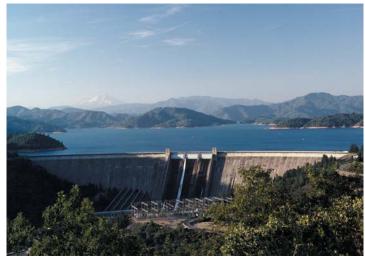
For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Shasta Dam Enlargement Investigation

Reclamation is conducting feasibility level studies focusing on the potential to enlarge Shasta Dam primarily for increased water supply and operational flexibility as part of the CALFED Surface Storage Program. This project is one of five identified in the CALFED Record of Decision. Increases in demand for water supplies and attention to ecosystem needs in the Central Valley have renewed interests on expanding the facility. The study is being conducted under the general authority of Public Law 96-375.

Reclamation is the project lead, responsible for the National Environmental Policy Act compliance and Federal planning studies. The California Department of Water Resources (DWR) is responsible for engineering and economics work.

Shasta Reservoir could be expanded by 290,000 acre-feet by raising Shasta Dam 6.5 feet or by 600,000 acre-feet for an 18.5 foot raise. Such an expansion would increase the pool of cold water available to maintain upper Sacramento



Shasta Dam and reservoir

River water temperatures needed by certain anadromous fish and provide other water management benefits such as water supply reliability. About 2,000 additional acres would be inundated, including a portion of the McCloud River protected by California Public Resources Code 5093,

The Wild and Scenic Rivers Act.

Reclamation and DWR are evaluating project alternatives, water supply benefits, potential adverse effects, and mitigation strategies. Coordination continues with landowners on the McCloud River to complete environmental surveys that address adverse impacts to the wild and scenic status of the river. Reclamation has initiated public involvement to establish working relationships with the public and key local, State, and Federal agencies; coordinate related activities; and present its technical findings.

A significant activity completed in June 2004 was the Alternatives Information Report narrowing down to a set of final alternatives for evaluation. The Region is continuing to conduct environmental studies, systems modeling, and technical studies to evaluate potential storage, operational, and conjunctive management alternatives and public outreach briefings and workshops. A draft feasibility report/Environmental Impact Statement/Environmental Impact Report is scheduled for completion in 2008.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

South Delta Improvement Program

Reclamation and the California Department of Water Resources are conducting environmental studies for the South Delta Improvement Program (SDIP) to provide increased deliveries for the State Water Project (SWP) and Central Valley Project (CVP) water service contractors while addressing the Delta fisheries and local in-Delta agricultural water users needs. The SDIP is a component of the Conveyance Program of CALFED. Expanded conveyance through the SDIP is critical to improve CVP South-of-Delta allocations to at least 65 percent, in keeping with the objectives of the CALFED Record of Decision, and to alleviate the Central Valley Projet Improvement Act delivery impacts.

The SDIP major components are increasing the allowable diversion capacity at the SWP's Clifton Court Forebay to 8,500 cfs, dredging a portion of Old River to improve conveyance capability during periods of high SWP and CVP Delta exports, construction of permanent operable barriers to improve water level and water quality in the south Delta, dredging local channels to reduce the frequency of barrier operations and to accommodate improvements to existing agricultural diversions both upstream and downstream of the proposed barriers, and constructing a permanent operable fish control structure at the head of Old River to reduce fish movement into south Delta channels.

Significant activities conducted in 2004 included early consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service under the Federal Endangered Species Act. Completion of environmental documentation is anticipated in fall 2005 with project implementation beginning in 2006.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Tahoe Regional Wetlands Development Program

Reclamation constructed Lake Tahoe Dam in 1913 and is responsible for its operation. The dam increased the water level of Lake Tahoe by 6 feet to provide water for urban and agricultural uses downstream. Thus, Reclamation has an interest in the water quality of the lake to protect the beneficial uses of the water.

Lake Tahoe and its watershed have been degraded by numerous environmental perturbations over the past several decades. These perturbations, including rural and residential development, new transportation routes, increased human population, and increased numbers of motor vehicles, have degraded the integrity of the watershed in various ways.

The purpose of the Tahoe Regional Wetlands Development Program is to assist in addressing the past degradation of Lake Tahoe and its watershed by undertaking projects, either directly or through financial assistance to others, to meet the environmental thresholds as defined in the Tahoe Regional Planning Agency's Environmental Improvement Program. The environmental thresholds are defined as the environmental standards necessary to protect the natural environment and public health and safety within the Lake Tahoe basin.

Ten conservation activities were funded in 2004 at a cost of approximately \$4 million. Funded projects included fish passage improvements, restoration of the Upper Truckee River, riparian restoration near the Tahoe Dam, and basin-wide hazardous fuels reduction planning.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).



Agricultural Water Use Model

In 2004, the Agricultural Water Use Model was completed and distributed to all California Department of Water Resources Districts. Agricultural data is now being input State-wide into this standard model, providing quick and consistent reporting at any level.

Project Use Forecast Model

In 2004, the Region developed a model to gather power usage data from pumping plants. The model will be used by the Central Valley Operations Office to forecast project power use, reducing penalties charged to Reclamation for inaccurate projections. In addition to the model, Planning staff researched and developed statistical algorithms to produce effective forecasts.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).



Lake Tahoe



Trinity Dam

Trinity River Restoration Program

Located in northern California, the Trinity River is one of the most beautiful in the State and nationally known for its salmon and steelhead fisheries. In 1964, the Trinity and Lewiston Dams were completed to provide water supplies and power generation for California's Central Valley, resulting in the diversion and export of as much as 75 to 90 percent of the Trinity River's flow for the past 4 decades.

The Trinity River Restoration Program (Program) was established in 1984, under Public Law 98-541, to restore and maintain the fish and wildlife stocks of the Trinity River Basin to those levels that existed just before the Central Valley Project's Trinity River Division construction. The Central Valley Project Improvement Act (Public Law 102-575) acknowledged the Federal government's trust responsibilities, increased instream flows to 340,000 acre-feet per year, and

directed the Secretary of the Interior to develop procedures for restoring and maintaining the Trinity River fishery. To do this, Reclamation plays a key role as a member of the Trinity Management Council, the decision-making body charged with setting policy for the Program.

The Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement (EIS) was completed in October 2000, with the Record of Decision (ROD) signed on December 19, 2000. Shortly after the ROD was signed, a lawsuit was filed in Federal District Court by a group of Central Valley water and power users. On March 19, 2001, Ninth Circuit Court Judge Oliver Wanger enjoined that part of the decision that provided increased flows for the Trinity River required preparation of a Supplemental Environmental Impact Statement/ Environmental Impact Report, and allowed other aspects of the Program to proceed.

The Court entered final judgment on April 7, 2003, and granted the defendants increased river flows from 340,000 acre-feet to 452,600 acre-feet in dry or wetter years. Appeals by the United States, the Hoopa Valley and Yurok Tribes, and the Central Valley irrigators (Westlands Water District, and the San Luis and Delta-Mendota Water Authority) were filed. The four co-lead agencies (Reclamation, the U.S. Fish and Wildlife Service, the Hoopa Valley Tribe, and Trinity County) continued with the Supplemental EIS analyses.

On July 13, 2004, the U.S. Court of Appeals for the Ninth Circuit issued a decision that included reversing the portion of the District Court's April 2003 decision that concluded that the scope of the EIS and the range of alternatives considered therein were unreasonable. The Ninth Circuit Court's decision also reversed the District Court's injunctive orders to supplement the EIS. The plaintiffs (Westlands Water District and the Northern California Power Agencies) filed a petition for rehearing, which was denied on November 5, 2004. Since then the plaintiffs have indicated they will not file any further appeals, and work on the Supplemental EIS has been suspended.

Spring Releases

In April 2004, Program staff and technical representatives of the Trinity Adaptive Management Working Group (TAMWG) and the Trinity Management Council (TMC) developed recommendations for a wet water year flow schedule that used a court-imposed normal water year's volume of 647,000 acre-feet. This not only required balancing important geomorphic and biological restoration objectives, but managing the impacts of peak releases in a manner that minimized costs and delays to the critically important bridge construction schedule. All objectives were achieved.

Purchase of Water for Fall Releases

Program staff from three offices of the Northern California Area Office (NCAO) (Shasta, Willows, and Weaverville) effectively coordinated the technical review, environmental compliance, and purchase of 25,000 acre-feet of Central Valley Project (CVP) water from the Sacramento River Water Contractors Association. The cost of the water was \$666,750 or \$26.67 per acre-foot. This water, combined with 11,313 acre-feet of water carried over from last year's acquisition from Metropolitan Water District, was released into the Trinity River in September.

Because of the 2002 fish die-off on the Lower Klamath River, this effort received a great deal of attention locally, regionally, and nationally. The release of 36,300 acre-feet over a 3-week period effectively contributed to a reduced incidence and severity of pathogens in returning Chinook salmon, and helped reduce the risk of another die-off. Program staff worked with agency and tribal scientists and stakeholders to maximize benefits to the fish populations at risk while minimizing impacts to other river resources and to CVP water and power customers. This fall release also had the potential to adversely impact the bridge construction schedule but was managed in such a way that costs and delays were minimized.

Bridge Contracts/Construction

One of the top priorities for the Program, NCAO, and the Region over the past several years has been the modification of four bridges on the upper Trinity River in order to pass the higher peak flows envisioned by the Record of Decision (ROD) (going from 6,000 cfs up to 11,000 cfs plus tributary flows). Using the hydrologic studies, engineering designs and specifications, and environmental documents completed in fiscal year 2003, the Program staff awarded and is now administering two construction contracts totaling \$6 million (both at or under engineer's estimates).

Cost-share funds of \$2 million were acquired from the State to assist with these projects. By the end of 2004, the culvert and its approach were finished, and the first bridge had been set in place, soon to be opened to local traffic. All four bridges were to be open to traffic by early 2005, setting the stage for higher ROD flows in April 2005. This accomplishment is especially noteworthy in that it required extensive coordination with contractors to respond to changes in both spring and fall release schedules (see above) that impacted construction schedules and methods.



Trinity River Bridge construction in 2004.

Science Program Implementation

In response to a Trinity Management Council-chartered Program Review Subcommittee evaluation, significant progress is being made to advance the science component of the program. Initiated in October 2003, with a final report submitted in April 2004, the recommendations are being used to guide improvements in the program.

Actions taken include the award of a contract to facilitate completion of the Program's Science Framework, which will include conceptual models, detailed monitoring and evaluation plans, and development of a supporting database. Two workshops were held; the first took place in October 2004, with the second scheduled for early 2005. The vacant position of Technical Modeling and Analysis Group Branch Chief (Chief Scientist) has been filled on a detail basis with one of the original flow study authors, and efforts are under way to fill additional scientist positions recently approved by the TMC. Essential elements of the foundational baseline assessment were completed in 2004, and the remainder will be completed by mid-2007.

For additional information, contact the Trinity River Restoration Program Office in Weaverville, California, at 530-623-1800.

Truckee River Operating Agreement (TROA)

Reclamation is one of a host of parties interested in reservoir operations on the Truckee River (Lake Tahoe, Prosser Creek Reservoir, Boca Reservoir, Stampede Reservoir, Donner Lake, and Independence Lake) which are negotiating a comprehensive operating agreement for the reservoirs. Parties participating in the negotiations include the States of California and Nevada, the Pyramid Lake Paiute Tribe, the Truckee Meadows Water Authority (water provider for the Reno/Sparks area), Washoe County Water Conservation District, the Town of Fernley, and others. That draft agreement is called the Truckee River Operating Agreement (TROA).

When implemented, the agreement will result in more efficient use of the Truckee River reservoirs and multiple benefits for a wide variety of Truckee River interests such as:

- Increased municipal and industrial drought water supply for the Reno/ Sparks area and the Truckee River basin in California.
- Enhanced habitat for endangered and threatened fish species in the Truckee River and Pyramid Lake.
- A reduction in the variability of instream flow and enhanced seasonal instream flows.
- Improved water quality.
- Reservoir storage maintenance at levels that better serve recreational uses.

The parties negotiating TROA completed a draft agreement in October 2003. Interior and the State of California, as co-lead agencies, completed a revised

draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) in August 2004. Representing the co-lead agencies are Reclamation, the U.S. Fish and Wildlife Service, Bureau of Indian Affairs, and the California Department of Water Resources. A Final EIS/EIR is expected to be completed in 2005.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).

Upper San Joaquin River Basin Storage Investigation

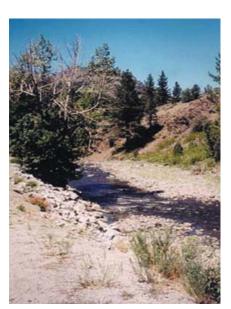
The CALFED Record of Decision (ROD) calls for 250,000 to 700,000 acre-feet of additional surface storage in the Upper San Joaquin watershed or a functionally equivalent storage program in the region. The objectives for new storage in the upper San Joaquin watershed are to contribute to restoration of and improve water quality for the San Joaquin River and make possible conjunctive management and water exchanges that will improve the water quality of Municipal and Industrial deliveries. Other benefits of increased storage include improving Central Valley Project water supply reliability south of the Delta, increasing flood protection in the San Joaquin Valley, and increasing power generation.

The study was undertaken as a result of the Central Valley Project Improvement Act Project Yield Increase Investigation and the CALFED initiatives. Consistent with the CALFED ROD, Reclamation and the California Department of Water Resources (DWR) have taken action in the form of a two-phased public investigation. Reclamation is the National Environmental Policy Act and Federal planning lead. DWR is the California Environmental Quality Act lead and is also conducting a regional conjunctive management program in the basin.

The Investigation's Phase 1 is completed and culminated in an appraisal-level report describing the surface storage options being evaluated. It also provides a short list of the storage options to be evaluated in more detail during the feasibility study. Phase 1 had broad public support and involvement from the agricultural, environmental, municipal, and business communities. Elected officials from the State, county, and Federal governments have also been keeping close tabs on the issues involved and Reclamation's progress.

Phase 2 began in January 2004 with filing a Notice of Intent and Notice of Preparation for environmental review and disclosure of the potential impacts of alternatives. The study team conducted four scoping meetings in March 2004 and continued with public, tribal, and stakeholder outreach. An Initial Alternatives Report is scheduled to be completed in spring 2005. A draft feasibility study is scheduled for the fall 2008.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608), or the South-Central California Area Office at 559-487-5116 (TDD 559-487-5933)



Walker River

Walker River Basin

Federal Indian Water Rights Negotiation Team

The Lahontan Basin Area Manager Betsy Rieke served as the chair of the Federal Indian water rights negotiation team from the team's formation in May 2002 through 2004. The team was established to resolve water rights claims filed by the United States on behalf of the Walker River and Yerington Pauite Tribes, the Bridgeport Indian Colony, the U.S. Army, the U.S. Marine Corps, the U.S. Forest Service, and the Bureau of Land Management. The team consists of representatives of the Federal entities with claims: The Bureau of Indian Affairs, Reclamation, the Office of the Solicitor, and the Department of Justice.

The negotiations involve the United States, the states of Nevada and California, the Walker River Paiute Tribe, the Walker River Irrigation District, and other key interests in the Walker River basin. The negotiations, which began in October 2002, seek a settlement that would resolve the water right claims, preserve Walker Lake's fresh water ecosystem, and assist in the recovery of the threatened Lahontan cutthroat trout fishery.

In addition, money was appropriated to Reclamation in 2002 to provide water to at-risk natural desert terminal lakes. Additional legislation in 2003 specified the appropriated funds were to be expended only on Summit, Walker, and Pyramid Lakes in Nevada. In 2004, Reclamation committed funds to three projects that will help increase Walker Lake inflows in 2004 and beyond.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436)

Water Forum Agreement-Lower American River

In 2004, Reclamation entered into an agreement with the Water Forum and the U.S. Fish and Wildlife Service (FWS) agreeing to jointly develop a new fisheries flow standard for the lower American River in 2005. The new flow standard is one of the components of the Water Forum Agreement. Reclamation is working closely with the Water Forum and FWS to develop this standard. For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Water 2025

In summer 2004, Secretary of the Interior Gale Norton awarded a grant to the Truckee Carson Irrigation District and the City of Fernley for \$150,000 to automate and provide telemetry to Gilpin Waste Way, a 100-year old structure on the Truckee Canal. This project will allow the City and other communities along the Truckee Canal greater control of flood flows and allow for more efficient use of the canal.

In addition, using approximately \$200,000 of a \$1 million Water 2025 write-in for Desert Research Institute, the Lahontan Basin Area Office (LBAO) is developing a tool to increase forecasting ability in the Carson River. This will enhance Reclamation's abilities under the Newlands Project Operating Criteria and Plan. Also, with this funding, LBAO will gain a more complete understanding of the water quantity and quality benefits of automating eight check structures along the Truckee Canal.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436)

Water Supply Improvements Efforts

The Central Valley Project (CVP) was designed to provide approximately 7 million acre-feet of water supplies for California's agricultural and Municipal and Industrial users in all but the driest of years. The enactment of Public Law 102-575, the Central Valley Project Improvement Act, dedicated 1,200,000 acre-feet of CVP yield to fish and wildlife purposes and charged Reclamation with identifying actions to replace that yield.

In 2004, Reclamation continued efforts directed by CVPIA Sec. 3408(j) to develop a least-cost yield plan to replace the re-dedicated yield. An internal draft Delivery Impact Report to supplement the Least-Cost CVP Yield Increase Plan published in 1995 was developed in 2004. The report examines new data, actions, and programs studied or implemented since publication of the Least-Cost Plan, focusing on the reduced ability of the CVP to deliver water as a result of implementing sections of the CVPIA—notably Section (b)(2) and Level 2 refuge water supply.

The primary efforts in 2004 included:

- Initiating an Integrated Resource Plan (IRP) for the CVP Eastside Region (Calaveras/Stanislaus Basin).
- Continuing the development of a daily CALSIM model for the American River Basin.
- Updating CVPIA delivery impacts using the new CALSIM model, updated hydrology, and the results of the Integrated Operations Proposal.
- Coordinating with ongoing projects and programs to protect yield replacement opportunities while developing the Delivery Impact Report.
- Investigations establishing the critical need for additional Delta export and conveyance capacity, and developing an integrated operation proposal for the CVP and State Water Project.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Delta tidal areas

Settlement Agreement - Water Quality Control Plan for San Francisco Bay/ Sacramento-San Joaquin Delta Estuary

On May 22, 1995, the State Water Resources Control Board (SWRCB) adopted the Water Quality Control Plan (WQCP) for the Delta Estuary which contains the current water quality and flow standards for the Delta. Subsequently, the SWRCB initiated the Delta water right proceedings to determine responsibility for meeting WQCP standards that until this time had been the sole responsibility of the Central Valley Project and California Department of Water Resources (DWR) State Water Project (SWP). Phases 1–7 of the Delta water rights proceedings involved the San Joaquin Valley and other Delta issues and resulted in D-1641.

Phase 8 of these proceedings would have ultimately determined the responsibility of Sacramento Valley water right holders other than the CVP/SWP to meet those standards. It was envisioned that the Phase 8 proceedings would have been lengthy and controversial and would ultimately result in litigation. Reclamation and DWR claim that certain water rights holders in the Sacramento Valley must cease diversions or release water from storage to help meet Delta water quality standards. Sacramento Valley water users contend their use has not contributed to water quality problems in the Delta and so, as senior water right holders and water users within the watershed and counties of origin, they should not be responsible for meeting these standards. Reclamation and DWR agreed to voluntarily meet the water quality standards pending the SWRCB's final decision regarding responsibility for meeting these standards.

The SWRCB encouraged the parties to resolve issues of responsibility through a negotiated settlement. In March 2003, the involved parties, including the Northern California Water Association, DWR, Reclamation, and various CVP and SWP contractors, entered into a Short-Term Settlement Agreement. Under this agreement, the Sacramento Valley water rights holders will provide up to 185,000 acre-feet of water in most water years to both CVP and SWP. The Sacramento Valley water users will provide this water by pumping groundwater in lieu of diverting surface water supplies, re-operation of existing reservoirs, or through system improvements.

Several additional activities will be required over the next 2 years to implement the Short-Term Settlement Agreement. These activities include execution of implementation agreements with each District to define the terms and conditions for making the water available, preparing an Environmental Impact Report/Environmental Impact Statement for the short-term implementation agreements, and an agreement on how the water provided under the Short-Term Settlement Agreement will be shared between the CVP and SWP. Ultimately, the parties must develop a long-term work plan to increase benefits for all parties and provide the basis for a long-term settlement agreement.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

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CVPIA ACTIVITIES

The Central Valley Project Improvement Act (CVPIA), implemented in October 1992, mandated changes in management of the Central Valley Project, particularly for the protection, restoration, and enhancement of fish and wildlife. The following pages describe activities related to the CVPIA that occurred during 2004 and progress made toward achieving its goals.

Central Valley Project Improvement Act (CVPIA) Overview

Since 1992, Reclamation and the U.S. Fish and Wildlife Service have worked to meet the challenges that the CVPIA presents. Its implementation has been afforded highest priority, and major strides have been made in accomplishing the mandate that Congress provided. Many of the CVPIA's provisions have been completed, and most of the others are well under way. To date, implementation of the prescribed actions and programs has cost approximately \$685 million, including the Restoration Fund, \$391 million; Water and Related Resources funds, \$239 million; State cost-share, \$54 million; and donated funds, \$1 million. The Restoration Fund appropriation for fiscal year 2004 was \$39.6 million, and Water and Related Resources was \$10.7 million. In fiscal year 2004, the largest amounts of money were obligated toward Refuge Water Conveyance, Facility Construction, Refuge Wheeling, and San Joaquin Basin Action Plan (\$13.1 million); Level 4 Water Purchases (\$6.8 million); Trinity River Restoration (\$8.3 million); and Ecosystem/Water Systems Operations Modeling (\$6.7 million).



Waterfowl in flight

The CVPIA fundamentally changed authorization of the CVP by including fish and wildlife protection, restoration, and mitigation as project purposes having equal priority with irrigation and domestic water supply uses, and fish and wildlife enhancement having equal priority with power generation. The ecosystem appears to be responding positively in the years since the CVPIA implementation began. The numbers of anadromous fish returning to Central Valley rivers and streams have increased, and salmon have returned to spawn in areas where they had not been seen for years. There has been a significant increase in the number of ducks, geese, and other migrating birds using the new wetlands, and avian diseases appear to be declining. While the ecosystem is also responding to other factors, it is reasonable to assume that some of these beneficial effects are due to CVPIA implementation actions.

Interior has developed many partnerships and extensive coordination linkages with local, State, and Federal agencies; CALFED; Restoration Fund Roundtable; and private groups. CVPIA implementation continues to be coordinated with existing and ongoing restoration efforts such as the state of California's efforts to restore salmon and steelhead populations, the State Water Resources Control Board Water Quality Control Plan, and CALFED.

Water Fact

The CVPIA aims to restore wetlands by firming up and increasing water supplies for refuges. Coordination with CALFED is particularly important as most of CALFED's actions have similar objectives and address many of the same natural resource and water management issues as the CVPIA. Close coordination and a focus on functional integration of CVPIA and CALFED have helped the MP Region's Special Projects staff to achieve common goals and to maximize benefits.

Reclamation and the U.S. Fish and Wildlife Service (FWS) continue to meet with a Subcommittee of the Restoration Fund Roundtable in developing a programmatic program evaluation process for all actions set out in the CVPIA. Issues being addressed include clarifying objectives, identifying program. endpoints (i.e. when will the programs be done/completed), and how and when stakeholders can be involved in the budget and decision-making process. The draft 10-year accomplishments report has been completed and is under review by the Washington Offices of Reclamation and the FWS.

Anadromous Fish Screen Program

Under the Central Valley Project Improvement Act Section 3406(b)(21), the Secretary of the Interior is required to develop and implement measures to avoid losses of juvenile anadromous fish resulting from unscreened or inadequately screened diversions on the Sacramento and San Joaquin Rivers, their tributaries, the Delta, and the Suisun Marsh.

Since 1994, Reclamation and the U.S. Fish and Wildlife Service have been assisting the State of California through the Anadromous Fish Screen Program (AFSP) to install fish screens on unscreened diversions in the Central Valley.

To date, 20 fish screening projects have been completed with cost-share funds from the AFSP. Several additional fish screen projects were in the design and construction phases in 2004. At the end of 2004, AFSP-funded fish screen projects were preventing the entrainment of fish from roughly 4,000 cfs of water diverted for municipal and agricultural purposes.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Central Valley Conservation Program/ Habitat Restoration

The Central Valley Conservation Program was developed during the Endangered Species Act Section 7 consultation process to ensure that the existing operation of the Central Valley Project (CVP), implementing the Central Valley Project Improvement Act (CVPIA), and renewing CVP water service contracts would not jeopardize listed or proposed species or adversely affect designated or proposed critical habitat.

Water Fact

Long-simmering conflicts over Central Valley water rates and environmental impacts came to a head in 1992 with passage of the CVPIA.

The Central Valley Conservation Program implements an aggressive adaptive management program that will protect, restore, and enhance special-status species and their habitats in CVP-affected areas. Eight conservation activities were funded in 2004 at a cost of approximately \$1.85 million. These projects included fee title and conservation easement acquisition of sensitive habitats in Kern, Fresno, and Tulare Counties, restoring riparian corridor on the Sacramento River, and performing surveys and studies on San Joaquin kit fox, riparian brush rabbit, and giant garter snake.

The 1992 CVPIA authorized the protection, restoration, and mitigation of the CVP's past fish and wildlife impacts. The Habitat Restoration Program goals are to stabilize and improve populations of native species impacted by the CVP that are not specifically addressed in the CVPIA's Fish and Wildlife Restoration Activities section. The focus is on Federal- or State-listed, proposed, or candidate species, or species of concern. These programs assist in facilitating Endangered Species Act compliance and continued CVP operation.

In 2004, eight activities were funded with CVPIA restoration funds at a cost of approximately \$1.95 million. These activities included fee title acquisition of sensitive habitats in Kern and Madera Counties, restoring riparian corridor on the Sacramento River, and performing giant garter snake surveys in the northern Sacramento valley and Grasslands Ecological Area.

For additional information, contact the Division of Environmental Affairs at 916-978-5052 (TDD 916-978-5608).

Habitat Monitoring and Mapping for the Central Valley Project Renewal Contractors Endangered Species Act (ESA) Compliance

Consistent with existing Central Valley Project and Central Valley Project Improvement Act Biological Opinions (BO), Reclamation implemented a habitat monitoring mapping program for its water service areas in 1999. This mapping was done to address issues of ESA consultations.

The Central Valley Habitat Monitoring (CVHM) Program data has been used to produce reports of habitat change within Federal water service contracts. These reports compare the CVHM 2000 habitat data with the CVHM 1993 habitat data.

Habitat change reports for water service contract boundaries have been completed for Long-Term Contract Renewal, Interim Contract Renewal, Sacramento River Settlement Contractors, and other miscellaneous groups.

Reclamation fulfilled its role by providing the U.S. Fish and Wildlife Service with the following:

- Spatial data CVHM1 1993 to 2000 habitat data, modified California Department of Water Resources land use data, riparian habitat data, satellite imagery and water service contract boundaries.
- Mapping water districts, species occurrence, and habitat change.
- Additionally, a user-friendly report viewer was developed for the staff to review all maps and reports relating to the contract renewals.

Renewal contracts reported on 292 Federal contract boundaries. With Geographic Information System, approximately 1,332 reports and 530 maps were produced in a relatively short period of time. These reports and maps show the general trend of habitat conversion in acres, species occurrences and critical habitat in and around the individual contract boundaries. This meets Reclamation's requirement in the BO.

For additional information, contact the Division of Environmental Affairs at 916-978-5037 (TDD 916-978-5608).

North-of-Delta Off-Stream Storage (NODOS) Investigation

The NODOS investigation (a.k.a. Sites Reservoir) is a potential off-stream surface water storage project identified for project-specific study in the CALFED Record of Decision. Major NODOS objectives are to evaluate the potential for off-stream reservoirs to improve water supply reliability in the Sacramento Valley as well as throughout the Central Valley Project and State Water Project systems, provide storage for the Environmental Water Account, improve Delta water quality, improve Sacramento River flows during critical fish migration periods, restore riparian habitat, and provide water supply to wildlife refuges.

Reclamation is participating in planning studies and environmental evaluations of NODOS with the California Department of Water Resources (DWR). DWR is the overall project lead and the California Environmental Quality Act lead. Reclamation is the lead Federal agency for the National Environmental Policy Act compliance and Federal feasibility studies. DWR has been conducting field studies and engineering analyses required for planning studies and environmental assessments.

Reclamation is responsible for cultural and socioeconomic resources, environmental justice, Indian Trust Asset investigations, and compliance with National Historic Preservation Act, Section 106. Since the passage of Public Law 108-7 Sec. 215 in 2003, Reclamation has also initiated a feasibility level investigation of NODOS in compliance with the Federal Principles and Guidelines. Tribal water resource needs assessments relative to NODOS have also been initiated under this authority (Sec. 201).

Significant activities completed during 2004 include a State engineering feasibility study for Sites and Newville Reservoirs dams and appurtenant studies. Planning staff also continued working with local planning partners, Native American tribes, environmental stakeholders, county supervisors, and the public to provide information relative to the status of NODOS planning efforts and to obtain additional input relative to their desires and concerns about the project. An Initial Alternatives Report is scheduled for mid-2005, and a draft feasibility study is scheduled for late 2007.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Refuge Water Supply Program (RWSP)

The Central Valley Project Improvement Act (CVPIA) directs Reclamation to provide directly or through contractual agreements with other appropriate parties firm water supplies of suitable quality to maintain and improve wetland habitat areas on Federal, State, and private refuges in California's Central Valley. RWSP is a joint effort of Reclamation and the U.S. Fish and Wildlife Service.

The Level 2 and Level 4 quantities are specified in the CVPIA.

Generally, Level 2 water is provided from CVP yield. Incremental Level
4 water is acquired from voluntary sellers. Delivering this water requires
access to and use of conveyance facilities of local water districts that can
physically deliver water to the boundaries of the refuges. Thus,
Reclamation has executed 57 long-term (25-year) and 3 interim (annual)
wheeling agreements with local, non-Federal entities to deliver the water
to the refuge boundaries. In 2003, negotiations were completed with
Biggs-West Gridley Water District and Buena Vista Water Storage
District for water conveyance to Gray Lodge and Kern refuge,
respectively. In 2004, negotiations were completed with the California
Department of Water Resourcefor refuge conveyance to the Kern refuge and
with the California Department of Fish and Game for reimbursement of deep
well pumping costs on the Gray Lodge Wildlife Area to meet Level 2 needs.

All refuges have received their respective Level 2 water allocations each year following the CVPIA's enactment, except for reductions due to conveyance capacity and distribution system limitations at some refuges and reductions specifically requested and scheduled by refuge managers. Two South-of-Delta refuges and two North-of-Delta refuges cannot receive full Level 2 deliveries until Reclamation completes conveyance facilities construction.

Provision of additional and/or more "firm" water supplies to Central Valley refuges has allowed managers to respond better to the habitat requirements of wetland-dependent species. Increased water supply to 48,348 acres of seasonal marsh, permanent wetlands, and riparian habitat, gives refuge managers the ability to irrigate for high-quality stands of moist soil food plants and maintain required water levels for optimal wildlife foraging.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).



Waterfowl take advantage of a Refuge Water Supply Program wetland.

San Joaquin River Agreement (SJRA)/Vernalis Adaptive Management Program (VAMP)

The SJRA/VAMP is a scientifically-based adaptive fishery management plan that is helping to determine the relationships between water flows, exports, and other factors on fish survival in the Delta.



San Joaquin River

Specifically, State and Federal fishery biologists and other stakeholders developed VAMP in 1998 to gather the best available scientific information on the impact of flows and State Water Project/ Central Valley Project export rates on salmon smolts in the lower San Joaquin River and to determine what impact the Head of Old River Barrier has on salmon smolt survival.

In 2004, Reclamation, in cooperation with the U.S. Fish and Wildlife Service (FWS) and the California Department of Water Resources (DWR) acquired 65,591 acre-feet of water for VAMP to meet the target flows required on the Merced, Lower San Joaquin, and Stanislaus Rivers. An annual report describing all facets of the 2004 VAMP program is scheduled for release in summer 2005. The report will provide conclusions and recommendations for the technical elements and the annual VAMP monitoring policy/management elements. The VAMP Policy and Technical Teams will consider the recommendations identified in the annual report for incorporation into the 2005 VAMP monitoring program.

In the event that SJRA/VAMP is terminated for some unforeseen reason in accordance with Section 13 of the SJRA/VAMP, Reclamation negotiated with Merced Irrigation District (MEID), and in cooperation with the FWS, California Department of Fish and Game, and DWR, for a backstop measure to preserve spring and fall pulse flows on the Merced River, which accounts for slightly more than half of the VAMP flows. This measure is called the Merced River Adaptive Management Program Agreement, which was signed in August 2002.

VAMP is implemented pursuant to the SJRA, which is a cooperative, multi-interest partnership of State and Federal agencies, various water and irrigation districts including some SWP/CVP contractors [collectively known as the San Joaquin River Group Authority (SJRGA)], and environmental parties. Pursuant to the SJRA, Reclamation and DWR (via a cost sharing agreement in accordance with the Central Valley Project Improvement Act) provide an annual payment of \$4 million, escalated annually per the Consumer Price Index-Urban to the SJRGA. In return, the SJRGA provides up to 110,000 acre-feet of increased flow on the San Joaquin and its tributaries during a 31-day period in April-May to meet the SJRA specified VAMP flow targets.

The SJRA also annually provides additional quantities of water that Reclamation has agreed to purchase for fishery protection and other project purposes. MEID, a member of the SJRGA, provides 12,500 acre-feet annually in the fall to augment the Merced River's instream flows for migrating anadromous fish

Water Fact

VAMP is a scientifically based plan to increase salmon smolt survival in the Delta.

species. Oakdale Irrigation District, also a member of the SJRGA, provides between 15,000 and 26,000 acre-feet to Reclamation in New Melones Reservoir.

A Federal Record of Decision, along with the "Meeting Flow Objectives for the San Joaquin River Agreement, 1999-2010, Final Environmental Impact Statement/ Final Environmental Impact Report," was completed for the SJRA/VAMP in February 1999. A Supplemental EIS/EIR, "Acquisition of Additional Water for Meeting the San Joaquin River Agreement Flow Objectives - 2001 through 2010," and its Record of Decision were completed in November 2001 and provides for the acquisition of up to 47,000 acre-feet of additional test flows for VAMP, which is a SJRA objective, during double-step years. Acquiring additional test flows is required because some double-step target flows may not be met without flows in excess of the 110,000 acre-feet guaranteed by the SJRA. The SJRGA must notify Reclamation by March 1 each year if there is additional water available for purchase.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608). For additional information on the VAMP monitoring program, contact the Central Valley Operations Office at 916-979-2180 (TDD 916-979-2183).

Tracy Fish Facilities Studies and Improvements

In accordance with the Central Valley Project Improvement Act (CVPIA), Central Valley Project (CVP) Operations Criteria and Plan (OCAP), and the Tracy Direct Loss Agreement with the California Department of Fish and Game (DFG), Reclamation works to improve or eventually replace fish protection facilities at Tracy in the south Delta (Tracy Pumping Plant; Delta-Mendota Canal).

New technologies in debris removal and fish handling, including fish capture (holding, sorting by size, and transport back to the Delta waters), require development before large expenditures are made on final fixes to the fish loss problems in the south Delta. Technologies to either replace or supplement exiting fish behavioral-based louver facilities are being studied to assess potentials for further protection of Federal- and State-listed species.



Tracy Pumping Plant

Reclamation, with interagency coordination and assistance, has proposed a Tracy Fish Test Facility (TFTF) adjacent to the Tracy Fish Collection Facility (TFCF) in a major attempt to provide new technologies that will eventually be acceptable and workable.

In 2004, the CALFED South Delta Fish Facilities Forum (SDFF) recommended holding off on construction of a test facility at this time due primarily to funding constraints. The SDFF is currently looking at other, less costly alternatives to improving fish protection in the south Delta while still meeting export objectives.

Interagency Planning

Monthly meetings involving Reclamation (lead), National Oceanographic and Atmospheric Administration Fisheries, the U.S. Fish and Wildlife Service, DFG and DWR, CALFED, water users, and university staff were again held in 2004, providing continued interagency communication, design and research planning. TFCF operational improvement recommendations reflect the many desires and inputs from regulatory and water development agencies, as well as from local water authorities and fish facility experts.

Research and Testing

Tracy fish facilities research and testing continued in 2004 on many projects with cooperative efforts between Regional and Denver Offices, and universities. Much work was done with the physical "fishery engineering" models in Denver (fish sorting, debris handling, leaky louver testing, validation of models predicting fish salvage efficiency at Tracy, and initial work on new experimental above- ground fish holding tanks) and at Tracy (improved debris management, demonstration and testing new acoustical cameras for underwater fish viewing day or night, louver efficiency studies, fish predator behavior and movements, etc.). Also, the deployment of a Tracy fishery facility research web site commenced in 2004 as well as continued publication of Tracy research results in the peer reviewed report series. This brought the total number to more than 25 volumes, with several more volumes in preparation. Technical and poster presentations from Tracy research activities were also presented at State and national scientific forums.

Status and Future Process for TFTF, and Overall Tracy Facilities Studies and Improvements

Decisions for implementing a TFTF in 2004 continued under the influence of the CALFED SDFF. Because of South Delta fisheries management complexity in the face of large water diversions, and competing options for implementing various protective measures, the SDFF was developed and is chaired by top managers and decision makers from several agencies, including Reclamation. Emphasis for the Tracy facilities studies and evaluations has shifted to existing structures and operations, and how they may be improved or supplemented to meet the needs of the CVPIA, CVP OCAP, and CALFED.

For additional information, contact the South-Central California Area Office at 559-487-5116 (TDD 559-487-5933).

Water Acquisition Program (WAP)

The CVPIA directs that Reclamation, in coordination with the U.S. Fish and Wildlife Service, acquire water to provide Level 4 water supplies for wildlife refuges in the Central Valley. The Level 4 water supplies provide optimum habitat management levels at the refuges for the benefit of migratory and wetland-dependent wildlife.

Under the WAP during 2004, Reclamation purchased 67,710 acre-feet of water from willing sellers to help meet Level 4 refuge water requirements. The Level 4 water allows for optimum development and management of wetlands to provide better

water quality, habitat diversity, and a longer winter flooding period. This results in improved habitat conditions and an increase in the survival rate and breeding success of migratory waterfowl.

WAP continued evaluating the potential of using ground-water, either directly or through conjunctive use opportunities, as an alternate water supply for Central Valley wildlife refuges. Both on-site and off-site sources are being investigated. This WAP study is part of an overall effort to diversify sources of Level 4 water and to seek reliable long-term economical acquisitions to meet Level 4 refuge water supply needs. Study results may also help to diversify Level 2 refuge water supplies, especially for San Joaquin Valley wildlife refuges.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Water Conservation Program

In 2004 Reclamation's Water Conservation Team (Team) announced the development of two criteria for Regional Plans and Refuge Plans. The "Regional Criteria for Evaluating Water Management Plans" (Regional Criteria) were developed under the authority of the Central Valley Project Improvement Act and in accordance with the Reclamation Reform Act of 1982. The development and implementation of the Regional Criteria for the Sacramento Valley was an alternative "experimental" pilot program to the current "Standard Criteria for Evaluating Water Management Plans." The Sacramento River Contractors that participate in the development of a Regional Water Management Plan (Regional Plan) will have 5 years in which to successfully implement their Regional Plan under these approved Regional Criteria.

The "Criteria for Developing Refuge Water Management Plans" (Refuge Criteria) were developed to provide a common methodology, or standard, for efficient use of water by Refuges, State wildlife management areas, and resource conservation districts that receive water under provisions of the CVPIA. They document the process and format by which Refuge Water Management Plans (Refuge Plan) should be prepared and submitted to Reclamation as part of the Refuge/District Water Supply Contracts and Memorandum of Agreements.

In addition to Criteria and Plan management, the Water Conservation Program provides assistance to water districts in the areas of water management planning, conservation education, demonstration of innovative technologies, and implementation of conservation measures. In 2004, the Team provided approximately \$1.3 million in grants to participating districts. These participants, in return, provided approximately \$2 million in cost-share funding.

Throughout 2004, the Team continued the interagency partnerships with CALFED's Water Use Efficiency Program and the Urban and Agricultural Water Management Councils. Additionally, the Team is focusing on measurement issues and is working with Cal Poly San Luis Obispo to develop options for measurement of water deliveries to customers.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Water Conservation Field Service Program

During 2004, \$275,000 in cost share grants was provided to 15 recipients as part of Reclamation's Water Conservation Field Service Program. These cost share grants were matched by the recipients on at least a 50-50 basis and were used for water conservation efforts such as public and school education, rebates for replacing inefficient washing machines and toilets, lining of irrigation canals and ponds, funding for water management plan updates, software to upgrade meter readings and billings, new irrigation methods, and automatic rain sensor shutoffs and controllers.

Five water districts provided updates to their 5-year water management plan, and 16 water districts provided updates to their annual reporting requirements.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Water Transfers

From March 1 through November 30 of Water Year 2004, 402,663 acre-feet of Central Valley Project (CVP) water has been approved for transfer under the water transfer provisions of the Central Valley Project Improvement Act (CVPIA). Of this amount, approximately 4,500 acre-feet was approved for transfer north of the Delta and 398,163 acre-feet was approved for transfer south of the Delta. These transfers helped ensure the CVP and its users' needs were met.

As part of the CVPIA Water Transfer Program, Reclamation executed a Memorandum of Understanding (MOU) with the California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB), regarding operation of a Water Transfer Information Clearinghouse. The MOU establishes a framework for agency roles and responsibilities and other mechanisms for managing and implementing the Clearinghouse. Establishing a water transfer clearinghouse to be operated jointly by Interior and the State of California Resources Agency was a goal of Interior under its 1998 Final CVPIA Administrative Proposal on Water Transfers and a key element of the CALFED Bay-Delta Water Transfer Program.

Reclamation's CVPIA Water Transfer Program continues to work in conjunction with DWR and SWRCB co-managing the "On-Tap" Web site, an on-line water transfer information source to improve access to information on water transfers, to clarify water transfer policies and procedures, and provide up-to-date information about ongoing water transfer activities. On-Tap is a key component of the Water Transfer Information Clearinghouse and functions as an informational source to facilitate water transfers within California. The On-Tap Web site is located at http://ontap.ca.gov.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

CONTRACT MATTERS

Contracts are the lifeblood of stakeholders who depend on water provided by the Central Valley Project and other MP projects. The following pages contain descriptions of contract matters important to both stakeholders and the Mid-Pacific Region that occurred during 2004.

Title Transfers

Cachuma Project Title Transfer

In 2004, Congress passed legislation authorizing the transfer of title of certain Cachuma Project distribution facilities to the Carpinteria and Montecito Water Districts. A public ceremony attended by Assistant Secretary of the Interior Lynn Scarlett commemorated the transfer of title. Staff began working on the proposed transfer of neighboring facilities to the Goleta Water District.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Carson Lake and Pasture Title Transfer

Late in 2004, an agreement to transfer the federally owned Carson Lake and Pasture from Interior/Reclamation to the State of Nevada was developed pursuant to Section 206(e) of Public Law 101-618, enacted in 1990. Carson Lake and Pasture is a 30,000-acre wetland within Reclamation's Newlands Project, some 60 miles east of Carson City, Nevada. The wetland is a component of the Western Hemisphere Shorebird Reserve Network and is one of the most valuable in northern Nevada. The wetland hosts thousands of waterfowl during fall migration, providing breeding and migratory habitat for a large variety of shorebirds, ducks, and other water birds.

This agreement does not complete the transfer. The requirements of various Federal statutes, such as the National Environmental Policy Act and Endangered Species Act must be addressed prior to transfer. Over the next 2 years, Interior will work collaboratively with the State of Nevada and the affected stakeholders to bring this transfer to the point where Interior can hand the deed for Carson Lake and Pasture to the State of Nevada.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).



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Carson Lake pasture

Fallon Freight Yard Title Transfer

Reclamation originally acquired the Fallon Freight yard property in Fallon, Nevada, in 1920 and used the 6 acres as a storage and rail yard for the Newlands Project. Beginning in 1926, the Truckee-Carson Irrigation District used the property for project purposes until they moved to their current location. Between 1984 and 2001, Reclamation leased this property to the City of Fallon. The City of Fallon has long expressed a desire to obtain the property.

In 2002, Public Law 107-339 gave the Secretary of the Interior the authority to transfer title of this property to the City of Fallon for fair market value. Since then, Reclamation has performed an appraisal of the fair market value and offered to sell the property to the City of Fallon. In late 2004, the City accepted this offer. Reclamation is now proceeding to transfer title to the City of Fallon and anticipates the transfer will be completed in 2005.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).

Humboldt Project Title Transfer

The Lahontan Basin Area Office has been working with the Pershing County Water Conservation District (District), the State of Nevada, and other interested parties to transfer title to the Humboldt Project to the District, the State, and two counties. The proposed transfer has many public benefits, including allowing the District to own and manage the project facilities without Federal oversight. In addition, land will be transferred to Lander County for county facilities and public access to the Humboldt River, the Derby Airfield will be transferred to Pershing County, and land for wetlands and recreational purposes will be transferred to the State.

The District has also committed to provide a permanent pool in Rye Patch Reservoir to benefit fish. In 2002, Congress enacted a law setting forth the criteria under which transfer of title may take place to the District, Lander County, Pershing County, and the State. In 2003, Congress provided funding to Reclamation to pay part of the State's share of the transfer costs. A Memorandum of Understanding was negotiated between Reclamation and the District to provide a framework for the transfer process. In 2004, an administrative draft Environmental Impact Statement (EIS) was completed. The Draft EIS is expected to be available for comment in early 2005.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).

Long-Term Contract Renewals

In 2003, the MP Region and its contractors resumed negotiations for renewal of approximately 113 of the existing long-term water service contracts. Since negotiations were resumed, a new Central Valley Project (CVP)-wide form of irrigation/municipal and industrial (M&I) contract and a CVP-wide form of M&I-only contract have been agreed upon and negotiations have commenced at the division and contractor levels.

During 2004, negotiations were completed at the division/unit levels and negotiations with individual contractors were concluded with all but four contractors. Upon completion of negotiations, the contracts will have been made

available for a 60-day public review and comment period. Twenty-seven long-term renewal contracts with Friant Division and Hidden and Buchanan Units, executed in February 2001, are not involved in the current negotiation process.

The negotiated contracts will be executioned upon completion of required environmental documentation, including a new Operations Criteria and Procedures (OCAP), Endangered Species Act consultations, and ten National Environmental Policy Act documents. The new OCAP was recently finalized, allowing the U.S. Fish and Wildlife Service and National Marine Fisheries Service to concentrate on completion of ESA consultations for the individual contracts. The environmental documentation is scheduled to be completed in stages between January and May 2005, and contracts will be signed as final environmental documentation is received. These negotiations involve approximately 5.6 million acre-feet of water for irrigation and M&I purposes.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Municipal and Industrial (M&I) Water Shortage Policy

The Central Valley Project has more than 250 water service contracts (including the Sacramento River Water Settlement Contracts). The water shortage provisions in these contracts vary, and potential inequities could exist when CVP water is allocated using the various shortage provisions.

Since December 1991, Reclamation has held many meetings and workshops with the CVP water users and the public to develop a CVP-wide M&I Water Shortage Policy that will provide a minimum level of water supply to M&I contractors.

A draft M&I Water Shortage Policy was released to the public on February 17, 1994, for review and comment. The Central Valley Project Improvement Act Administrative Proposal for Urban Water Supply Reliability, dated June 9, 1997, addressed several of the major issues regarding the 1994 draft M&I Water Shortage Policy, and supported the development and adoption of a final M&I Water Shortage Policy.

By Federal Register notice dated October 30, 2001, Reclamation released a draft M&I Water Shortage Policy, dated September 11, 2001, for public review and comment. A significant number of comments were received during the 30-day review period, and they have been reviewed and considered by Reclamation in the final policy development. Reclamation has used modeling studies to assess the impacts of the proposed policy, and the necessary environmental documentation is near completion. A draft Environmental Assessment and a draft Finding of No Significant Impact were made available for public review and comment in March 2005. The final M&I Water Shortage Policy is scheduled for completion in summer 2005.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Sacramento Contractors Ongoing Recontracting Effort (SCORE)

As a result of litigation involving certain Sacramento River Settlement Contractors, a settlement was reached in January 1996. Part of the settlement involved a "Memorandum of Understanding Between Named Sacramento River Settlement Contractors and the United States of America for the Preparation of Data in Aid of the Renewal of Settlement Contracts" (Contract Renewal MOU).

The Contract Renewal MOU identified four major types of data or documents that were to be prepared as an aid in contract renewal negotiations. These four components represent the framework of the SCORE program that is seeking to build an agreeable platform from which future contract negotiations with the Sacramento River Settlement Contractors can be reached.

The four components of the Contract Renewal MOU are:

- Updating and Extending the 1956 Cooperative Study (1956 Study Update): The Draft 1956 Study Update was completed on December 20, 2000. On October 15, 2001, Reclamation provided a briefing of the draft 1956 Study Update. As a result of the contractors' comments, revisions were made to the model and the report in 2002.
- Developing a Basin Wide Management Plan (BWMP): The BWMP was finalized in October 2004 and includes six technical memorandums. In addition to the BWMP, the Sacramento River Settlement Contractors must submit separate Water Management Plans or a joint Regional Water Management Plan which meet either the current existing Standard Criteria or the newly adopted Regional Criteria. The Regional Criteria were noticed in the Federal Register in January 2004 and finalized in September 2004.
- Contracting Principles: Simple contracting principles were discussed at the first negotiation meeting in May 2002. Negotiations were continued throughout 2004, with agreements reached with all contractors. Executing these contracts is pending completion of the environmental documentation and water management plans. Legislation was passed in 2003.
- Environmental Documentation: Scoping for the environmental documentation for the contract renewal has been accomplished. Environmental documentation is in the process of being completed.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Sacramento River Contract Renewal Process

Approximately 145 Sacramento River Settlement Contracts were scheduled to expire on March 31, 2004. Of these, 16 are with water or irrigation districts and 129 are with individual diverters on the Sacramento River. The contracts encompass 2.2 million acre-feet of water, of which approximately 1.8 million acre-feet is classified as base supply water (water that may be diverted by the contractors free of charge) and approximately 380,000 acre-feet is Central Valley Project Water (water for which the Contractors must pay the United States). Twenty Sacramento River Settlement Contractors (primarily districts) control approximately 95 percent of the water under contract.

Negotiations between Reclamation and the Contractors were initiated on May 1, 2002. During 2003, agreement was reached with the Contractors on a form of contract, and negotiations have been concluded with all of the contractors. The completed contracts have been released for a 60-day public review and comment period. The required environmental documents, including National Environmental Policy Act, Endangered Species Act, and Operations Criteria and Plan (OCAP) are being prepared and the renewal contracts were on track to be signed early in 2005.

The OCAP could not be completed in time to allow new contracts to be signed before the current existing contracts were scheduled to expire on March 31, 2004. Public Law 108-137 provided that the Secretary of the Interior would extend the existing contracts for up to 2 years to provide for continued water delivery to the Sacramento River Settlement Contractors.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).



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Sacramento River

MID-PACIFIC REGION 2004 YEAR IN REVIEW

FACILITY IMPROVEMENTS

Most of the dams, canals, and other infrastructure in the Mid-Pacific Region's projects are decades old. Keeping them in good working order is an ongoing process. Following is a look at progress made in 2004 toward those ends.

Coleman National Fish Hatchery

The main power transformer at Coleman National Fish Hatchery was completely remanufactured in Montana and successfully reinstalled by the Western Area Power Administration during 2004. However, one million fish in the hatchery are still at risk if the commercial power to the hatchery fails. As a result of the main power transformer failure, Reclamation is currently installing a 2,000 kilowatt backup generator capable of powering the entire hatchery. The generator is expected to be operational by mid-2005.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).



Folsom Dam

Folsom Dam Flood Control Projects

The Central California Area Office (CCAO) continued working with the U.S. Army Corps of Engineers (USACE) on authorized flood control projects that will modify Folsom Dam to increase flood protection for Sacramento. Under the Water Resources Development Act of 1999, the USACE was authorized to increase the capacity of Folsom Dam to make flood releases by increasing the size of the existing river outlets and/or adding new outlets.

The first contract for the Folsom Dam Outlet Modification project was awarded in 2004. Additionally, the Energy and Water Appropriations Act for 2004 authorized USACE to design and construct the Folsom Dam Mini-Raise Project. Initial design work began in 2004 on the dam raise. CCAO's role is to work closely with USACE to facilitate completion of the projects with minimum impact on Reclamation's ability to deliver water and power.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Link River Fish Passage

Reclamation contracted with Slayden Construction to build a fish ladder at the Link River Dam on the Klamath Project for \$2,239,000. The ladder will allow endangered short nosed suckers and other fish species to continue their route north along the Link River through the dam to Upper Klamath Lake. It replaces a ladder constructed in 1926 for red band trout that has proven to be a barrier to the endangered suckers.

Work on the Link River Dam Fish Ladder began on July 1, 2004. Completion is scheduled for spring 2005.

To accommodate recreational users of the Link River Nature Trail, which was closed during construction of the fish ladder, Reclamation developed a hiking trail along the northeast corner of Klamath Falls.

For additional information, contact the Klamath Basin Area Office at 541-883-6935 (TDD 541-883-6935).

NCAO Capital Improvement Program

In fiscal year 2004, the Northern California Area Office (NCAO) stepped up an already aggressive capital improvement program. The goal is to extend the life of NCAO's facilities and to upgrade the powerplants with state-of-the-art technologies.

There are currently 68 projects totaling \$43 million either in progress, in contracting, or in planning through fiscal year 2007. Recent accomplishments include: (1) completing the last of 16 main unit circuit breaker overhaul/ replacements; (2) installing the last of 14 main unit flow meters to aid in monitoring turbine efficiency; (3) completing the overhaul of the Shasta Dam Gantry Crane; (4) nearly completing the overhaul of the first of 16 Shasta Dam main outlet works valves; (5) completing the first of five main bus replacements at the Shasta powerplant; and (6) installing a new trash raking system at Keswick Powerplant.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

New Melones Replacement Runners and Turbine Overhaul

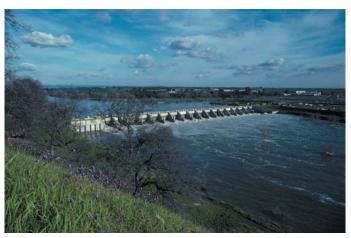
New Melones Dam, located on the Stanislaus River in Calaveras County, California, is undergoing important changes in its power generating equipment. An \$8.8 million contract awarded in late 2003 to G.E. Hydro, Quebec, Canada, involves rebuilding two generators and replacing older runners (the part that turns the turbines) with state-of-the-art stainless steel runners.

In October 2004, New Melones Powerplant Unit 1 was taken out of service for a turbine replacement and overhaul. The work is expected to be completed on Unit 1 in summer 2005. The project includes Unit 2 which will be taken out of service in fall 2005 and is expected to be completed by early summer 2006. The new runners will increase output from 205,000 to 265,000 horsepower.

In addition to the turbine replacement, the units will undergo a mechanical overhaul, repair of the stator and rotor windings, replacement of the electromechanical governors with new digital governors, replacement of the butterfly bypass valves, and replacement of the coolers on the main unit transformers. The cost for the replacement and overhauls is approximately

\$10 million. About 40 percent of that cost is being provided by the Central Valley Project power customers.

For additional information, contact the Mid-Pacific Construction Office at 530-934-7066 (TDD 530-934-1345).



Nimbus Dam

Nimbus Gate Automation

Modifications were completed during summer 2004 to automate the spill gates at Nimbus Dam. Nimbus Dam is an unmanned dam that controls the flow of the lower American River.

In the past, an operator had to be dispatched from Folsom to restore river releases in the event of a powerplant outage. In unusual events like the sudden loss of the powerplant, or during flood conditions, the flows on the American River can now be controlled from Central Valley Operations Office (CVO) in Sacramento. CVO is constantly monitoring Central Valley Project water and power conditions and can now take immediate action to restore flows.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

Replacements, Additions, and Extraordinary (RAX) Maintenance

The initial Central Valley Project (CVP) RAX Program budget for fiscal year 2004 was \$13.6 million; however, the CVP RAX Program successfully expended \$18.3 million due to funds being made available from other programs within Reclamation. This indicates that the CVP RAX need is generally greater than available funds.

CVP RAX design and construction began in 2004 on several large projects including replacing the New Melones Recreation Center Wastewater Treatment Facility, replacing transformers at Coleman Fish Hatchery, replacing Tracy Fish Facility Northside Utilities/Grounds Electrical Utility System, and refurbishing K1A and K2A transformers at the New Melones powerplant. The CVP RAX accomplishment has helped to reduce the MP Region's deferred maintenance from approximately \$21 million in fiscal year 2003 to \$16 million in fiscal year 2004.

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CVP RAX consists of approximately 145 items with an estimated cost of more than \$109 million. The CVP RAX Program has consistently assured that all available dollars are applied to the highest priority items first, ultimately reducing the amount of deferred maintenance that is being reported by the MP Region and successfully sustaining its aging infrastructure.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Shasta Turbine Upgrade

From October 2003 through June 2004, the second of five turbine upgrade installations at Shasta Powerplant was completed. The work included disassembling the generator and turbine, removing and replacing the upper and lower seal rings (bored to size on site), new wicket gates (existing bushings bored to size on site), old runner separated from the shaft, shaft and new runner assembled with new bolts, installing a new runner with a good fit in the new seal rings, and full unit assembly.

This multi-year turbine upgrade program is an ambitious project that will result in five new and better turbines, coupled to five refurbished generators at Shasta. The five new units, rated at 142 megawatts (Mw) each, will be a significant upgrade from the present 125 Mw, without the addition of a new generator or using more water from the reservoir. It is an example of using today's best technology and tools to improve key parts of a powerplant for an overall power increase. This job used better hydrologic data from which to design the new turbines and improved modeling, materials, and manufacturing techniques. The result is increased efficiency and power at the average operating conditions.

In addition to getting turbines upgraded, the crew's level of expertise is being improved. Shasta Dam mechanical crews are performing the work on-site. There are now more workers on the crews with experience in a total overhaul. At the end of this five unit upgrade, which will be 4 or more years into the future, there will be a crew of experts.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Water Fact

The CVP's 11
hydroelectric
powerplants
produce on average
5.5 billion kilowatt
hours of electricity
a year.

PARTNERSHIPS AND ACCORDS

The Region's employees work with stakeholders representing the public and private sectors in virtually every water-related issue in our territory. We form partnerships and make accords with stakeholders to gain high levels of cooperation and achieve results not possible by the action of one agency alone. Following are examples of partnerships and accords formed or continued during 2004.

2004 Klamath Project Pilot Water Bank

The Klamath Basin Area Office (KBAO) continued the Klamath Project Pilot Water Bank to meet requirements of the National Marine Fisheries Service Biological Opinion (BO) on the Klamath Project operation. In 2003, the BO required a water bank of 75,000 acre-feet to supplement river flows for Endangered Species Act-listed coho salmon. KBAO contracted for about 80,725 acre-feet at a total cost of about \$5.3 million.

The Water Bank consisted of land idling and ground-water substitution. Participants were paid \$146 per acre for idling land and \$143 per acre-foot for substituting well water for Klamath Project surface water. Approximately 15,500 acres were idled. Ground-water was used in lieu of Klamath Project water for 6,900 acres. Approximately 42,224 acre-feet of water was available for the water bank as a result of options contracts.

For additional information, contact the Klamath Basin Area Office at 541-883-6935 (TDD 541-883-6935).

Battle Creek Salmon and Steelhead Restoration Project

The Battle Creek Salmon and Steelhead Restoration Project provides an opportunity to restore approximately 42 miles of prime salmon and steelhead habitat on northern California's Battle Creek plus an additional 6 miles on its tributaries, while minimizing the loss of clean and renewable energy produced by the Battle Creek Hydroelectric Project (Federal Energy Regulatory Commission (FERC) Project 1121), owned and operated by Pacific Gas and Electric (PG&E).

A 1999 Memorandum of Understanding between Reclamation, PG&E, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game established a proposed plan to modify Battle Creek Hydroelectric Project, so that restoration could occur while minimizing the loss of hydropower production.

The Restoration Project includes cooperative efforts between Reclamation and the California Department of Water Resources to develop project designs and with the State Water Resources Control Board and the Federal Energy Regulatory Commission (FERC) for the completion of environmental compliance

Water Fact

Battle Creek, a tributary of the Sacramento River in Northern California, is potentially the best salmon spawning tributary north of the Feather River.

and hydropower licensing activities. The Restoration Project is in the final stages of design, environmental compliance, and FERC license amendment processes.

For additional information, contact the Division of Design and Construction at 916-978-5300 (TDD 916-978-5608).

CALSIM II Model Development

CALSIM II development continued in 2004 with continued refinement of the simulation of water quality at Vernalis on the San Joaquin River and simulation of non-Federal projects on the San Joaquin Valley's east side, projects completed in 2003 but modified in response to testing and review by stakeholders.

A CALSIM III development was initiated. This is primarily an update of the hydrologic input, and conversion of the language CALSIM is coded in from FORTRAN to JAVA. Additionally, a daily timestep version of CALSIM II for the American River watershed is under development by CH2M Hill.

Additional features to the Graphical User Interface were developed in conjunction with Reclamation's Technical Service Center. Specifically, search utilities to quickly and easily find detail information was developed.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Conservation Implementation Program (CIP)

Reclamation believes that resolution of the numerous natural resource management issues in the Klamath River Basin will require a basin-wide, stakeholder driven, ecosystem restoration approach. The Klamath Basin Area Office (KBAO) worked with stakeholders throughout the basin during 2004, including the Klamath, Yurok, and Hoopa Valley Tribes; watershed groups; water users; and environmental groups to develop the Klamath River Basin CIP.

The Governors of California and Oregon; the Secretaries of the Interior, Commerce, and Agriculture; and the Administrator of the Environmental Protection Agency signed the Klamath River Watershed Coordination Agreement, which supports a CIP-like process.

The CIP's aim is to unite and empower all the existing restoration efforts; provide guidance and resources; coordinate efforts; exchange information; ensure that sound, peer-reviewed science guides restoration efforts; and standardize the collection of water quality and fish population data. The second draft of the document was discussed at six public meetings held throughout the basin. Comments will be incorporated into a third draft early in 2005.

The final draft will be crafted in a meeting of interested parties facilitated by a team of organization development specialists.

For additional information, contact the Klamath Basin Area Office at 541-883-6935 (TDD 541-883-6935).



Gray Lodge Wildlife Management Area

Conveyance and Construction Agreements for Gray Lodge Wildlife Management Area

Reclamation and the Biggs-West Gridley Water District have reached agreement on a long-term contract to convey water needed for full habitat development at the Gray Lodge Wildlife Management Area.

In September 2003, the district's board of directors voted to accept the last proposal presented by Reclamation on September 20, 2003. Negotiations for a long-term agreement had been on going for 7 years during which the district conveyed water to the wildlife area under interim agreements. The agreement includes a section on conveyance and a section on construction. The conveyance portion of the contract provides for quantities and scheduling, points of acceptance and delivery, conveyance losses, measurement, payment, water quality, and operation and maintenance of improved facilities. The construction contract provides for improvements to the district's distribution system that are required to deliver the water needed for full habitat development. The conveyance and construction contract was executed in fiscal year 2003.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Integrated Hydrologic Simulator Model Development

To address important issues concerning the quantity, quality, distribution, and management of water, integrated modeling tools are needed that can accurately simulate the entire hydrologic cycle and the interactions between its different components.

Traditionally, models have been constructed that simulate individual components of the hydrological system (e.g., ground-water models, watershed models, reservoir and stream routing models, lake and estuary hydrodynamic models). Integrated Hydrologic Simulator (IHSim) is a fully-coupled surface/subsurface numerical flow and transport model recently developed for water-resource analysis, planning, and management.

The development of IHSim has been a joint effort involving Reclamation, the University of Waterloo, Laval University, and HydroGeoLogic, Inc. IHSim is among

a relatively small class of physically-based, spatially-distributed models designed to address ground-water and surface water flow/solute transport and their interactions at the component interfaces.

IHSim is a comprehensive conjunctive surface-subsurface modeling tool and represents the state-of-the-art in conjunctive hydrologic modeling. Its existing features of 2-D flow and transport in the surface water regime, 3-D flow and transport in the subsurface regime, and the coupled interactions between the two regimes have been thoroughly tested and verified. IHSim is beginning to be applied to challenging real-world problems.

In 2004, Reclamation applied IHSim in the following projects:

- To evaluate the capability of an integrated on-farm drainage management system at Red Rock Ranch, San Joaquin Valley, to control drainage water and salinity.
- To evaluate the impact of land retirement on the local and regional hydrology and water quality (the conceptual model at the Tranquility, California, site is under development).
- To apply IHSim to evaluate the potential benefits of the proposed Shasta Dam and Reservoir enlargement.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

California State University, Chico, Irrigation Training Facility

As a result of Reclamation's water conservation educational grant, Chico State University, in partnership with Reclamation, the California Public Utilities Commission, Cal Poly, Fresno State, Durham Pump, North State Pump Companies, and Concepts in Controls Inc., developed a state-of-the-art facility for water and pump management training.

Labeled the "Irrigation Training Facility," its mission is to provide a place for irrigation automation and pump training using classroom instruction, Supervisory Control and Data Acquisition (SCADA) equipment, and the demonstration pump and canal control systems. Cal Poly and Fresno State have already provided seminars on SCADA and pumping efficiencies to agriculture industry personnel and irrigation districts. Future seminars will be offered by professional staff from Cal Poly, Fresno State, and Chico State forming a unique and powerful partnership that will bring educational opportunities in water management to the north State that previously have not been available.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Red Bluff Pumping Plant Fish Passage Program

The Red Bluff Diversion Dam is a 52-foot-high concrete gated weir structure located on the Sacramento River about 2 miles southeast of Red Bluff, California. The dam was built between 1962 and 1964 to divert water from the Sacramento River to the Corning and Tehama-Colusa Canals, thus providing irrigation water to parts of the Sacramento Valley. Because it seasonally blocks the Sacramento River, the dam interferes with the threatened spring-run Chinook salmon and steelhead as they attempt to move upstream to their spawning grounds.



Red Bluff Diversion Dam

In an effort to minimize the fish passage problems, Reclamation implemented an 8-month "gates out" operation at the dam on September 15, 1994. Each year on September 15, the dam's gates are raised until May 15 of the following year. During this "gates out" period, water cannot be diverted by gravity to the Tehama-Colusa and Corning Canals.

While this change in operations has significantly mitigated the fish passage problem at the dam, it severely limits the ability of the Tehama-Colusa Canal Authority (TCCA) to reliably deliver a sufficient water supply to contract users. Reclamation and TCCA, working with other Federal, State, and local agencies and stakeholders, are co-lead agencies for the National Environmental Policy Act/California Environmental Quality Act process to develop alternative plans to increase the delivery of irrigation water during the "gates out" period while further reducing fish passage problems.

One of the alternatives is the Red Bluff Research Pumping Plant, which was completed in 1996. The pumping plant was built to test fish-friendly pumps and deliver irrigation water to Tehama-Colusa and Corning Canals. It was originally constructed with three pumping units, but was designed for four units. Water districts depend on this plant for spring and fall water deliveries during the "gates up" operation of Red Bluff Diversion Dam. Although the planning process was on hold during 2004, awaiting the completion of the Operations Criteria and Plan consultation under the Endangered Species Act, a contract was let to install the fourth and final pump in the pumping plant, a component of all alternatives, to reduce delivery problems during the spring and fall. That work is to be completed in 2006.

When completed, the additional capacity will help water users meet yearly diversion needs and delay rediverting at Stony Creek constant head orifice. The evaluation of alternatives is to be completed in 2005.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

Restoration Plan for San Joaquin River

In July 2004, Reclamation and the California Department of Water Resources (DWR) announced that the agencies will engage in efforts to develop a feasible and sufficient restoration plan for the San Joaquin River. The efforts include working with other State, Federal, and local agencies; developing site-specific information; and fostering broad involvement by local landowners, downstream interests, environmental interests, and other stakeholders. Through this process, a science-based review of fish restoration feasibility, including anadromous fish, will be implemented, and a range of implementable restoration strategies will be developed. Reclamation and DWR anticipate that this effort will take at least 5 years to complete.

For additional information, contact the South-Central California Area Office at 559-487-5116 (TDD 559-487-5933).

Sacramento River Diversion Feasibility Study

Public Law 106-554, Appendix D, Division B, Section 103, directs the Secretary of the Interior to conduct a feasibility study for a Sacramento River Diversion Project, consistent with the Water Forum Agreement dated April 24, 2000. The goal of the Sacramento River Diversion Feasibility Study is to develop a water supply plan consistent with the Water Forum Agreement. The objective includes pursuing a Sacramento River diversion to meet Placer County/Sacramento County Region water supply needs while promoting ecosystem preservation along the lower American River.

Reclamation and the Placer County Water Agency (PCWA), the Cities of Roseville and Sacramento, and the Sacramento Suburban Water District are sharing the cost of developing the study. The non-Federal cost share of Study development is a minimum of 50 percent, with a maximum total study cost of \$10 million. Reclamation and PCWA are continuing to share in the cost of developing a county-wide habitat conservation effort known as Placer Legacy. The first stage of plan development is addressing the study focus area, western Placer County.

Significant accomplishments and activities for 2004 include the completion of a draft Initial Alternatives Report. A final report is scheduled for mid-2005. The study team also focused on analyses for the Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) and the Biological Assessment. They conducted public meetings and briefings to study partners. A draft EIS/EIR is scheduled to be completed in late 2005.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Title XVI Water Reclamation and Reuse Program

The Division of Planning manages the Title XVI Water Reclamation and Reuse Program for the MP Region. In 2004, Reclamation participated in the following studies:

Watsonville Area Water Recycling Project

In August 2004, the City of Watsonville and the Pajaro Valley Water Management Agency completed a final Feasibility Study report of water recycling opportunities to mitigate the impacts of ground-water overdraft in the Pajaro Valley. The report recommended the construction of a project to recycle up to 4,000 acre-feet per year of effluent from the City's wastewater treatment plant, which must be blended with 10,000 acre-feet of higher quality water to reduce salinity for agricultural irrigation. Reclamation certified the feasibility study and issued a cooperative agreement for construction in September 2004. Design studies were initiated in fiscal year 2004 with project construction scheduled for summer 2005. Project cost is estimated at \$72 million.

North San Pablo Bay Restoration and Reuse Project

In fiscal year 2004, Reclamation and the Sonoma County Water Agency (SCWA) completed a draft Phase I feasibility report which evaluated opportunities for water recycling supply, storage, and distribution in the northern San Pablo Bay region, an area abundant in vineyards. The proposed regional water recycling project would stretch existing supplies while leaving more flows during summer months for anadromous fish restoration. The regional water recycling project would link up to five wastewater treatment plants with distribution pipelines that would provide recycled water to restore the former Cargill bittern ponds and to provide irrigation water for 10,000 to 15,000 acres of vineyards. Comments to the draft Phase I feasibility report are now being incorporated into a final Phase I feasibility report which is scheduled for completion in early 2005. The feasibility study is being completed in phases. Phase II feasibility study was initiated in fiscal year 2004 and will build upon the recycled water supply alternatives developed in the Phase I feasibility study. All phases of the feasibility study, which include National Environmental Policy Act (NEPA) compliance and a statement of financial capability, are scheduled for completion in fiscal year 2007.

North Sonoma County Agricultural Reuse Project

In fiscal year 2004, Reclamation and SCWA continued the feasibility study to evaluate opportunities for recycled water, storage, and distribution in the Alexander, Russian River, and Dry Creek Valleys in the vicinity of Santa Rosa, California. The project will evaluate a regional approach to providing recycled water to 25,000 acres of agricultural lands (primarily vineyards). The objective is to provide an alternative source of agricultural water to reduce reliance on surface water and ground-water supplies. Six wastewater treatments plants from six different wastewater treatment districts would be linked by a regional pipeline system to provide recycled water.

In December 2004, the study completed recycled water demand analyses for the Alexander, Russian River, and Dry Creek Valleys. Work continues in fiscal year 2005 with development of alternatives and the initiation of NEPA/California Environmental Quality Act (CEQA) compliance. The feasibility study is scheduled for completion in fiscal year 2007. The final feasibility study report will select a preferred alternative, develop a project cost estimate, include NEPA/CEQA compliance, and include a statement of financial capability.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

WESTSIM Ground Water Model

WESTSIM is a ground-water simulation model of the Federal contract lands on the San Joaquin Valley's western side from Tracy in the north to Kettleman City in the south. Salinization, ground-water overdraft, and land subsidence threaten agricultural productivity in this region.

The model uses finite element techniques to simulate the hydrologic cycle's various components and how these components interact. The most important components are the stream/aquifer interaction, subsurface drainage simulation, and soil moisture accounting. The model consists of 61 sub-regions that include both water districts and wildlife refuges. Geographic Information System technology was used to define the various model characteristics. Once completed, the model will give Reclamation a better understanding of groundwater movement and quality that is critical to the region's economic survival.

In early 2003, a model peer review of the original Integrated Ground Water Surface Water Model (IGSM) code by the California Water and Environmental Modeling Forum revealed serious deficiencies in the stability of the original IGSM model for sub-regional model domains. A new model code was released publicly in early 2004, and Reclamation has been an active partner with the California Department of Water Resources in peer reviewing the model and making suggestions for model enhancements. Two training workshops have been held since the release of the new model. WESTSIM was used as the test case for these training workshops.

Reclamation completed the following major tasks in 2004 towards development of a final calibrated WESTSIM model:

• The unique, public domain data management system, renamed SHEDTOOL, was enhanced in parallel with the WESTSIM model to improve Reclamation's management of well log, water level, and water quality data and allow more rapid processing of the data necessary for modeling purposes. Two new output formats have been developed to allow water balances to be developed on an individual water district basis. This is a significant development and will provide direct benefit to MP-400 and Reclamation's water conservation office.

- All model input files were updated to the year 2000 and the input files cross-checked with the U.S. Geological Survey (USGS) to produce a single set of model input files for all years for irrigation water deliveries, cropping, and evapo-transpiration losses. This collaboration will help to improve utility of both the USGS and Reclamation modeling activity by improving public acceptance and stakeholder confidence in modeling assumptions and the supporting database.
- Private wetlands are being simulated for the first time as distinct subregions in the WESTSIM model. No current model of west-side
 hydrology has included these important hydrologic features. Inclusion of
 wetlands will result in a more realistic simulation of San Joaquin Basin
 hydrology and improve the simulation of stream-aquifer interactions and
 ground-water contribution to the San Joaquin River.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Water Quality Coordination

The Water Quality group in the Division of Planning manages water quality activities relating to Water Quality Control Board permits, Endangered Species Act and Clean Water Act (CWA) actions, and Central Valley Project operations. The Water Quality group strives to ensure minimum impact to Reclamation's operations and its ability to meet customer needs.

In 2004, the Water Quality Group participated in the following water quality activities:

- Reclamation participated in the multi-agency/private stakeholder processes during several CWA activities:
 - Salt and Boron Total Maximum Daily Load (TMDL) in the Lower San Joaquin River.
 - The San Joaquin River Deepwater Ship Channel Dissolved Oxygen TMDL.
 - National Pollutant Discharge Elimination System permit for Sliger Mine (an abandoned mine located on Reclamation property near the Auburn Dam site).
 - Warren Act Contract for Delta-Mendota Canal (DMC) and Friant-Kern Canal.
 - Perform small-scale Recirculation study.
 - San Joaquin River Water Quality Management Group address critical water quality problems in the San Joaquin River Basin.

- Reclamation participated in multi-agency planning and scoping sessions relating to water quality issues (within or near Reclamation facilities) that may impact daily operations:
 - California Bay-Delta Authority Drinking Water Subcommittee.
 - Freeport Regional Water Project.
 - Environmental Water Account.
 - South Delta Water Quality Standards.
 - Shasta Enlargement Program.
 - DMC water quality monitoring for selenium TMDL.
 - South Delta Improvement Plan.
 - Delta Improvement Plan.
 - City of Fernley Storm Water Runoff and Drainage.
 - Sacramento County Regional Water Transfers.
- MP Region participated in Reclamation's Water Quality Work Group.
 The Work Group addresses various water quality issues pertinent to Reclamation facilities and operations:
 - Reclamation and MP Region Water Quality Database.
 - Reclamation water quality related policies.
 - Environmental Protection Agency water quality related polices.
 - Reclamation Storm water policy.
 - Perchlorate monitoring program.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).



Lower San Joaquin River near Friant Dam

SPECIAL RECOGNITION

The Mid-Pacific Region's success every year depends on the continued hard work of each of its employees and divisions. A select few are singled out each year to receive honors for outstanding service and programs. Following are two of the award winners for 2004.

Superior Service Award from the Department of the Interior

David W. Poore: Mr. Poore was recognized for his extensive contributions in the field of engineering and management for the Bureau of Reclamation. Throughout his career with Reclamation, he has received numerous awards and recognitions for his leadership and technical skills on many projects, including recently receiving Reclamation's Heart of Hydro Award in 2004 for his program management and supervision on the turbine replacements at the Shasta Powerplant. At the Northern California Area Office, Mr. Poore was instrumental in many projects that enhanced facilities and significantly contributed to Reclamation's mission accomplishment in Northern California. He supervised the disassembly and reassembly of numerous units at all of Northern California Area Office's powerplants for generator upgrades and turbine repairs and turbine runner replacements.

Citation for Exemplary Act

Steven L. Barker: On February 12, 2004, while accompanying two contract employees to the Prosser Creek Dam, which is accessible only by snowcat during the winter months, Mr. Barker encountered a vehicle trapped in the snow. Upon approaching the vehicle, it became apparent the occupant was attempting suicide by carbon monoxide inhalation. The contract employees cut the hose leading from the vehicle's tail pipe into the passenger compartment and opened the vehicle door to allow fresh air to reach the victim. At the same time, Mr. Barker contacted authorities by calling 911 on his cell phone and kept them apprised of the victim's condition. Upon their arrival, Mr. Barker ferried the paramedics and the Sheriff's Deputies to the scene so that prompt first aid could be administered. He then transported the victim by snowcat to a Care Flight helicopter and used the snowcat to free the ambulance and Sheriff's patrol vehicles, which had become trapped in the snow.



David Poore



Steven Barker

How To Reach Us

Regional Office

Mid-Pacific Regional Office

Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825-1898

Public Affairs 916-978-5100 TDD 916-978-5608 Web site: www.usbr.gov/mp

Specialized Offices

Central Valley Operations Office

3310 El Camino Avenue, Suite 300 Sacramento, CA 95821 916-979-2180 TDD 916-979-2183

MP Construction Office

P.O. Box 988 Willows, CA 95988-0988 530-934-7066 TDD 530-934-1345

Area Offices

Central California Area Office

7794 Folsom Dam Road Folsom, CA 95630-1799 916-988-1707 TDD 916-979-7285

Klamath Basin Area Office

6600 Washburn Way Klamath Falls, OR 97603-9365 541-883-6935 TDD 541-883-6935

Lahontan Basin Area Office

705 North Plaza Street, Room 320 Carson City, NV 89701-4015 775-882-3436 TDD 775-882-3436

Northern California Area Office

16349 Shasta Dam Boulevard Shasta Lake, CA 96019 530-275-1554 TDD 530-275-8991

South-Central California Area Office (Fresno)

1243 N Street Fresno, CA 93721-1813 559-487-5116 TDD 559-487-5933

South-Central California Area Office

(Tracy) 16650 Kelso Road Byron, CA 94514-1909 209-836-6201 TDD 209-836-6282

Acronyms Used

AFSP Anadromous Fish Screen Program
ARWEC American River Water Education Center

Authority California Bay-Delta Authority

BARWRP Bay Area Regional Water Recycling Program

BA Biological Assessment BO Biological Opinion

BRC Business Resource Center
BWMP Basin-Wide Management Plan

CA California Aqueduct

CALFED California-Federal Bay-Delta Program

CCAO Central California Area Office

CDPR California Department of Parks and Recreation

CEQA California Environmental Quality Act

cfs Cubic Feet Per Second

COMA Consolidated Operations and Maintenance Agreement

CVO Central Valley Operations Office

CVACS Central Valley Automated Control System
CVPIA Central Valley Project Improvement Act

CVP Central Valley Project
CWA Clean Water Act

DFG California Department of Fish and Game

DMC Delta-Mendota Canal

DWR California Department of Water Resources
Delta San Joaquin/Sacramento River Bay-Delta

EWA Environmental Water Account ESA Endangered Species Act EAP Emergency Action Plan

EIS/EIR Environmental Impact Statement/

Environmental Impact Report

EPA Environmental Protection Agency
FERC Federal Energy Regulatory Commission

FWS U.S. Fish and Wildlife Service GAO Government Accounting Office GIS Geographic Information System

GPRA Government Performance and Results Act

GWh Giga Watt Hours

ICS Incident Command System

IDS In-Delta Storage IG Inspector General

IGSM Integrated Ground-water Surface Water Model

IHSim Integrated Hydrologic Simulator Department of the Interior Interior **IRP** Integrated Resource Plan ΙT Information Technology ITA Indian Trust Asset JOC Joint Operations Center Klamath Basin Area Office **KBAO** LBAO Lahontan Basin Area Office MEID Merced Irrigation District

MPCO Mid-Pacific Construction Office

Municipal and Industrial

M&I

MOA Memorandum of Agreement MOU Memorandum of Understanding

Mw Megawatt

NCAO Northern California Area Office NEPA National Environmental Policy Act NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

NODOS North of Delta Off-stream Storage

NOI Notice of Intent NOP Notice of Preparation NPS National Park Service

NRDC National Resource Defense Council

NWS National Weather Service

OCAP Operating Criteria and Procedures (for Newlands Project and others)

OCAP Operations Criteria and Plan (for CVP only)

OSH Occupational Safety and Health PCWA Placer County Water Agency

PEIS/EIR Programmatic Environmental Impact Statement/Environmental Impact Report

MID-PACIFIC REGION

PG&E Pacific Gas and Electric

RAX Replacements, Additions, and Extraordinary Maintenance Program

RecNet Reclamation Network
Refuge National Wildlife Refuge
ROD Record of Decision

RWSP Refuge Water Supply Program

SCADA Supervisory Control and Data Acquisition SCCAO South Central California Area Office SCWA Sonoma County Water Agency SDFF South Delta Fish Facilities Forum

SEIS Supplemental Environmental Impact Statement

SJRA San Joaquin River Agreement
SJRGA San Joaquin River Group Authority

SWP State Water Project

SWRCB State Water Resources Control Board

TAMWG Trinity Adaptive Management Working Group

TCCA Tehama Colusa Canal Authority
TCD Temperature Control Device
TDD Telephone Device for the Deaf
TDFF Tracy Demonstration Fish Facility
TFCF Tracy Fish Collection Facility
TMC Trinity Management Council
TMDL Total Maximum Daily Load

TROA Truckee River Operating Agreement

TSC Technical Service Center
USACE U.S. Army Corps of Engineers
USGS U.S. Geological Survey

VAMP Vernalis Adaptive Management Plan WAWRP Watsonville Area Water Recycling Project

WAP Water Acquisition Program

Western Area Power Administration

WQCP Water Quality Control Plan

WY Water Year