

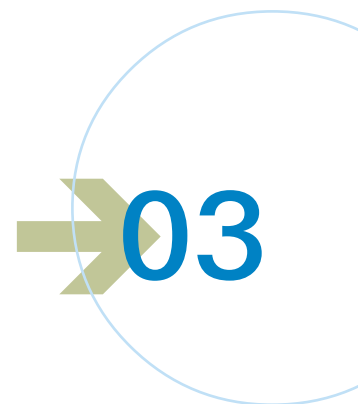
RECLAMATION

Managing Water in the West

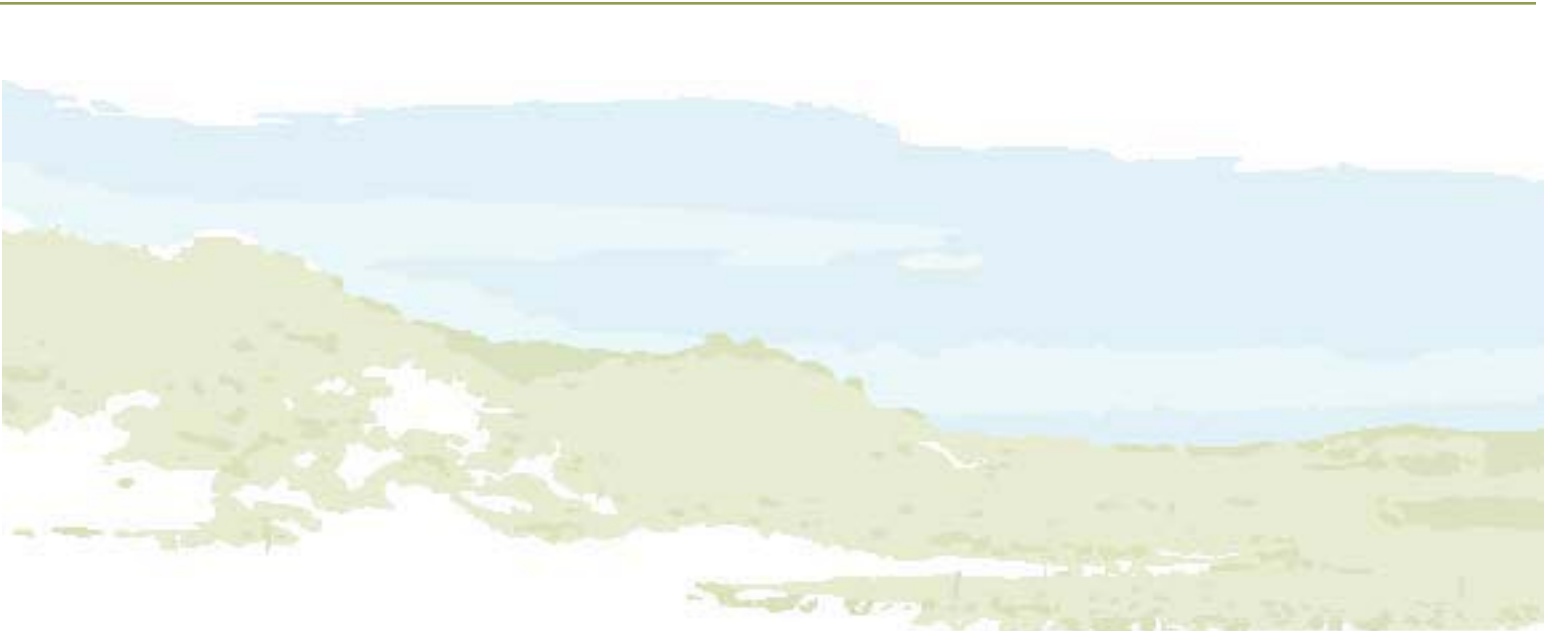
Mid-Pacific Region
Year in Review
2003



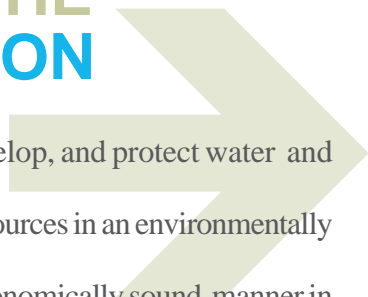
U. S. Department of the Interior
Bureau of Reclamation



Mid-Pacific Region
YEAR IN REVIEW

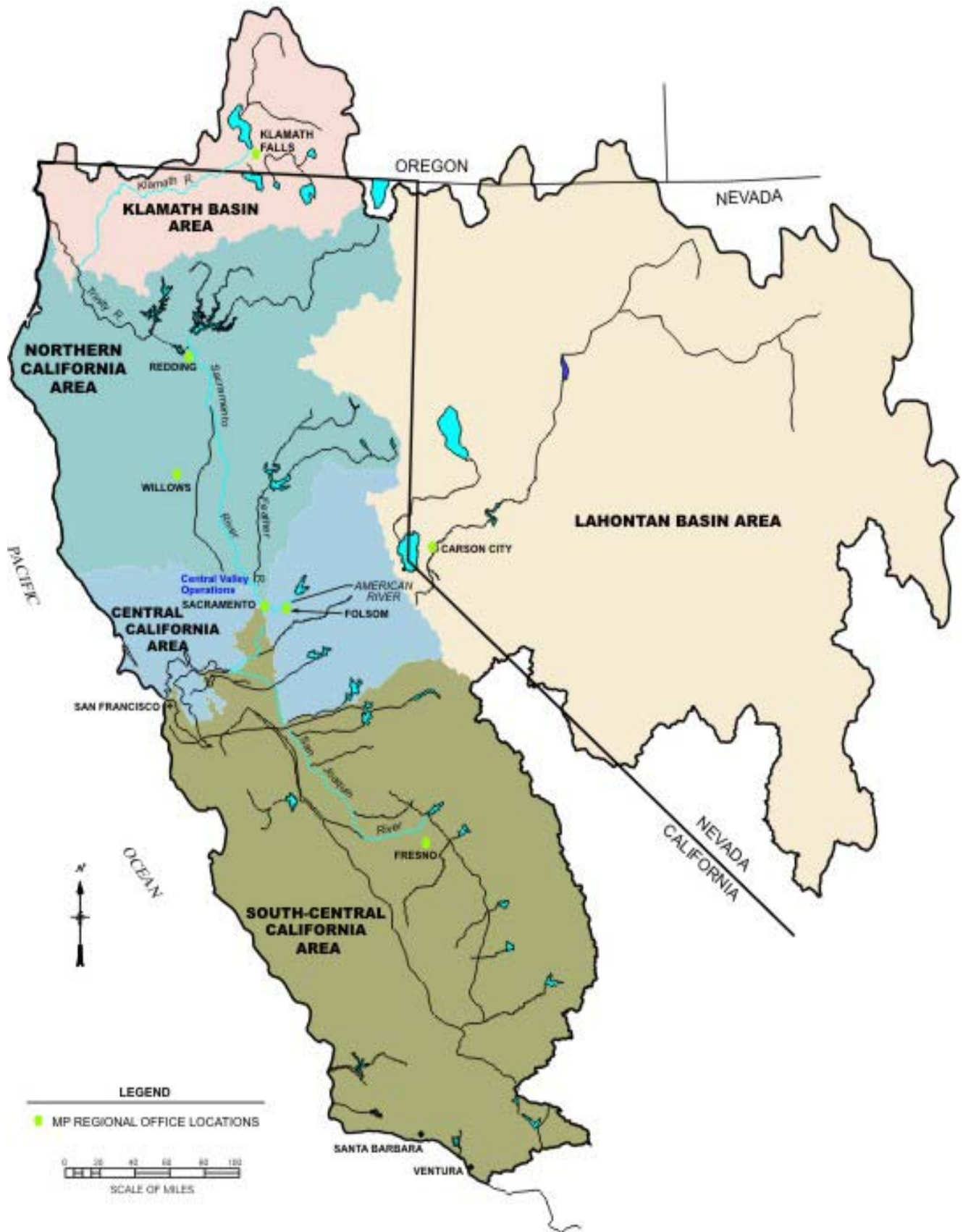


THE MISSION OF THE BUREAU OF RECLAMATION



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



The Organization

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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.”

In 2002, a momentous page turned in Reclamation’s history. On June 17, Reclamation observed its 100th year, and its motto, “A Century of Water for the West,” is a poignant reminder of the hard work that thousands of our men and women have performed to achieve economic prosperity for the 17 Western states.

Shortly after President Theodore Roosevelt signed the Reclamation Act on June 17, 1902, Reclamation engineers fanned out across the arid West to find likely sites to begin building irrigation projects. Just 3 years later, on June 17, 1905, a congressional delegation led by Nevada Senator Francis G. Newlands, sponsor of the 1902 Reclamation Act (the MP Region’s Newlands Project bears his name), dedicated Derby Diversion Dam in western Nevada. When the 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 half-century, huge irrigation projects were built that created agricultural and industrial profits, prosperity, and ensuing population growth. With these changes, 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), National Environmental Policy Act (1969), Clean Water Act amendments to the Water Pollution Control Act (1972 and 1976), Endangered Species Act (1973), and Central Valley Project Improvement Act (1992).

As Reclamation begins its second century of service, our 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 this, we are working very hard to find ways to meet the needs for limited water and power supplies, provide incentives for water conservation and water reuse, and form and nurture partnerships with state and local entities and consult with Indian 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 and activities that took place during 2003. It demonstrates the Mid-Pacific Region’s dedication to our natural resources.

Kirk C. Rodgers
Regional Director
Mid-Pacific Region

THE ORGANIZATION

The Mid-Pacific Region includes offices at headquarters 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 we have established Area Offices in Folsom (Central California Area Office), Fresno (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 Region strives to develop and implement a balanced approach to water allocation serving users while protecting the environment. We manage and operate California's largest and best-known water project, the Central Valley Project (CVP), as well as Oregon's Klamath Project; Nevada's Newlands, Humboldt, Washoe, and Truckee Storage Projects; and California's Cachuma, Orland, Santa Maria, Solano, and Ventura River Projects. All projects share in the complexity and competition that grow out of the scarcity of water in the West. The Region's challenge is to balance competing and often conflicting needs among water uses and users that include 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

During 2003, the Mid-Pacific Region employed a staff of 962 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 worked diligently to support the Region's overall critical mission requirements related to water and natural resources management.

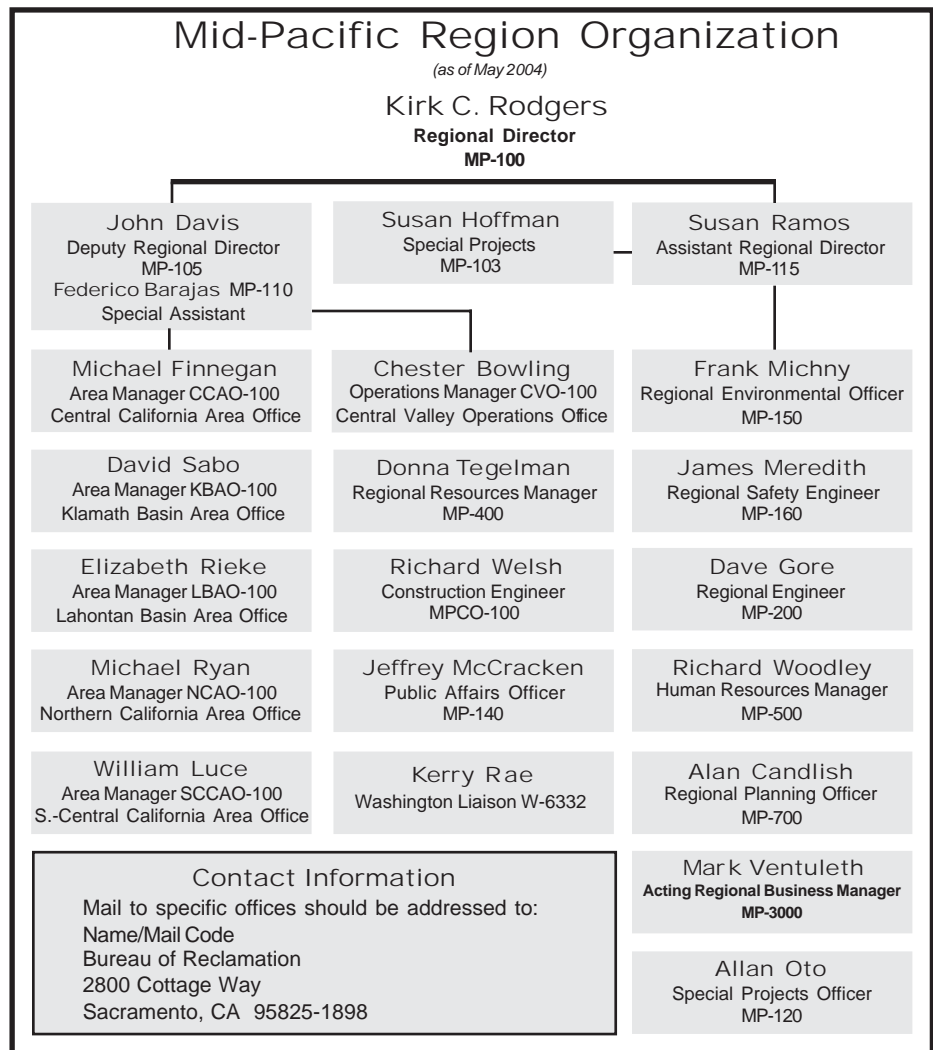


David McInnes, a Job Corps worker, in the Central California Area Office garage in Folsom.

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

Below is an approximate number of permanent staff members located throughout California, Nevada, and Oregon:

Office	Location	Employees
Mid-Pacific Regional	Sacramento, CA	383
Central Valley Operations	Sacramento	56
Mid-Pacific Construction	Willows, CA	44
Lahontan Basin Area	Carson City, NV	31
Klamath Basin Area	Klamath Falls, OR	32
Central California Area	Folsom	98
Lake Berryessa	Berryessa	27
New Melones	Jamestown	23
Northern California Area	Redding	129
Red Bluff	Red Bluff	12
Willows	Willows	9
Elk Creek	Elk Creek	5
South-Central California Area	Fresno	57
Tracy	Tracy	41
Friant	Friant	12
Cachuma	Santa Barbara	3
Total		962



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 high-visibility programs to include the California-Federal Bay-Delta Program (CALFED) and the Central Valley Project Improvement Act (CVPIA). The staff implements the Region's policies in these areas and develops 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 Office of Public Affairs supports the Region with respect to public affairs, public involvement, public education, and internal employee information. 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. They also design fact sheets, brochures, newsletters, annual reports, and other materials related to ongoing Regional projects and activities. They design and manage public involvement processes to ensure stakeholders participate in policy development and project implementation. Public Affairs provides oversight for the development and implementation of the Internet. Public Affairs operates the Foreign Visitor Program and coordinates tours for members of Congress and congressional staff members. The staff also provides audiovisual services (including film-based and digital photography and videography) and maintains the Region's photo library.

Division of Environmental Affairs (MP-150)

The division staff ensures compliance with a variety of environmental statutes and provides 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 (NEPA) and the Endangered Species Act (ESA). The division is responsible for Region-wide environmental monitoring and compliance with the National Historic Preservation Act, hazardous materials statutes, and wetlands and endangered species programs. It also acts as lead for the Interagency Ecological Program.

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

The office staff provides support for the Region's Occupational Safety and Health (OSH), Security, and Accessibility programs for the protection of employees and visitors, equipment and facilities, and contractor operations. The office ensures the conduct of Reclamation operations comply with Federal and Agency OSH standards, and develops supplemental or additional Regional policy as needed. It provides technical guidance to field safety professionals, conducts accident investigations and OSH program evaluations, and promotes good safety practices. The office assures the physical security of Reclamation facilities, employees, and operations. It also works to make Regional facilities accessible to all individuals.



The Sutter Wildlife Refuge

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 were authorized in the Western states. The Newlands Project in Nevada, in what is now the Mid-Pacific Region, was the first.



Ground water pumping in the Central Valley

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)

The division staff works closely with the Denver Technical Service Center (TSC), 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 prepares designs and specifications for new construction and for the modification or repair of existing facilities, provides engineering consultation services, provides engineering technical support for planning studies, and provides engineering support during construction. Staff also performs subsurface investigations and geologic analysis to support engineering designs, water resource planning efforts, operation and maintenance activities, and construction activities. Staff provides ground water and geohydrologic support for all aspects of ground-water issues. The division survey and photogrammetric mapping section supports design, planning, and structural monitoring activities.

Division of Resources Management (MP-400)

The division is responsible for Regional activities related to water rights; administration of water service contracts; CVPIA and Reclamation Reform Act compliance evaluations; real estate; Native American Affairs; land resources management; irrigation and drainage; Geographic Information Systems (GIS); and land classification. Division staff members are responsible for a broad range of programs including water acquisition, water conservation, title transfer, Tracy Fish Facility improvement, 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 (RAX) 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 office functions as the Human Resources Office for the Region's employees and offices and advises on human resource issues. Under a Memorandum of Agreement (MOA), the office also provides human resources services to the Bureau of Indian Affairs Pacific Region and Indian agencies under its jurisdiction. The Human Resources Office provides organization and position analysis, diversity consultation, and recruitment and staffing activities; and provides advisory services for employee conduct and performance issues, complaints, and grievances. Staff negotiates and administers collective bargaining agreements with employee unions, oversees training and employee development programs, coordinates payroll activities, and advises employees on retirement and benefit programs.

Division of Planning (MP-700)

The Division of Planning's (Planning) primary responsibility is preparing multi-purpose water resource studies and plans for use in conserving water, land, power, and other associated natural resources. Planning conducts strategic planning and

formulates alternatives and recommendations for resource studies and is responsible for maintaining and improving CVP delivery capabilities through the CVP Yield Feasibility Investigation Program along with evaluating improvements to water supply reliability through Bay Delta Program participation. Planning is also responsible for reviewing, applying, developing, and maintaining 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 these models and related computer applications, hydrologic data development, project planning and management related to these models, research coordination, and documenting study results.

Business Resources Center (MP-3000)

The Business Resources Center (BRC) is the Region's principal supplier of administrative expertise and service. The BRC's mission is to provide its customers with expert business advice and service so that they may successfully serve their customers. The BRC staff also provides specialized support to CVP water and power contractors and other Federal agencies including the U.S. Fish and Wildlife Service (Service) and the Office of the Solicitor. The BRC is organized along functional lines into six service organizations and two specialized offices that include Information Technology (IT) Services, Budget Services, Ratesetting Services, Accounting Services, Administrative Management Services, Acquisition Services, and the Internal Review Office and Regional IT Security Office. During 2003, the BRC aggressively pursued its purpose of assuring that the completion of administrative matters would assist the Region in accomplishing all of its primary goals.

Central California Area Office (CCAO)

The CCAO main office is located 23 miles east of Sacramento within the Folsom city limits and has resource offices at New Melones and Lake Berryessa. CCAO staff manages water and land resources in 12 counties, including Folsom Dam, Folsom Lake, and Powerplant; Nimbus Dam, Lake Natoma, and Powerplant; New Melones Dam, Reservoir, 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; and the Nimbus Fish Hatchery. 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. CCAO manages the recreation areas at Lake Berryessa and New Melones and has a long-term lease with the California Department of Parks and Recreation (CDPR) for Folsom Lake and Lake Natoma recreation management, and Solano County for management of Lake Solano recreation facilities and Auburn Park Recreation District for management of the Auburn Overlook and rail yard recreation areas.

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.



Lake Berryessa

Klamath Basin Area Office (KBAO)



Gerber Dam

Located in south-central Oregon, the KBAO was authorized as the Klamath Project in May 1905 for irrigation service to 240,000 acres. Three storage reservoirs provide 1,094,000 acre-feet (af) of active storage in the Klamath River and Lost River Basins. More than 1,400 miles of canals and drains provide service to water users and indirectly to two National Wildlife Refuges (Refuge) (other wildlife refuges are also located at Upper Klamath Lake and Clear Lake). Since 1992, KBAO has been working with agricultural, Tribal, environmental, and hydroelectric water interests to develop operation plans for the Klamath Project to meet the diverse demands on water resources in the area. KBAO facilities include Link River Dam, Gerber Dam, Clear Lake Dam, Malone Diversion Dam, Lost River Diversion Dam and Channel, Anderson-Rose Dam, Miller Diversion Dam, Klamath Straits Drain, and Tule Lake Tunnel and Pump.

Lahontan Basin Area Office (LBAO)



Walker Lake

With headquarters in Carson City, Nevada's capital, the LBAO area of responsibility covers about 80,000 square miles in northern Nevada and eastern 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. The office is responsible for four Reclamation projects: 1) the Newlands Project which includes Lake Tahoe Dam and Reservoir, Derby Diversion Dam, Derby Dam Fish Passage and Lahontan Dam and Reservoir; 2) the Washoe Project which includes Stampede Dam and Reservoir, Prosser Creek Dam and Reservoir, and Marble Bluff Dam and Pyramid Lake Fishway; 3) the Truckee River Storage Project which includes Boca Dam and Reservoir; and 4) the Humboldt Project which includes Rye Patch Dam and Reservoir.

Northern California Area Office (NCAO)



Shasta Lake

NCAO administers Reclamation lands, water service, and repayment contracts from north of Sacramento to the Klamath Basin. 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 af. Offices are also located in Willows, Red Bluff, and Weaverville. NCAO administers Shasta and Trinity Dams, power plants, and reservoirs, and provides the office and staffing for the Trinity River Restoration Program in the Trinity Basin. NCAO also administers the Trinity River Fish Hatchery, the Livingston Stone National Fish Hatchery, and the Coleman National Fish Hatchery; Keswick Dam, Reservoir, and Power Plant; Lewiston Dam, Lake, and Power Plant; 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 manages 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 the Bureau-wide total irrigated acreage. SCCAO staff administers about 75 water service and repayment contracts; they are responsible for water conservation and water rights for the Delta Division, the San Luis Unit, and the San Felipe Division; and they make water supply declarations for the Friant Division and the Cachuma Project. Their facilities include the Delta Cross Channel, 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-Kern Canal, Madera Canal, Twitchell Dam, Bradbury Dam and Lake Cachuma, and Casitas Dam and Lake Casitas.

Central Valley Operations Office (CVO)

The CVO staff manages the 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 (NWS), and the River Forecast Center (RFC). This close proximity is crucial to the CVP and SWP's coordinated operation. CVO staff performs operations forecasting and manages water supply operations, water quality and salinity, instream flows, and Sacramento-San Joaquin Delta (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 (USACE). CVO forecasts monthly hydroelectric power generation and coordinates daily generation and project-use schedules and forecasts with the Western Area Power Administration (Western), the power marketing agency for our surplus power products. Staff also monitors and operates CVP powerplants and facilities from the centralized control system in the JOC.



The Sacramento River at dusk.

Mid Pacific Construction Office (MPCO)

The MP Construction Office 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 clean up 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 2003, the MPCO maintained field stations at Folsom Dam (Folsom, CA), Shasta Dam (Redding, CA), Auburn Dam Site (American River, CA), the "A" Canal (Klamath Falls, OR), and Derby Dam (Nevada).

HIGHLIGHTS

The Mid-Pacific Region's employees are engaged in a myriad of activities to ensure its customers receive high-quality services. Achievements during 2003 span many areas. On the following pages are the year's Highlights. Numbers in parenthesis following a section title indicate placement on the location map on page 17.

American River Pump Station Project (5)



Construction got under way on the American River Pump Station project in October 2003.

The American River Pump Station Project is a multi-agency effort to reestablish permanent access for the Placer County Water Agency (PCWA) to its Middle Fork Project water supply and to restore a dewatered portion of the American River to its pre-dam construction functions.

As part of the initial construction of the Auburn Dam, Reclamation removed a pumping plant that belonged to PCWA that was used to convey water supplies from its Middle Fork Project. Reclamation and PCWA entered into a land purchase agreement that obligated Reclamation to provide a temporary pumping facility until Auburn Dam was completed. Reclamation installed a temporary pump station each spring and removed it each fall prior to the flood season, however, the temporary pump station was no longer able to meet PCWA's increasing year-round water demands.

A cofferdam and a two-mile long diversion tunnel were built during construction of Auburn Dam that dewatered a 3/4-mile section of the North Fork American River. This dewatered channel will be restored and the tunnel closed in order to be able to reestablish the pumping station.

Project construction began in October 2003. The pump station is scheduled to be operational in 2005. There will still be some final work on the project, such as cleanup, roads, public health and safety facilities, and final tunnel closure work that will occur in 2006.

Reclamation, PCWA, and the State of California have all contributed funding to the project.

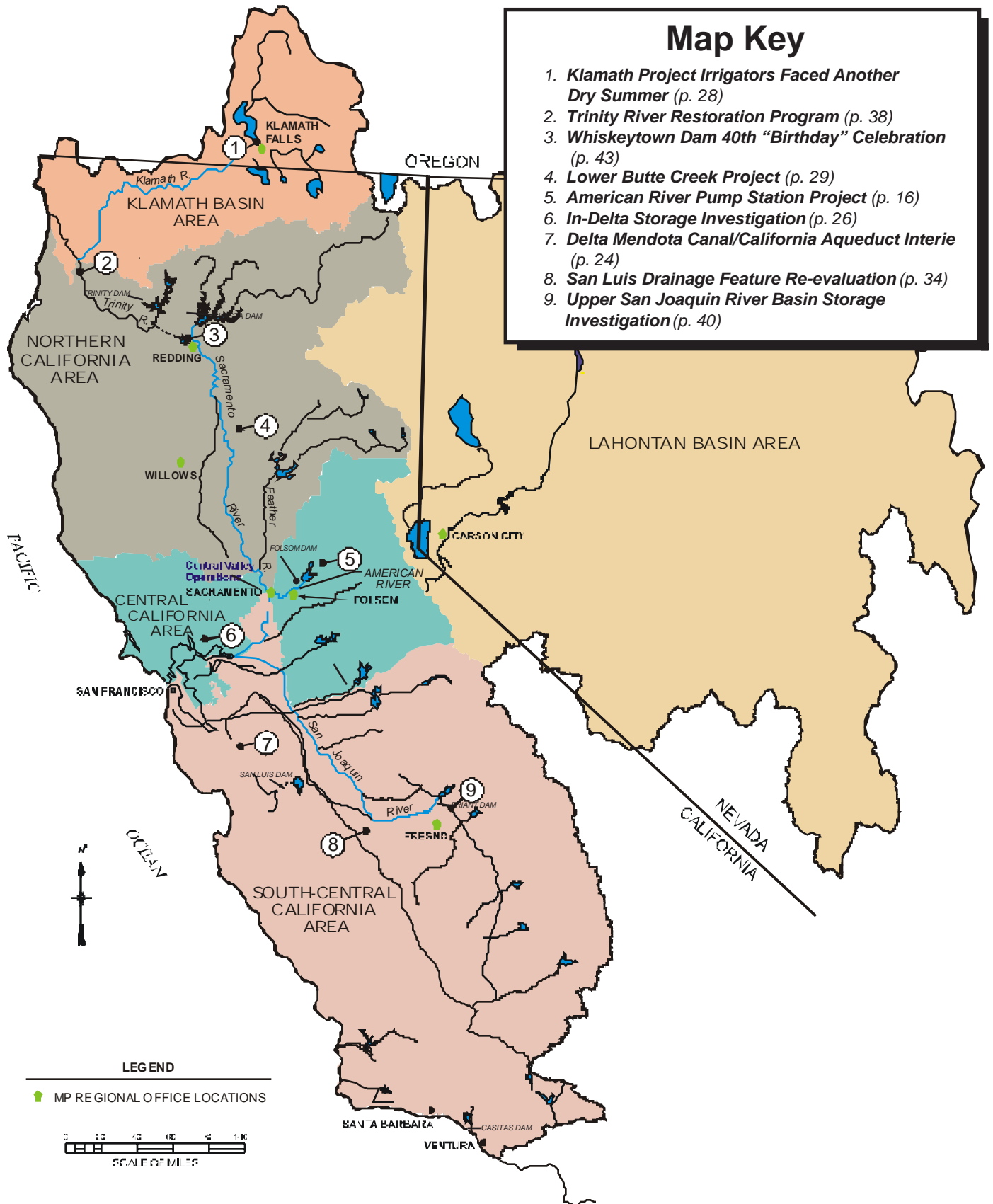
For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

American River Water Education Center

The American River Water Education Center (ARWEC) at Folsom Dam is a joint effort by Reclamation and CDPR to stimulate interest in and increase knowledge of the American River watershed, thus promoting resource stewardship. Emphasis is placed on how individuals can actively participate in water conservation. This is accomplished through exhibits about the American River watershed and water conservation at home. Additional learning opportunities are offered through educational programs including tours of Folsom Dam (to schools, beginning in January 2004) Historic Folsom Powerhouse tour option, a water efficient garden, special classroom programs, and special events.

Volunteers worked 1,056 hours during 2003, providing excellent public service and interpretive programs. ARWEC's programs reached approximately

MID-PACIFIC REGION HIGHLIGHTS



8,250 children on- and off-site. Additional children and adults received water conservation messages through four special events:

- Get W.E.T. (Water Education Today) (254 participants)
- Walk on the Wild Side (600 participants)
- American River Salmon Festival (22,000 attendees) and booth staffing on water conservation, and on Folsom Dam
- Make a Splash (350 attendees)



Folsom Dam

Dam tours did not resume in 2003, however progress was made. Standard Operating Procedures were completed and approved in Denver and ultimately Washington D.C. The approval came in December and tours for school groups were scheduled to begin early in 2004.

CCAO staff continued to provide Folsom Dam information in educational programs at ARWEC and worked with CDPR to provide tours and electricity educational programs at the Folsom Historic Powerhouse, two miles down river from ARWEC. Under a special use permit, Science Enrichment Services Inc. used the facilities for two Science Day Camps for eight weeks in summer 2003. In compensation, they were to present electricity classes at ARWEC in winter 2004.

For additional information, contact CCAO at 916-989-7150 (TDD 916-989-7285).

Business Resource Center Activities

The Region's Business Resource Center (BRC), the Region's principal supplier of administrative expertise and service, provides its customers with expert business advice and service so that they may successfully serve their customers. Following are descriptions of some of BRC's activities during 2003.

Information Technology (IT)

During 2003, IT provided extensive technical, logistical, and administrative support in the successful migration of MP public Web servers to the Sacramento peer facility as part of the Reclamation Network (RecNet) security perimeter. By working closely with Acquisition, was able to further enhance and maximize the full reporting capability of IDEAS-PD and develop internal process and procedures related to the Department of Interior (Interior) Storefront initiatives. To ensure software licenses are in compliance with Executive Order 13103 (Computer Software Piracy), IT implemented Ostivity, a software tracking tool.

IT Security

The Regional IT Security Manager completed all required actions for the Mid-Pacific Region consolidation of the General Support Systems and the BOR WORKS application to be granted an Interim Authority to Operate in conformance with Reclamation-wide schedules and commitments.

Budget Execution

The Regional Director identified unobligated carryover as a critical item in fiscal year (FY) 2003. In order to meet key Reclamation objectives, all Region offices were directed to minimize carryover balances in FY 2003. As a result of intensive efforts by Budget Services and Contracting Services, unobligated carryover was minimized without impact on the current year program.

Budget Formulation

The MP budget formulation process was revised in 2003 to provide greater managerial involvement in the decision making process. This process will continue to be analyzed, refined, and revised in 2004.

Water Ratesetting and Cost Recovery

In conformance with water and power contractor expectations, Ratesetting Services completed and posted the draft 2004 CVP water rates on the Internet on October 1, 2003. This task was accomplished despite a lengthy, tedious, and laborious retroactive adjustment that took the rate team staff more than eight months to complete and required the annual recalculation of both irrigation and municipal and industrial (M&I) individual water service contractor's net results of operations from 1949 through 2002.

Financial Integrity

The FY 2003 audit of Reclamation's consolidated financial statements, including the accounting records for the MP Region, resulted in a clean audit opinion without any unforeseen findings or recommendations. Accruals and controls over Construction-in-Progress along with structures and facilities accounts were areas where audit findings were reported for the Region, however, the level of reporting for these findings did not impact the audit opinion.

Records Management

MP-3700, Administrative Management Services, was heavily involved during 2003 in supporting the Regional Office staff and Regional Solicitor by providing the administrative records for two Federal lawsuits: Central Green vs. U.S. and Natural Resources Defense Counsel (NRDC) vs. Rodgers. The records management staff researched active, inactive, and archival files and provided more than 840,000 pages of documents for specialist and attorney review. MP-3730 (Records Management) also cooperated with MP-3100 (IT Services) in developing and testing a new database to manage documents involved in litigations. This database saved hundreds of man-hours usually spent in tracking and searching for documents, and developing reports for submission to the court. MP-3730 also wrote specifications for the first regional contract to produce an electronic administrative record for the NRDC vs. Rodgers lawsuit.

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.

Audit Compliance

Reclamation's leadership firmly believes that the timely implementation of Inspector General (IG) and General Accounting Office (GAO) audit recommendations is essential to improve efficiency and effectiveness in its programs and operations and to achieve 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. In 2003, MP Region closed the two audit recommendations received during the year.

President's Management Agenda (PMA)

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

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

CALFED Bay-Delta Program

CALFED is a collaborative effort among 23 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 California's billion agricultural industry.

As the largest wetland habitat and estuary in the West, it 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.

A Framework Agreement was signed in June 1994 setting forth the operating principles for developing a long-term solution to the Delta's problems. Phase I, completed in September 1996, 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 programmatic environmental review process on a broad level was conducted. This

resulted in the release of the Final Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/EIR) in July 2000 and the signing of the Record of Decision (ROD) on August 28, 2000, which adopted the 30-year long-term plan to restore the Delta ecosystem and improve water management, and began Stage 1 of Phase III (first 7 years). The ROD outlined commitments by the Federal and State governments and performance goals for CALFED, calling for \$8.6 billion to be invested over the seven years by both the Federal and State governments as cost-share partners.



Bay Delta Aerial

Reclamation and other Federal agencies have been unable to fully participate in meeting the commitments of the ROD due to lack of long-term program authorization and funding levels needed for implementation during the first two years of Stage 1 (2001 and 2002) other than where there has been existing authority to do so. State agencies have had to deal with contracting and funding issues, in addition to hiring restrictions imposed on them during 2002. Reclamation's FY 2002 appropriation included \$30 million under Water and Related Resources for activities in support of the goals of the California Bay-Delta Ecosystem Restoration Program within various units of the CVP. This allowed Reclamation to continue appraisal studies for several proposed storage and conveyance projects identified in the ROD, and to purchase water for the Environmental Water Account (EWA).

While several bills were introduced during sessions of the 106th, 107th, and 108th Congress that would have provided authorization needed to meet most Federal commitments, none of them moved to a final bill. Interior and Reclamation continue to support the program's goals and remain hopeful that Congress will authorize full Federal participation in 2004. Reclamation also serves as the Designated Federal Representative agency for the California Bay-Delta Public Advisory Committee, the 30-member citizens group appointed by the Secretary of the Interior to provide assistance and recommendations to the Secretary and the Governor on program integration, coordination, balance, and assessment.

The California Legislature enacted legislation creating the California Bay-Delta Authority (Authority) effective January 1, 2003, that provides a State governance structure for CALFED as identified in the ROD, along with passing a substantial water bond. Reclamation was identified as one of the six Federal member agencies on the Authority, and pending Federal authorization, Reclamation and other Federal agencies will participate on the new Authority as non-voting members.

For additional information, contact the Special Projects Office at 916-978-5023 (TDD 916-978-5608).



Great Blue Heron

About the Delta

Watershed Area: 61,000 square miles, or 37 percent of the State. The Delta covers 738,000 acres.

Delta Inflow: Inflow ranges from 6 to 69 MAF* per year; average is 24 MAF.

Diversions: More than 7,000 diverters draw water from the system, including 1,800 in the Delta.

Exports: The State Water Project and Central Valley Project draw an average of 5.9 MAF each year (about 3.6 MAF for agriculture and 2.3 MAF for urban uses).

Flora: More than 400 plant species. Fauna: 225 birds, 52 mammals, and 22 reptile and amphibian species. Fish: 54 fish species in the Delta; 130 in the Delta and San Francisco Bay.

Levees and Channels: More than 700 miles of waterways and 1,100 miles of levees.

Farmland: More than 52,000 acres are farmed. Average annual gross value is \$500 million.

Recreation: About 12 million people per year enjoy the Delta.

* MAF = Million Acre-Feet

CVP Water and Power Operations

Water Operations

In the 2003 Water Year, classified as “above normal” in the Sacramento River basin, Reclamation managed the CVP to meet the CVPIA’s requirements, the ESA, Biological Opinions (BO), and 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, 75 percent for south-of-Delta agricultural project water users, and 100 percent for south-of-Delta urban water users. Allocations were 100 percent for the water rights holders, exchange contractors, and wildlife refuges. Reclamation also facilitated water transfers to CVP water districts.

In other actions, Reclamation coordinated with DWR and other CALFED agencies in developing a proposal for improving the CVP and 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/California Aqueduct Intertie operation. Work also continued on the CVP Operations Criteria and Plan (OCAP). The OCAP is being prepared for consultation under the ESA to serve as a baseline description of the facilities and operating environment of the CVP and SWP.

The CVP participated in various environmental programs during 2003. 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 salmonids outmigration through the Delta. The 2003 VAMP required meeting a flow target at Vernalis of 3,200 cubic feet per second (cfs) and a combined CVP/SWP export reduction to 1,500 cfs.

Since the updated decision on implementing the CVPIA Section 3406 b(2) environmental account in 1999, CVP operations have accounted for dedication of 800,000 af of yield for restoring fish and wildlife habitat in accordance with (b)(2). On May 9, 2003 Interior released the (b)(2) Decision on Implementation that will be implemented in Water Year 2004.

This year also included the use of EWA water to compensate the CVP for environmental actions. In a separate environmental action, Reclamation released approximately 33,000 af 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 continued to play an active role in the State Water Resources Control Board (SWRCB) water rights hearings and proceedings.



Irrigation in the Central Valley

Power Operations

The above average water year in the Region was one of the bright spots for Reclamation in what was a relatively dry 2003 for other Reclamation projects. As a result of the wetter conditions, the 5,483 Giga Watt Hours (GWh) of CVP generation produced exceeded the historical average by approximately 10 percent.

Major activities involving close coordination with Western continued during the year. These activities are of significant importance as they relate to how the CVP generation and transmission systems will be operated in 2005. The CVP has been operated under an integration contract with Pacific Gas and Electric (PG&E) Company since the late 1960s. This contract expires on December 31, 2004 and PG&E will not extend it. Consequently, for the last two years, Western and Reclamation have been closely coordinating the planning and programs that will be implemented in place of the PG&E contract that will then govern the CVP power operations for the next 20 years.

In 2003, analysis of various means to operate the CVP was completed. Forming a Federal control area, joining an existing control area or variations of these alternatives were considered in order to derive the certainty, durability, flexibility, reliability, and cost effectiveness that is desired of CVP power operations. The final decision and resulting actions to implement the process will be completed in early 2004.

Western and Reclamation signed the Consolidated Operations and Maintenance Agreement (COMA) that was undergoing revision and negotiation over the last three years. This major milestone document replaced an existing COMA that had been in place for almost 20 years.

CVP power customers continue to support efforts to improve generator facilities reliability within the Project. Customer advance funding for facilities operations and maintenance continues to increase. Projects under way that are a direct result of customer funding include replacing the final two turbine runners for Shasta, new turbine runners for the two Carr generators as well as two New Melones generators, replacing current and potential transformers on all CVP generators to allow revenue metering accuracy readings to be obtained, implementing a new generation/load forecasting and optimization program, and generator bus replacement at Shasta powerplant.

Power operations staff worked closely with CVP stakeholders in facilitating and developing an understanding and acceptance of the financial process that governs allocation of costs that are assigned to the power beneficiaries for repayment. This activity took more than two years of meetings with the stakeholders and successfully resulted in widespread acceptance of the complicated cost sub allocation process that will be used for the next several years.

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



Power lines distribute electricity produced by CVP hydropower generators.

Water Fact

The CVP's 11 hydroelectric powerplants produce on average 4.8 billion kilowatt hours of electricity a year.

Central Valley Automated Control System

Reclamation's Central Valley Automated Control System (CVACS) provides the technology tools 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 electric power generation, optimizing available water supply, and efficiently managing water release operations for flood control, water quality, and environmental protection purposes.

For 2003, Reclamation completed certification and accreditation of the security controls in CVACS in compliance with the Federal Information Security Management Act and Executive Order 13231 of October 16, 2001 "Critical Infrastructure Protection in the Information Age." In addition, Reclamation and Western approved an agreement on cyber security practices for the interconnection between CVACS and Western's supervisory control and data acquisition system.

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

Delta Mendota Canal/California (7) Aqueduct Intertie

The Delta Mendota Canal (DMC)/California Aqueduct (CA) Intertie consists of constructing and operating a pumping plant and pipeline connection between the two canals. The DMC/CA Intertie alignment is proposed for 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 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 SWP operations.

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 950 cfs flow could be conveyed from the CA to the DMC using gravity flow.

In 2003, Reclamation continued to develop the project design and environmental documentation. Reclamation expects to finalize the environmental documentation in the spring of 2004, and initiate construction in October 2004.

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



The Delta Mendota Canal

Diversity

Efforts to improve diversity representation continued for minorities, women, and the disabled during 2003.

Nearly 50 percent of the Mid-Pacific Region's workforce is comprised of minorities and women. Of the 962 permanent employees, 38 percent were women, 33 percent were veterans, and persons with disabilities represented approximately 10 percent.

Targeted outreach efforts were conducted through local partnerships, academic institutions, career fairs, and community networks. As a result, the overall population in Reclamation's employment increased for White and Black females, Hispanic males and females, and Asian American/Pacific Islander males and females. Of the 67 students who worked throughout the Region, 55 percent were minorities and women.

In addition to executive-level leadership, managers, supervisors, employees, special emphasis coordinators, and human resources staff members all played a pivotal role in providing a focused commitment to sound affirmative employment principles. Continued efforts to market Reclamation as a premier employer for all groups has been successful and will continue in the future.

For additional information, contact the Division of Human Resources at 916-978-5482 (TDD 916-978-5608).

Emergency Management Activities

In 2003, NCAO accomplished important and significant work related to emergency management. Early in the year, employees received training on the Incident Command System (ICS), which is a standardized approach response to emergencies. The training consisted of a self-paced orientation training for all employees as well as more detailed classroom training for key management and support personnel.

In June 2003, NCAO conducted an Emergency Action Plan (EAP) functional exercise for Trinity and Lewiston Dams. Before the exercise, a small design team consisting of NCAO and Regional Office staff and local emergency responders worked on developing the exercise.

The exercise was specific to the Lewiston and Trinity Dams, but involved most of NCAO's key staff, including the Weaverville Office, as well as involving CVO staff. The design team assisted with conducting the exercise, as well as observing and evaluating the exercise. The exercise provided a good forum for NCAO employees to use the ICS training and the EAP document. An "After Action" exercise evaluation report written by the Region's Emergency Management Section provided a good source of recommendations for improving and enhancing NCAO's emergency management and response. In these times of increased security, due to the possibility of terrorist threats and actions, the work in emergency management and response becomes even more critical.

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



Trinity Dam



Bacon Island in the Bay-Delta

In-Delta Storage Investigation (6)

DWR is conducting the In-Delta Storage (IDS) Investigation under the Bay Delta Program Integrated Storage Investigations to evaluate surface storage in the Delta. Reclamation's involvement in the planning study is relegated to 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 re-engineered alternative was developed to address these concerns based on State and Federal design standards for public ownership.

Study activities undertaken by DWR in 2003 focused on more detailed engineering, design, operations, water quality, and economic studies. DWR implemented a work plan to complete the IDS Draft State Feasibility Reports in July 2003. By that time, DWR had completed the engineering and design studies but additional time was needed to complete the operations, water quality and economic studies. By December 2003 all technical studies and reports were completed. DWR is scheduled to release the IDS Draft State Feasibility Reports in January 2004.

The project cost is estimated at \$774 million. The average annual cost is estimated at \$60 million or \$484 per af; however, this does not include the cost associated with delivering water supply to a water user. Total project benefits have not been estimated because all the beneficiaries are not known.

DWR will make a recommendation on the IDS project following a 30-day public review of the draft reports. The IDS Final State Feasibility Reports are scheduled for release in March 2004. A Bay Delta Program water supply subcommittee briefing is scheduled for February 2004 with a recommendation on the future of the IDS project in April 2004.

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

Lake Berryessa Field Office Accomplishments

The Lake Berryessa Field office staff was involved in many programs during 2003, including improving Park Ranger operations, working with environmental issues, recreation, and facility improvement programs.

Lake Berryessa Park Rangers

Ranger programs, training, and coordination with emergency and regulatory agencies were improved during 2003. Ranger Interpretive Programs were initiated for day users in Oak Shores and Smittle Creek, reaching more than 300 visitors

between Memorial Day and Labor Day weekends with water safety, cultural resources, and wildlife info, and fun family activities. The Ranger training program was also improved and formalized. Rangers established rapport and positive coordination with local emergency and regulatory agencies, including California Department of Forestry, Napa County Sheriff's Office, California Department of Fish and Game, and EMS providers.

Rangers coordinated and assisted on all summer season emergency incidents in Oak Shores and Smittle Day Use Parks, including several incidents in dispersed areas such as fire incident visitor management, first aid, and emergency services needs. The Ranger program was also upgraded with a more consistent staffing base of GS-5/7 term Rangers and GS-5 temporary Rangers.



Lake Berryessa

Environmental Programs

Staff developed a Master Plan for Environmental Education in the area from Monticello Dam to the Solano Diversion Dam, and participated with Putah Creek Discovery Corridor to develop, present, and evaluate the Water Ways environmental education programs to more than 120 5th graders. This program will be adapted and experience used to develop environmental education day use programs at Lake Berryessa in the future. Staff also began work on developing an Environmental Management System pilot project, the first in the MP Region, and facilitated an Environmental Campout and Cultural Interaction activities at Cortina Rancheria.

Recreation Programs

Field Office staff hosted a youth camp-out with the Cortina Rancheria that provided about 400 children with a camp out experience at Lake Berryessa. Staff also managed 39 Special Use Permits including Davis Aquatic Masters open water swim event with 3,000 participants. Assistance and advice was also provided to Solano County with its Recreation Master Plan.

Facility Improvements

Staff completed several resource management projects including erosion control, trail upgrades, and creating fire breaks at Berryessa Pines subdivision. Day use area debris removal and bench and grill repairs were made. Staff also maintained navigation safety program and added new hazard and regulatory buoys on the lake, and added three new floating toilets to the fleet, bringing the total to five. Maintenance parking areas were paved, and Oak Shores and Capell Parking areas were sealed and striped. Staff upgraded a portion of the deteriorated dormitory HVAC system, cut a fire break around an adjacent housing development to mitigate a serious fire risk, and maintained the water treatment plant and 14 sewage systems.

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

Klamath Project Irrigators Faced Another Dry Summer (1)

By late June 2003 it became apparent that inflows into Upper Klamath Lake were falling well below predicted values. On June 26, 2003, irrigators were informed that deliveries would be suspended until the first of July, so that required lake elevations for endangered suckerfish could be met. A last minute agreement with the Service avoided the suspension of deliveries.

As a result of lower than expected inflows, it was necessary to lower the “Year Type” for Upper Klamath Lake from “Below Average” to “Dry.” This change in year type lowered the required elevation on the lake and provided the necessary flexibility to continue the Project’s operation and still remain in compliance with the current BO on suckerfish 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 ground water 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 2003.

Unfortunately, water deliveries to the Refuges were curtailed for the summer, and were not reinstated until fall.

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



Los Vaqueros Reservoir

Los Vaqueros Expansion Studies

The Los Vaqueros Reservoir expansion of up to 400,000 acre-feet is identified as a program 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 reservoir owners, Contra Costa Water District is the lead Project Manager for the studies. Reclamation and DWR are funding the studies and act as the Study Managers.

In 2003, Reclamation received Feasibility Study Authority and formally initiated a Federal Feasibility Study. Reclamation continued to fund studies through a Financial Assistance agreement with Contra Costa Water District. A Draft Planning Report was also completed and provided to the public. This document focused on alternative methods of expanding and operating an expanded Los Vaqueros Reservoir. Reclamation expects to continue funding studies in 2004 during which time the NEPA/CEQA process would formally begin.

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

Lower Butte Creek Project (4)

Reclamation is serving as the NEPA 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 (Project) is funded by the CALFED Bay-Delta Program, 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 unadjudicated 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 increase in the sizes of the runs, and Butte Creek now has the largest run, by far, of the tributaries with pure spring-run populations.

Work is already under way in parts of the Butte Sink and 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 integrating restoration programs with water supply improvements for the Sutter Wildlife Refuge.

The Program 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 or TDD 530-275-8991.



Lower Butte Creek

MP Region Safety, Health, and Security Program

In 2003, the Office of Safety and Health (OSH) program's focus was on electrical safety, workplace inspections, and improving emergency response actions. New policy requiring improved electrical hazard assessments and personal protective clothing was developed with input from across the Region. The Region implemented a new process for identifying OSH goals that encourages each unit within the Region to establish its own Safety & Health goals under the broader goals established by the Department, Reclamation, and the Region. Statistically, the MP Region had a good year in accident prevention: we reduced our total incident rate from the previous year while the severity rate remained fairly constant.

For its Security program, the Region continued to focus on facilities assessment and physical and operational security improvement. Facility security assessment results underwent a technical review and decision making process to produce effective security strategies for MP Region facilities. Site Specific Security Plans were developed for key facilities.

The Region made significant progress in the accessibility program, moving toward meeting Reclamation's goal of having all required Bureau facilities accessible to people with disabilities by 2010. Mid-Pacific ended the year with almost 10 percent of places of employment and almost 5 percent of recreation areas fully accessible to people with disabilities, and expects the pace to retrofit facilities to accelerate in 2004 and later years.

Native American Affairs

In 2003, the Mid-Pacific Region's Native American Affairs Technical Assistance Program provided \$290,000 in funding assistance to seven 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. Federally recognized tribes assisted in 2003 were the Yurok Tribe, Summit Lake Paiute Tribe, Karuk Tribe, Elem Indian Colony (Pomo), Big Sandy Rancheria (Western Mono), Walker River Paiute Tribe and the South Fork Band Council of the Te-Moak Western Shoshone Indians.

The Yurok and Karuk tribes completed several 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 2003 included MP Region Division of Resources Management Native American Affairs Office's (Office) participation with several federally recognized California tribes in tribal information meetings on Upper San Joaquin Basin Surface Storage Investigation, North of Delta Offstream Storage Investigation, Environmental Water Account and the Shasta Lake Water Resources Investigation. The North of Delta meetings included the Cortina Rancheria, Colusa Rancheria, Grindstone Rancheria, Paskenta Band of Nomlaki Indians. The Shasta meetings included the Redding Rancheria, Pit River Tribe, Cortina Rancheria, Colusa Rancheria, and Paskenta Band of Nomlaki Indians. The San Joaquin meetings included the Cold Springs Rancheria, Picayune Rancheria, Table Mountain Rancheria, North Fork Rancheria, and Big Sandy Rancheria. The Environmental Water Account meetings included the Paskenta Band of Nomlaki Indians, Colusa Rancheria, Redding Rancheria, Picayune Rancheria, Table Mountain Rancheria, and North Fork Rancheria.

Activities under the Indian Self-Determination and Education Assistance Act, Title IV Self-Governance (P.L. 93-638) included Annual Funding Agreements with the Yurok and Karuk Tribes for the purposes of collecting data to improve tribal fisheries and water quality on the Trinity and Klamath Rivers under the authorities of the Trinity River Division Act and the Klamath Basin Fishery Resources Restoration Act.

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

Newlands Project Operating Criteria and Procedures

Municipalities and irrigation districts diverting water from the Truckee River have decreased the flow in the Truckee River, the only source of water for Pyramid Lake, a desert terminal lake in northern Nevada. The decreases in flow have contributed to the lake surface elevation's decline and in listing the cui-ui fish 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 Operating Criteria and Procedures (OCAP), first implemented in 1967 and most recently modified in 1997, are intended to provide sufficient water to Newlands Project water users to meet their water rights while maximizing the use of Carson River water and minimizing use of Truckee River water. Minimizing use of Truckee River water may help in maintenance and recovery of listed species in Pyramid Lake. In 2003 diversions of Truckee River water to the Newlands Project occurred in mid-January through March, part of April, May, and July, and November through December. 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.

The OCAP sets target efficiencies for water deliveries in the Newlands Project. The Truckee-Carson Irrigation District, the entity that operates and maintains the Newlands Project, exceeded efficiency targets in the 2000, 2001 and 2002 irrigation seasons and, based on incomplete data, it appears the efficiency target for the 2003 irrigation will be exceeded as well. These accomplishments are due to improved water management techniques and improved water measurement implemented by the District and Reclamation.

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



Truckee River

New Melones Lake Resource Area

Reclamation staff operates and manages the facilities at New Melones Lake to provide more than 300 campsites, three boat launch areas, six day use areas, and two group campgrounds in the two developed recreation areas.

During 2003 more than 700,000 visitors used the developed recreation facilities at New Melones Lake. Countless more use the undeveloped areas for rock climbing, spelunking, hunting, fishing, hiking, mountain bike riding, geocaching (a new sport using GPS units in an outdoor treasure hunt), wildlife watching and horseback riding.

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.

Uniformed Reclamation park rangers patrol the recreation facilities, lands and waters to provide visitor assistance and safety, facility security and resource stewardship. Park Rangers wear many hats, also performing emergency first response for fires, medical emergencies, hazmat spills, traffic and boating accidents and search and rescue, as well as providing interpretive programs to educate the public, such as guided walks, campfire programs and school programs at the Visitor Center.

Maintenance workers at New Melones were busy maintaining and repairing all the facilities to keep the recreation areas functioning and provide high quality customer service. The maintenance staff also supported the powerplant with special projects and ongoing maintenance.

Concessions External Review

In May 2003, a comprehensive safety, health and administrative review was performed at the New Melones Marina concession. Following guidance in the new Reclamation Concessions Management Directives and Standards (LND-04-01), this review was conducted using subject matter experts external to the managing area office. To conduct the review, a team of professionals was assembled which included Reclamation staff from Denver and the MP Region, as well as private-sector consultants.

The review resulted in more than 200 findings, several of which were significant hazards to public safety and health and the environment. These conditions did not happen overnight, but were rather a long-term build-up of problems stemming from lack of effective management and oversight by both the concessionaire and Reclamation. To ensure corrective action would be taken for the large quantity of findings, a follow-up “action” team was created consisting of staff from New Melones, CCAO and MP Region. Through the efforts of the action team working closely with the concessionaire, significant progress has been made to cleanup the marina concession and correct the many deficiencies identified. New management and programs at the marina coupled with continuous, responsible oversight by Reclamation are already resulting in greatly improved conditions and service to the visiting public.

National Recreation Reservation Service (NRRS)

Starting in the spring of 2004, the public will be able to reserve individual and group campsites at New Melones Lake. The NRRS is a service used by many Federal recreation agencies including the Forest Service, Army Corps of Engineers, Bureau of Land Management, National Park Service (NPS) and now Reclamation at New Melones Lake. The service’s objective is to streamline campground management and increase visitor enjoyment at New Melones. Visitors to New Melones will be able to better plan for their camping trip by having such information as their campsite location, amount of shade, length and size of available parking, community events and many other aspects important to the recreation experience. To access the reservation service, call 1-877-444-6777 or log on to www.ReserveUSA.com.

Water and Wastewater System Upgrades

In 2001, a Needs Assessment for the potable water and wastewater systems at New Melones Lake was completed. The infrastructure for the recreation facilities, constructed between 1987 and 1993, is deteriorating or in some cases inadequate to accommodate existing use on peak weekends. The assessment identified improvements necessary to continue supplying customers with quality drinking water and identified permitted wastewater systems throughout New Melones Recreation Area. In 2002 and 2003, the New Melones Resource Office received \$2 million in special Congressional funding through a collaborative effort with Calaveras County and Representative John Doolittle (R-4th). In 2003 these funds were used to complete a construction contract for needed upgrades to the wastewater system in Glory Hole Recreation Area. Designs and plans were developed for a similar construction contract for Tuttle town Recreation Area. This contract was awarded in September 2003, with construction planned for spring 2004.

Shell Road Corridor Interim Management Plan – Update

In the spring of 2002, New Melones began the process of creating an Interim Management Plan for the Shell Road corridor. Shell Road runs through private land and public lands managed by Reclamation and the Bureau of Land Management. Approximately two miles of the road is an unimproved dirt road. This area is popular for activities such as hiking, wildlife viewing, rock climbing, hunting, horseback riding, and mountain biking. Illegal target shooting, excessive off-road vehicle use, and dumping garbage were activities damaging the integrity of the resources as well as impacting visitor enjoyment.

Since the implementation of the Interim Management Plan the area has improved drastically. The only tire tracks seen in the area now are those from bicycles. Areas damaged from campfires, shooting, and dumping have been seeded with native grasses. The roads condition has stabilized and Reclamation maintenance crews are working with the California Department of Forestry and Fire Protection to improve the roads for emergency vehicle access and to prevent erosion on badly entrenched road areas.

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



A hiker enjoys the Shell Road corridor

New Zealand Mud Snails Invade Putah Creek

On October 30, 2003, an aquatic biologist found a population of New Zealand Mud Snails (NZMS) in Putah Creek below Monticello Dam. The California Department of Fish and Game Bioassessment Lab confirmed the identification as NZMS.

The introduction of NZMS into California's trout streams is of great concern. The snails replace the native aquatic invertebrates and offer almost no value to feeding trout. If accidentally introduced into the Upper Sacramento or McCloud Rivers, or into Hat Creek, the snails have the potential to severely alter the aquatic and riparian food web forever. These tiny snails can form populations as dense as

500,000 per square meter, and graze across habitat normally used by mayfly larvae and other grazing aquatic invertebrates.

Research in Yellowstone National Park has shown a severe reduction in native mayflies and stoneflies in some areas, which has resulted in an adverse affect to fisheries. At those sites, the NZMS now constitute 50 percent of the total invertebrate population. NZMS have received much publicity and are a very hot topic right now.

CCAO is concerned about the potential the snail has to affect the quality of fisheries, and has funded the initial delineation, as well as a follow up contract to develop improved surveying techniques.

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

Reclamation and U.S. Fish & Wildlife Service Work To Reestablish California Red-legged Frog



A California Red-Legged frog

Reclamation and the Service are working together to assist in the recovery of the California Red-legged Frog (CRLF), a Federally threatened species, by helping to reestablish populations at localities where the CRLF formerly lived. Captive rearing will provide a source of animals to be used for this purpose.

Project funding is being requested from the Central Valley Project Conservation Program (CVPCP). A Service herpetologist has taken on the role of Principal Investigator for the project and is completing a proposal, on behalf of the Service and Reclamation to present to the CVPCP. The Memorandum of Understanding (MOU), and implementing the ensuing project, will aid in the recovery of a Federally listed species.

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

San Luis Drainage Feature Re-evaluation (8)

Reclamation is developing a plan to provide drainage service to the CVP's San Luis Unit (Unit). Over the past four 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.

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 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. The report accomplishes the important objective of meeting the Plan of Action milestone for identifying a proposed action by December 2002. The major findings of the 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.
- For land retirement scenarios, it appears the expected cost of purchasing and retiring lands is greater than the cost of providing drainage service to these lands.
- Implementing any drainage service plan will require further congressional action to increase the authorized appropriation cap under the San Luis Act.

Public scoping meetings were held January 2003. During the current phase of the Feature Re-evaluation process, Reclamation is preparing a draft EIS in response to public input in late 2003. Reclamation began considering incorporating land retirement among the alternatives for providing drainage service. This additional analysis will require public scoping and postpone public release of a draft EIS until mid-2005.

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

San Luis Lowpoint Improvement Project

The San Luis Lowpoint Improvement Project is identified as a complementary action in the CALFED ROD. 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 is conducting a feasibility study and Environmental Impact Statement/Environmental Impact Report (EIS/EIR).

Reclamation has agreed to be the NEPA lead for this study; however, no Bay Delta funding is currently available for Reclamation activities.



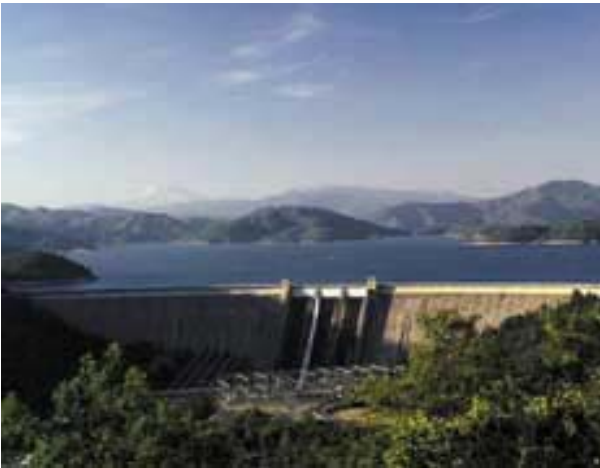
Agricultural drainage

Funding for our participation on this study has come from the CVP Yield Investigation.

In 2003, Reclamation continued coordination with SCVWD as the NEPA lead. Reclamation also initiated an Appraisal Study, which is a first step in requesting Feasibility Study Authority. The Appraisal Study is expected to be completed in the fall of 2004.

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

Shasta Dam Enlargement Investigation



Shasta Dam

Reclamation is conducting feasibility level studies focusing on the potential to enlarge Shasta Dam primarily for increased water supply and operational flexibility. 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 (9180).

Shasta Reservoir could be expanded by 290,000 af by raising Shasta Dam 6.5 feet. Such an expansion will increase the pool of cold water available to maintain lower Sacramento River water temperatures needed by certain 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.

Significant activities completed in 2003 include completion of reservoir mapping, continuing environmental surveys, physical inventory of infrastructure around Shasta Lake, systems modeling, completion of a mission statement milestone report, and public outreach briefings and workshops. The Region is continuing to conduct environmental studies, systems modeling, and technical studies to evaluate potential storage, operational, and conjunctive management alternatives. An Alternatives Information Report is scheduled for completion in late 2004. The draft feasibility report/EIS/EIR is scheduled for completion by early 2007.

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

South Delta Improvement Program

Reclamation and DWR are conducting environmental studies for the South Delta Improvement Program (SDIP) to provide more reliable long-term export capability for the SWP and CVP while addressing the Delta ecosystem and local in-Delta agricultural water users needs. The SDIP is a component of the Conveyance Program of the Bay Delta Program. Expanded conveyance through the SDIP is critical to improve CVP South of Delta allocations to at least 65 percent, consistent with the objectives of the CALFED ROD, and to alleviate the CVPIA delivery impacts.

The SDIP major components are increasing the maximum 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 supply reliability 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 losses.

Significant activities conducted in 2003 included public and stakeholder involvement and a negotiated agreement with DWR and the SWP contractors for reliable capacity for conveying CVP supplies. Completion of environmental documentation is anticipated in the spring of 2004 with project implementation beginning in 2005.

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

Technical Assistance to the State - Model Development

During 2003, the Division of Planning updated a Consumptive Use Model database created in 2002. The database was refined in response to comments from DWR district offices. Work is continuing to add land use information, including acres and crops. This information will allow the model to calculate consumptive use, in addition to evapo-transpiration of applied water rates.

A power module, as requested by the San Luis Delta Mendota Water Authority, was coded within CALSIM II. This module calculates generation and energy capacity as a function of reservoir storage and releases. This is not an attempt to have CALSIM optimize for power but does eliminate the need for post calculation of generation and capacity.

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

Trinity River Restoration Program (2)

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 four 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 CVP Trinity River Division's construction. The CVPIA acknowledged the Federal Government's trust responsibilities, increased in stream 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 EIS was completed in October 2000, with the 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 (SEIS)/EIR, 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 af to 452,600 af in dry or wetter years. Appeals by the United States, the Hoopa Valley and Yurok Tribes, and the Central Valley irrigators (Westlands, San Luis and Delta-Mendota Water Authority) are pending. The four co-lead agencies (Reclamation, Service, Hoopa Valley Tribe and Trinity County) are continuing with the SEIS analyses. Completion is currently estimated as November 2004.

Much progress was made in several key areas of the Restoration Program during 2003, including:

Organizational Effectiveness

The Secretary's "4 Cs: Consultation, Cooperation, and Communication - all in the Service of Conservation," are consistently being demonstrated in the Program: "The adaptive management organization outlined in the December 2000 ROD established three main elements: (1) the decision-making Trinity Management Council, (2) the advisory Trinity Adaptive Management Working Group, and (3) the technical and administrative support staff in the Program office. The organizational structure's effectiveness has been clearly demonstrated many times in the past year. Some of the key issues resolved in a positive manner by these program entities include: (1) identifying the most effective hydrograph and 2003 spring flow release schedule given dry water year volumes and a wet water year type, (2) developing a plan for 2003 fall flows to minimize potential for a fish die-off, and (3) developing and approving in concept the 2004 program of work and budget.



A tractor pushes gravel into the Trinity River



Gravel distribution provides salmon spawning habitat

Fall Flow Releases to Minimize Risk of Chinook Salmon Die-Off

As requested by the Regional Director, Program staff effectively coordinated a timely multi-agency proposal to minimize risk of a die-off of Chinook salmon during the late summer/early fall migration from the lower Klamath River into the Trinity River. Using flows allowed by the Court, Program staff worked with agency and tribal scientists and stakeholders to develop a plan that would be of maximum benefit to the fish populations at risk while minimizing impacts to other river resources and to CVP water and power customers. Because of last year's large fish die-off on the Lower Klamath, this effort received a great deal of attention locally, regionally, and nationally.

Trinity River Bridges Project

One of the top priorities for the Program, the NCAO, and the MP Region is modifying four bridges on the upper Trinity River in order to physically pass the higher peak flows envisioned by the December 2000 ROD. During 2003, Program staff coordinated and completed hydrologic studies, engineering designs and specifications, and NEPA/California Environmental Quality Act (CEQA)/ESA compliance for all four bridges, a \$6-7 million project. Realty actions and contract award for the first two bridges will be completed in February 2004, with all four bridges open to traffic by December 2004.

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

Truckee River Operating Agreement

Reclamation is one of a host of parties interested in reservoir operation 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 agreement is called the Truckee River Operating Agreement (TROA).

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 M&I 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; and
- Improved water quality; and reservoir storage maintenance at levels that better serve recreational uses.

The parties negotiating TROA have completed a draft agreement. A revised draft EIS/EIR is being prepared by Interior, Reclamation, the Service, and State of California, and is expected to be completed in 2004.

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



Lake Tahoe

Water Fact

The Central Valley Project's reservoirs can store 11 million acre-feet of water. It is transported 450 miles from Lake Shasta in northern California to Bakersfield in the southern San Joaquin Valley.

Upper San Joaquin River Basin Storage Investigation (9)

The CALFED ROD calls for 250,000 to 700,000 af 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 M&I deliveries. Other benefits of increased storage include improving CVP 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 CVPIA Project Yield Increase Investigation and the Bay-Delta Program initiatives. Consistent with the ROD, Reclamation and DWR have taken action in the form of a two-phased public Investigation.

The Investigation's Phase 1 is completed and culminated in an appraisal-level report describing the surface storage options being evaluated, and 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. Coordination with other on-going programs will be important to ensure consistency with the goals of others such as the Bay Delta Program and the USACE Sacramento-San Joaquin Basins Comprehensive Study.

Phase 2 will begin with the filing of a Notice of Intent and Notice of Preparation (NOI/NOP) for environmental review and disclosure of the potential impacts of alternatives. Subsequent to the NOI/NOP filing will be intensified evaluation of detailed project alternatives, and the preparation of an EIS/EIR.

Major accomplishments in 2003 included completion of the Phase 1 Investigation Report, identification of six surface storage options that appear technically feasible, coordination with State and local agencies, three public stakeholder workshops, and completion of a modification to the CALSIM II model to incorporate an accurate representation of Friant Dam operations and to add the storage options being considered. Several planning documents have been, and will continue to be published for public review and comment, and final planning and environmental documentation is scheduled for public review in 2007.

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

Walker River Basin Federal Indian Water Rights Negotiation Team

LBAO Manager Betsy Rieke is the chair of the Federal Indian water rights negotiation team formed in May 2002. The team consists of representatives of the Bureaus of Indian Affairs, Reclamation, and Land Management, the Service, the Office of the Solicitor, Department of Justice and the Department of the Army. The negotiations involve the United States, the State of Nevada, 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 involving water right claims by the Walker River Tribe, other tribal entities and various Federal agencies; preserving Walker Lake's fresh water ecosystem; and assisting 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. Recognizing the declining level and increasing salinity of Walker Lake, Reclamation has earmarked some of the funding for projects in the Walker River Basin. In 2003 Reclamation pursued implementation of multiple proposals that will 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 Quality Control Plan for San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan)

On May 22, 1995, the SWRCB adopted the Water Quality Control Plan for the Delta Estuary (WQCP), which contains the current water quality and flow standards for the Delta. Subsequently, the SWRCB initiated the Bay-Delta water right proceedings to determine responsibility for meeting WQCP standards that until this time had been the sole responsibility of the CVP and DWR SWP. Phases 1–7 of the Bay-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 resulted 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.



Walker River

Water Fact

An acre-foot of water is about equal to a football field covered with a foot of water. California receives about 193 million acre-feet a year as rain or snow. Of that amount, only 71 million acre-feet is available in usable surface water.

The SWRCB encouraged the parties to resolve issues of responsibility through 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 af 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 two 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 EIS/EIR 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).

Water Supply Improvement Efforts

The CVP was designed to provide approximately seven million af of water supplies for California's agricultural and M&I users in all but the driest of years. The enactment of Public Law 102-575, the CVPIA, dedicated 1,200,000 af of CVP yield to fish and wildlife purposes and charged Reclamation with identifying actions to replace that yield.

In 2003, 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 2003. 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 2003 included:

- Discussions with stakeholders for an Integrated Resource Plan (IRP) for the CVP Eastside Region (Calaveras/Stanslaus Basin);
- Initiating a daily CALSIM model for the American River Basin;
- Updating CVPIA delivery impacts using the new CALSIM model and hydrology;
- Coordinating with ongoing projects and programs to protect yield replacement opportunities while developing the Delivery Impact Report; and
- Investigations establishing the critical need for additional Delta export and conveyance capacity, and developing an integrated operation proposal for the CVP and SWP.

Reclamation prepared a water supply Gap Analysis for the CVP Westside region. Information was developed and synthesized to analyze current and future water supply and needs for M&I, agricultural, and environmental uses.

In 2004 the internal draft Delivery Impact Report will be updated for the results of the Integrated Operations proposal as analyzed in the proposed Operations Criteria and Plan. Significant progress on an IRP for the CVP Eastside Region and a daily CALSIM model for the American River Basin will be made.

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

Whiskeytown Dam 40th “Birthday” Celebration (3)

September 27, 2003, marked the historic 40th anniversary of Whiskeytown Dam’s dedication by President John F. Kennedy. On the anniversary date, the NPS, with the assistance of Reclamation, hosted a history seminar at Turtle Bay Exploration Park centering on the CVP, the Trinity River Division, the creation of the Whiskeytown National Recreational Area, and recollections of President Kennedy’s visit during his 1963 National Conservation Tour. Reclamation Commissioner John Keys and Reclamation Historian Brit Storey were among the distinguished speakers.

The celebration continued on Sunday, September 28, with a “Big Dam Party” held on the crest road of Whiskeytown Dam near the Kennedy Memorial. The formal ceremony began with a local high school band playing the National Anthem, opening remarks by NPS Regional Director Art Eck and Reclamation NCAO Manager Mike Ryan. Local, State, and national leaders, including Commissioner Keys, delivered speeches commemorating the completion of the CVP, the creation of Whiskeytown Lake, and the birth of the idea that later became the Whiskeytown-Shasta-Trinity National Recreation Area.

A live music concert followed the ceremony while exhibitors provided information from the NPS and Reclamation.

Whiskeytown Dam stands as a testament to the vision and tenacity of the citizens united to improve their community. Reclamation is proud to have joined in the celebration and to serve as collective stewards of Northern California’s public lands and natural resources.

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



Whiskeytown Reservoir

CENTRAL VALLEY PROJECT

by the numbers

3,000,000

Number of acres the CVP irrigates

1,943,040

By comparison, the acreage of the combined land mass of Delaware and Rhode Island

20

Number of major CVP dams

4.5 million

Acre feet of storage provided by Shasta Dam

11

Number of CVP hydropower plants

4.8 billion

Average number of watts of electricity produced by CVP hydropower plants annually

4,600

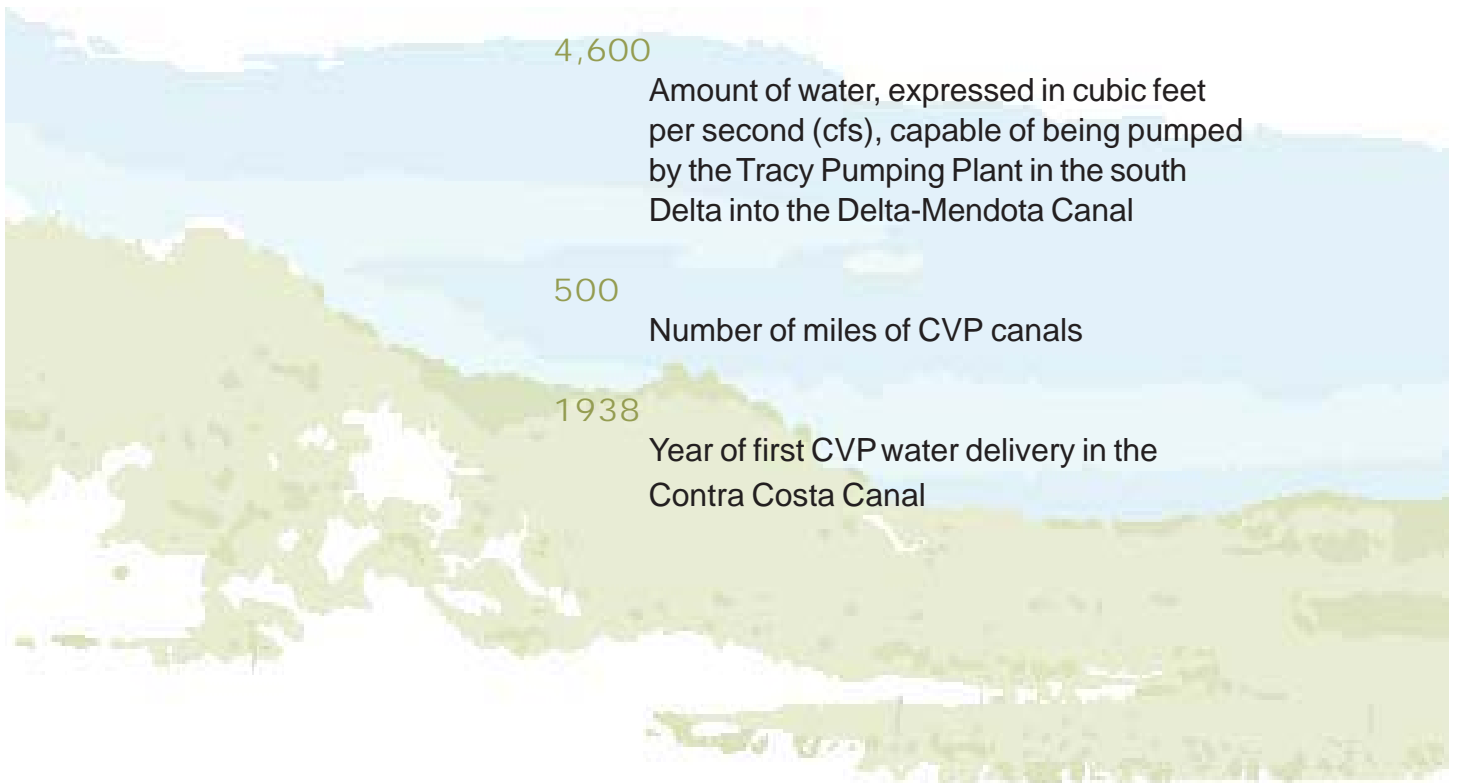
Amount of water, expressed in cubic feet per second (cfs), capable of being pumped by the Tracy Pumping Plant in the south Delta into the Delta-Mendota Canal

500

Number of miles of CVP canals

1938

Year of first CVP water delivery in the Contra Costa Canal



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 2003 and progress made toward achieving its goals.

Central Valley Project Improvement Act (CVPIA) Overview

Since 1992, Reclamation and the 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 Act's provisions have been completed and most of the others are well under way. More than \$630 million of State and Federal funds has been spent thus far to implement directed programs and projects. More time, effort, and funds will be expended in the future.

Immediately upon the CVPIA's passage, Reclamation and the Service adopted the three fish and wildlife restoration goals prescribed by the Act. One of the most ambitious was to make all reasonable efforts to double the production of anadromous fish. Another was to supply water to Central Valley refuges and other migratory waterfowl habitats. The third was to mitigate for other CVPIA identified impacts.

Staff then began to develop procedures to implement the specific provisions of the Act. A set of procedural objectives was developed to guide future activities. Measures undertaken to implement the Act are designed to achieve CVPIA goals while providing the greatest public benefit and minimizing adverse impacts. Great emphasis is placed on forming partnerships and coordinating with other efforts planned or already under way throughout the Central Valley.

Interior has developed many partnerships and extensive coordination linkages with local, State, and Federal agencies, 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 SWRCB's Water Quality Control Plan, and CALFED.

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 Special Projects staff to achieve common goals and to maximize benefits.

For additional information, contact the Special Projects Office at 916-978-5023 (TDD 916-978-5608).



Waterfowl enjoy wetlands made possible by CVPIA - provided water.

Water Fact

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

Anadromous Fish Screen Program

Under the CVPIA 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 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 will be in the design and construction phases in 2004. By the end of 2004, AFSP-funded fish screen projects will be preventing the entrainment of fish from roughly 4,000 cubic feet per second of water diverted for M&I and agricultural purposes.

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

North of Delta Off Stream Storage Investigation

The North of Delta Off-stream Storage (NODOS) Investigation (a.k.a. Sites Reservoir) is a potential off-stream surface water storage project identified for project-specific study in the CALFED ROD.

Reclamation is participating in planning studies and environmental evaluations of NODOS with DWR. DWR is the overall project lead. Reclamation is the lead Federal agency for NEPA compliance. DWR has been conducting field studies and engineering analyses required for planning studies and environmental assessments.

Reclamation is responsible for cultural resource, socioeconomic, environmental justice, Indian Trust Asset (ITA) investigations, and compliance with National Historic Preservation Act Section 106. Since passage of P.L. 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).

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 CVP and SWP systems, provide storage for the EWA, improve Delta water quality, improve Sacramento River flows during critical fish migration periods, restore riparian habitat, and provide water supply to wildlife refuges.

Significant activities completed during 2003 include 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.

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

Refuge Water Supply Program

The 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. The Refuge Water Supply Program (RWSP) is a joint effort of Reclamation and the Service.

The Level 2 and Level 4 quantities are specified in 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 five long-term (25-year) and three 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 refuges, respectively. Negotiations continued with DWR for refuge conveyance to the Kern refuge. To date, seven long-term conveyance agreements have been negotiated.

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, currently scheduled for completion in 2006.

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. Water supply was increased to 48,348 acres of seasonal marsh, permanent wetlands and riparian habitat, giving 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 enjoy water provided by the Refuge Water Supply Program

Water Fact

The CVPIA aims to restore wetlands by firming up and increasing water supplies for refuges.

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

The San Joaquin River Agreement (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.

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 SWP/CVP 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 2003, Reclamation, in cooperation with the Service, and DWR acquired 58,065 af 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 2003 VAMP program is scheduled for release in Winter 2004. 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 2004 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 the Merced Irrigation District (MEID), and in cooperation with the Service, DFG, and DWR 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 CVPIA) 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 af 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. Merced Irrigation District (MEID), a member of the SJRGA, provides 12,500 af annually in the fall to augment the Merced River's instream flows for migrating anadromous fish species. Oakdale Irrigation District, also a member of the SJRGA, provides between 15,000 and 26,000 af to Reclamation in New Melones Reservoir.

A Federal ROD along with the final EIS/EIR, "Meeting Flow Objectives for the San Joaquin River Agreement, 1999-2010, Final EIS/EIR," was

completed for the SJRA/VAMP in February 1999. A supplemental final EIS/EIR, “Acquisition of Additional Water for Meeting the San Joaquin River Agreement Flow Objectives - 2001 through 2010,” and its ROD were completed in November 2001 and provides for the acquisition of up to 47,000 af 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 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 CVPIA, 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 Delta waters require development before large expenditures are made on final fixes to the fish loss problems. Technologies to either replace or supplement exiting fish behavioral-based louver facilities are being studied to assess potentials for further protection of smaller, delicate native species, some of which are Federally and State listed.

Reclamation, with interagency coordination and assistance, has proposed a Tracy Fish Test Facility adjacent to the Tracy Fish Collection Facility in a major attempt to provide new technologies that will eventually be acceptable and workable. In 2003, scaled down concepts were advanced by Reclamation for a Tracy Demonstration Fish Facility (TDF) in response to potential future budgetary constraints. The TDF would provide aboveground 250 cfs experimental flume capability at Tracy and could test all criteria recommended by regulatory agencies at a fraction of the cost of previously conceived test facilities. MP-400 provides leadership in Tracy facilities interagency coordination, design, and research to assist Reclamation’s SCCAO and the Tracy Office in implementing this program.



The Tracy Pumping Plant

TDF Interagency Coordination - Monthly meetings involving Reclamation (lead), NOAA Fisheries, the Service, DFG, DWR, CALFED, water users, and university staff were again held in 2003, providing continued interagency communication, design and research planning. TDF designs reflect the many desires and inputs from regulatory and water development agencies, as well as from local water authorities and fish facility experts.

TDFD Designs - TDFD designs are unique, providing the flexibility for testing a vast range of conditions and parameters in the real world of the south Delta. Large variances in debris loadings, fish species and sizes, and hydraulic conditions must be scientifically tested to guide future decisions on construction and operation of fish facilities. Reclamation engineers based in Denver worked with fishery scientists in Denver, the MP Region, and regulatory staff, to provide new TDFD designs in 2003 that will lead to smaller, more economical facilities having greater testing flexibility.

Research and Testing – Tracy fish facilities research and testing continued in 2003 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 at Tracy (“fish friendly” pump, demonstration and testing new acoustical cameras for underwater fish viewing day or night, louver efficiency studies, fish predator behavior and movements, initial work on new experimental above ground fish holding tanks). Also, the development of a Tracy fishery facility research web site continued. Continued publication of Tracy results in the peer reviewed report series brought the total number to more than 20 volumes, with six further volumes in preparation. Technical and poster presentations from Tracy research were presented at State and national scientific forums.

Status and Future Process for TDFD, and Overall Tracy Facilities Studies and Improvements - Decisions for implementing a TDFD in 2003 came under the influence of a new interagency forum, the “South Delta Fish Facilities Forum” (SDFD). Because of South Delta fisheries management complexity in the face of large water diversions, and competing options for implementing various protective measures, the SDFD was developed and is chaired by top managers and decision makers from several agencies, including Reclamation. By the end of 2003, it was apparent that the TDFD would be further postponed until more information about the Delta was acquired. Emphasis for the Tracy facilities studies and evaluations has shifted once more to existing structures and operations, and how they may be improved or supplemented to meet the CVPIA’s needs.

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

Water Acquisition Program

The CVPIA directs that Reclamation, in coordination with the 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 Water Acquisition Program (WAP) during 2003, Reclamation purchased 70,000 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 migratory waterfowl breeding success.

In Fall 2002, the WAP initiated a reconnaissance level-of-effort study to evaluate the potential of using groundwater, 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 over-all 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. This activity, which should be completed in Spring 2004, is being conducted under the authority of CVPIA Section 3406.

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



A pheasant flies over a refuge made possible by the Water Acquisition Program

Water Conservation Program

The Reclamation Reform Act of 1982 required that a Water Conservation Plan (Plan) be prepared and submitted by certain entities that have entered into a repayment contract or water service contract with Reclamation. The "Criteria for Evaluating Water Management Plans" (Criteria) was established in 1993 and revised in 1996, 1999, and 2002.

The draft 2002 Criteria was noticed in the Federal Register and on the Internet at www.watershare.usbr.gov in order to solicit comments. In addition, three stakeholder workshops were conducted. In all, approximately 15 comments were received. Once the Criteria became final, all Plans submitted were evaluated using the 2002 Criteria.

In addition to Plan management, the Water Conservation Program (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 2003, the Mid-Pacific Region's Area Office Water Conservation Specialists provided approximately \$3.5 million in grants to participating districts. These participants, in return, provided approximately \$1.70 million in cost-share funding.

Throughout 2003, the Program continued the interagency partnerships with CALFED's Water Use Efficiency Program and the Urban and Agricultural Water Management Councils. The Program currently oversees seven CALFED water use efficiency grants. Additionally, the Program is continuing agreements developed between Reclamation, DWR, and CALFED to assist the Council in developing a program of technical and financial incentives for water use efficiency in the urban sector.

For 2004 the Program envisions continuing efforts to assist districts with their Plan development and Annual Updates. The Program will also continue to build on its partnerships with Cal Poly San Luis Obispo Irrigation Training and Research Center, Chico State Agricultural Teaching and Research Center, Fresno State's Center for Irrigation Technology, and the Water Education Foundation's Project WET.

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

Water Transfers

From April 1 through December 31 of Water Year 2003, approximately 402,700 af of CVP water had been approved for transfer under the CVPIA water transfer provisions. Of this amount, approximately 2,700 af was approved for transfer north of the Delta and 400,000 af 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 an MOU with DWR and the 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 Website, 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 Website is located at: <http://\ontap.ca.gov>. For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).



Water transfers make possible these irrigated orchards in the Southern Central Valley.

CONTRACT MATTERS

Contracts are the lifeblood of stakeholders who depend on water provided by the Central Valley Project. The following pages contain descriptions of contract matters important to both stakeholders and the Mid-Pacific Region that occurred during 2003.

CCAO Title Transfers

There were two title transfers of Reclamation facilities in the MP Region accomplished in 2003. Transfer of title to the Sugar Pine Dam and Reservoir was completed on November 7, 2003, and title to the Sly Park Dam and Reservoir was completed on December 23, 2003. The CCAO now has only miscellaneous expenses related to these transfers.

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

Humboldt Project Title Transfer

The LBAO has been working with the Pershing County Water Conservation District (District) and other interested parties to transfer title to the Humboldt Project to the District. 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 of Nevada.

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 of Nevada. In 2003, Congress amended the initial legislation and provided additional funding to the State of Nevada to complete the transfer. A MOU was negotiated between Reclamation and the District. A contract for preparing an EIS was awarded and that work is expected to begin in early 2004.

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



Commissioner John W. Keys III (right), and Representative John T. Doolittle preside at the Sly Park Dam title transfer.

Long-Term Contract Renewals

After receiving a revised approval memorandum addressing issues that Contractors raised relative to the negotiation of a CVP-wide contract, the MP Region and its Contractors resumed negotiations for renewing the existing long-term water service contracts. Since negotiations were resumed, a new CVP-wide form of irrigation/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. Upon completion of negotiations, the contracts will be 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 Region intends to complete negotiations by April 15, 2004 and negotiated contract execution will occur upon completion of required environmental documentation, including a new OCAP, ESA consultations, and 10 NEPA documents. The environmental documentation is scheduled to be completed in June 2004 with contract execution expected in July 2004. These negotiations involve approximately 5.6 million af 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).

M&I Water Shortage Policy

The CVP 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 CVPIA 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 have been reviewed and considered by Reclamation in the final policy development. Reclamation will use modeling studies to assess the impacts of the proposed policy and the necessary environmental documentation will be prepared. A draft environmental document is scheduled to be available for public review and comment by Spring 2004. The final M&I Water Shortage Policy is scheduled to be issued by August 2004.

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



The city of Sacramento's new pumping plant on the Sacramento River.

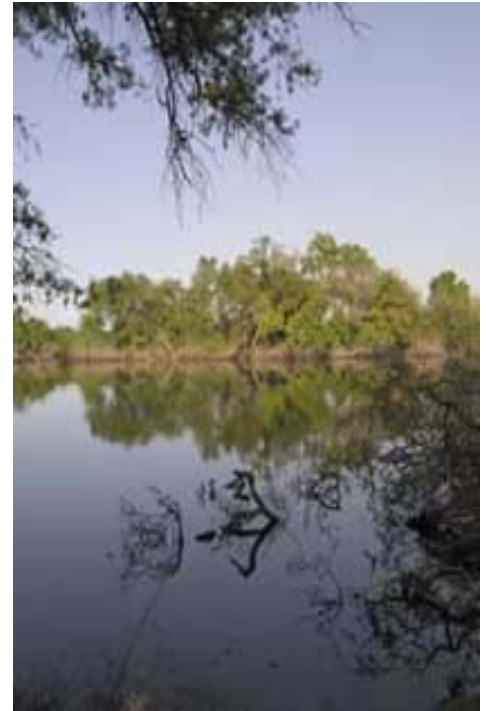
Sacramento Contractors Ongoing Recontracting Effort (SCORE)

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 1956 Study Update was completed in draft 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.
- **The Basin Wide Management Plan (BWMP)** is in final draft form and includes six technical memorandums. Reclamation provided final comments on January 2, 2004 to the Sacramento River Settlement Contractors. To complete the BWMP, the Sacramento River Settlement Contractors must submit separate Water Management Plans or a joint Water Management Plan, and Reclamation must have determined such a plan meets either the current existing Standard Criteria or acceptable approved Regional Criteria. Draft Regional Criteria were completed and submitted in December 2003 for publication in the Federal Register.
- **Contracting Principles:** Simple contracting principles were discussed at the first negotiation meeting in May 2002. Negotiations were continued throughout 2003 with agreement reached by all but one contractor. Executing these contracts is pending completion of the environmental documentation and water management plans. Legislation has been passed providing a two-year extension on the term of the existing Sacramento River Settlement Contracts.
- **Environmental Documentation:** Scoping for the environmental documentation for the contract renewal has been accomplished. Environmental documentation is in the process of being completed.



The Sacramento River

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

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.

Sacramento River and CVP Water Service Contract Renewals

Some 145 Sacramento River Settlement Contracts 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 are for 2.2 million af of water, of which approximately 1.8 million af is classified as base supply water (water that may be diverted by the contractors free of charge) and approximately 380,000 af is 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 contract. Negotiations were essentially concluded with all but one “long-form” contractor in 2003 and the “short-form” contract has been accepted by nearly all of the short-form contractors. The required environmental documents, including NEPA, ESA and OCAP are being prepared and it is anticipated that the renewal contracts will be signed during the summer of 2004, to be effective April 1, 2005.

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

Reclamation has also reached agreement with 20 of 29 contractors for long-term renewal of existing CVP Water Service Contract Renewals. Only Bella Vista Water District and Clear Creek Community Service District have significant issues to be negotiated. Negotiations with those districts are expected to resume in January 2004.

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

FACILITY IMPROVEMENTS

Most of the infrastructure in the Mid-Pacific Region's projects are decades old. Keeping them in good working order and ensuring they will withstand future earthquakes common to California is an ongoing process. Following is a look at progress made in 2003 toward those ends.

"A" Canal Fish Screen Project

Work continued during 2003 on the construction of the "A" Canal Fish Screen and associated facilities in Klamath Falls, OR. The \$18 million project's purpose is to reduce entrainment of endangered Lost River and shortnose suckers from Upper Klamath Lake into the "A" Canal, while still providing water to area farmers.

The Service first identified the need to reduce entrainment in its 1992 long-term BO on the operation of the Klamath Project. The Current Biological Opinion for suckers requires that an operational screen be constructed before diversions began on April 1, 2003. The "A" Canal was the largest unscreened diversion facility in Oregon.

Groundbreaking on phase one of the Fish Screen Project began in August 2002, and primary project elements – including new headgates to replace those built in 1906, a trash rack, fish screen, pump station, fish evaluation station and preliminary bypass – were complete and operational in April 2003. The Project's Phase Two followed immediately, including installing a secondary bypass pipe to the lower Link River as well as final features such as paving, lighting, area restoration, and landscaping. The entire project was completed in October 2003.

The project site was at the center of controversy and garnered national media attention in 2001, when public protests surrounding water allocation and endangered species took place.

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

Coleman National Fish Hatchery

The CVPIA required Coleman National Fish Hatchery, on Battle Creek in northern California's Shasta County, to be rehabilitated and expanded as an ongoing process. Although it is 58 years old, the hatchery is a large, modern, state-of-the-art facility with rebuilt raceways and state-of-the-art water treatment facilities. It continues to meet its production goals as described in the Service's 1998 Biological Assessment, and facility upgrades and improvements continue as planned.

The following station development projects are ongoing: (1) a seismic retrofit of the hatchery building to meet California Zone 2 seismic requirements, (2) a contract to provide detailed station pipe and valve drawings to facilitate facility operations, and (3) NEPA initial and advanced design development for the water intake modification project. Simultaneously, coordination is ongoing to ensure the hatchery is compatible with the restoration of Battle Creek, potentially the best salmon spawning tributary north of the Feather River, and the stream from which the hatchery obtains its water.

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



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

Derby Diversion Dam Fish Passage Project



Derby Dam fish passage

Derby Diversion Dam, located on the Truckee River 20 miles east of Reno, Nevada, was Reclamation's first construction specification and was completed in 1905. The dam diverts water from the Truckee River into the Truckee Canal and is used to irrigate agricultural land and wetlands in the Newlands Project. The construction of Derby Dam resulted in blocking fish from migrating upstream in the Truckee River for almost 100 years.

To address the problem, LBAO completed construction of a fish passage in 2002. The fish passage provides access to fish spawning and rearing habitat upstream of Derby Dam and also facilitates downstream fish migration. It provides benefits to resident and migratory fish, including the Federally listed cui-ui and Lahontan cutthroat trout, by reconnecting a currently fragmented river system. The project also included construction of a flood bypass structure in the location of the previous earthen soft plug.

In 2003, to further proper functioning of the fish passage and fish protection, LBAO began gate automation on Derby dam and initiated the design for fish screens in the Truckee Canal just downstream from the Derby Dam headworks. This will allow fish attempting to return to the Truckee River's lower reaches below Derby Dam to be screened out of the Truckee Canal and fed back into the Truckee River below the dam.

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

Folsom Dam Temperature Control Device

A Temperature Control Device (TCD) on the urban water supply intake on Folsom Dam was installed during 2003. The TCD helps conserve cold water in Folsom Lake that will be released down the lower American River during the hot summer and early fall months to help steelhead and salmon survival.

Folsom Dam and reservoir provides water storage, flood control, water quality, fish and wildlife, and recreation benefits. The dam delivers urban water to nearby cities and water districts and provides downstream water quality benefits. Water released from the dam forms the flow of the lower American River in which threatened fish live.

During the high demand summer months water can only be drawn from the depths of Folsom Lake, which due to temperature stratification, contains a limited pool of colder water. Ideally the temperature of the lower American River should remain below 67 degrees F at a compliance point located downstream at Watt Avenue during the summer for steelhead. A temperature of 60 degrees F or lower is needed for fall run Chinook salmon during the fall months.



Workers prepare to hoist the Folsom temperature control device into Folsom Reservoir.

The TCD sends warmer water from the upper levels of the reservoir to the pipeline that serves urban users. Those users — the City of Folsom, Folsom State Prison, San Juan Water District and the City of Roseville — will be able to get more dependable and constant water deliveries without limitations caused by the American River temperature requirement.

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

Folsom Power Generators Get Overhauls

The Folsom Power Plant's three power-generating units were overhauled during 2003 to make them more reliable.

The process for each unit involved major disassembly from top to bottom. In addition, some modifications were made to employ newer technology to make the units operate more reliably and with less maintenance. This will lead to savings through minimizing maintenance and extending the life of the units.

One of the modifications involved removing the automatic greasing system and installing self-lubricating bushings that require no maintenance. Digital state-of-the-art governors were installed to better regulate unit speed. The old governor system required maintenance, and the systems are now so old that there are no replacement parts available.

Most of the unit overhaul work was done by contractors, and the cost varied from \$2.5 – \$3.5 million per unit based on the modifications being made. Funding comes from the RAX program.

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

Lake Tahoe Dam Restoration

Lake Tahoe Dam is located at the Truckee River's headwaters where it flows out of Lake Tahoe at Tahoe City, California, which is about 10 miles south of Truckee, California. The facility is part of the Newlands Project and provides water for irrigation and hydropower production, and controls the top six feet of Lake Tahoe. With the surface area of the lake, this creates a reservoir of 732,000-acre-feet capacity and regulates the lake outflow into the Truckee River. A collaborative process for restoring Lake Tahoe Dam and surrounding areas was undertaken between Reclamation, CDPR, and Tahoe City Public Utility District.

In 2003, Reclamation replaced rotting timber over the gate operators, rebuilt the roof, and gave the dam a new coat of paint, along with replacing the shutters with windows. The new windows allow for lake views, the first time since the wooden gatehouse was built in the 1940s. CDPR has finished the first phase of their Truckee River Outlet Rehabilitation Project. The improved William B. Layton Park



Lake Tahoe Dam

includes walkways, public restrooms, picnic tables, a shaded structure and a parking lot. Tahoe City Public Utility District's project is the Commons Beach Lake Access Enhancement Project. Commons Beach and its boardwalk are being improved and expanded. There will be a pedestrian bridge that will be situated adjacent to the dam on the lakeside, along with a bike path that connects Commons Beach to the State Park.

In 2004, Reclamation will continue its commitment to Lake Tahoe Dam by initiating design work to repair the deteriorating concrete of the slabs and the buttresses. The concrete was originally placed before 1915 and must be repaired to ensure proper gate functioning.

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

New Melones Power Plant Protective Relay Replacements

Existing electro-mechanical relays, which have been in service since the plant was commissioned, 1979, were replaced during 2003 at the New Melones Power Plant. The new protective relay packages are solid-state protection packages which also collect and store information about the system whenever a disturbance takes place. The new design replaces the existing system with two completely independent systems for redundancy, and reduces any possibility of a unit not being protected during a fault on the system.

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

Replacements, Additions, and Extraordinary (RAX) Maintenance and Deferred Maintenance

The \$11.6 million CVP RAX Program budget for fiscal year 2003 is one of the largest budgetary items in the MP Region. The entire CVP RAX budget was successfully expended by the end of the fiscal year. Projects completed include refurbishing the gantry crane at Shasta and Nimbus Dams and repairing the Folsom Power Plant draft tube gate hoist. Design and construction began on several large projects including Shasta Dam spillway repair, New Melones Power Plant Runner Replacement, and repair of Shasta Dam 750 foot elevation tube valve #1.

CVP RAX consists of approximately 180 items with an estimated cost of more than \$98 million. The CVP RAX Program has consistently assured that all available dollars are applied to the highest priority items first, ultimately reducing the



Workers at the Folsom Power Plant.

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 2002 through June 2003, the first turbine upgrade job at Shasta Powerplant was completed. The job 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; installed new runner with a good fit in the new seal rings; and full assembly of this unit.

The upgrade cost was approximately \$1.5 million. In August 2003 an accurate performance test was conducted determining peak efficiency was just over 95 percent. As 2003 ended, the same Shasta crew was in the middle of the same job on unit 5 with completion expected in June 2004.

This multi-year turbine upgrade job 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 currently installed 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 power plant for an overall power increase. The increased power output comes from: (1) better hydrologic data from which to design the new turbines, and (2) better modeling, materials, and manufacturing techniques.

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

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



Workers perform upgrades to the turbine at the Shasta Power Plant.

PARTNERSHIPS AND ACCORDS

The Mid-Pacific Region doesn't operate in a vacuum. Daily, the Region's employees work with stakeholders representing public and private sectors in virtually every water-related issue in our vast territory. We form partnerships and make accords with stakeholders to gain high levels of cooperation and to achieve results not possible by the action of one agency alone. Following are examples of partnerships and accords formed during 2003.



Alcatraz Island

Alcatraz Water Reuse and Recycling

Reclamation is working cooperatively with the National Park Service (NPS) under the Sustainable Water Resources Partnership Initiative. This is a cooperative program that involves sharing expertise and capabilities of Interior agencies. The program focuses on pursuing sustainable water and energy practices at facilities on Federal lands. Reclamation and the NPS identified Alcatraz Island as an ideal location to pursue the application of sustainable technologies in remote and island locations. The Science and Technology Program and General Planning Activities has funded all of Reclamation's work.

The problem needing improvement at Alcatraz Island is the limited basic infrastructure development of fresh and wastewater systems. Both potable and non-potable water is barged over from San Francisco. Sewage from the limited restroom facilities is barged back to San Francisco. Buildings on Alcatraz do not have heat, which increases the rate of decay. The lack of fresh water supply limits the ability to clean and maintain historic structures and walkways, which are subject to near constant sea-spray.

In 2003, Reclamation completed an Appraisal Study, which has been under review by the NPS. No additional fund sources have been identified to respond to any comments the NPS may have.

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

Water Fact

California's Central Valley has lost 95 percent of its wetlands to agricultural and urban development.

Battle Creek Salmon and Steelhead Restoration Project

The Battle Creek Salmon and Steelhead Restoration Project (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 six 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 Company (PG&E).

A 1999 MOU between Reclamation, PG&E, NOAA Fisheries, the Service, and DFG established a proposed plan to modify the 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 DWR to develop project designs and with the SWRCB and FERC for the completion of environmental compliance 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).



Battle Creek

CALSIM II Model Development

CALSIM II development continued in 2003 with key features added including a more robust simulation of water quality at Vernalis on the San Joaquin River; a reformulation of the simulation of the EWA; explicit simulation of non-Federal projects on the San Joaquin Valley's east side; a power module; improved San Joaquin hydrology; and CALSIM II code comprehensive commenting.

CALSIM II has also been independently reviewed under a Bay Delta Program contract. University of California, Davis conducted interviews of 89 water resources professionals for their opinions on CALSIM II. UC Davis then convened a panel of academic experts on water resources modeling to review the interviews and directly comment on CALSIM II.

Two reports "CALSIM II in California's Water Community: Musing on a Model" and "A Strategic Review of CALSIM II and its Use for Water Planning, Management, and Operations in Central California" were produced. Reclamation and DWR are now reviewing these comments to determine effects on model development priorities.

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

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.

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 August 2003, the District's board of directors voted to accept the last proposal presented by Reclamation on March 26, 2003, when negotiations were broken off. Negotiations for a long-term agreement had been on going for seven years during which the District conveyed water to the refuge under interim



Gray Lodge Wildlife Management Area

agreements. The long-term conveyance contract will be effective when Reclamation and the District reach agreement on a construction contract that was presented to the District on August 27, 2003. The construction contract will provide improvements to the District's distribution system that are required to deliver the water needed for full habitat development. The conveyance and construction contracts were executed in fiscal year 2003.

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

2003 Klamath Project Pilot Water Bank

KBAO implemented the 2003 Klamath Project Pilot Water Bank to meet requirements of the NOAA-Fisheries Biological Opinion on the Operation of the Klamath Project. The Biological Opinion required a 50,000 acre-foot of water bank to supplement river flows for ESA listed coho salmon. KBAO contracted for about 58,600 acre-feet at a total cost of about \$4.45 million. The Water Bank consisted of Land Idling and Groundwater Substitution programs. Participants were paid \$187.50 per acre for idling land and \$75 per acre-foot for substituting well water for Klamath Project surface water. Approximately 14,400 acres were idled and 11,000 acres used groundwater in lieu of Project water.

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

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 demonstrating 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 Diversion Dam Fish Passage Program

The Red Bluff Diversion Dam is a 52-foot-high concrete gated weir structure located on the Sacramento River about two 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.

In an effort to minimize the fish passage problems, Reclamation implemented an eight-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 the TCCA, working with other Federal, State, and local agencies and stakeholders, are co-lead agencies for the NEPA/CEQA process to develop alternative plans to increase the delivery of irrigation water during the “gates out” period.

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



Tehama-Colusa Canal

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 (Study) is to develop a water supply plan consistent with the Water Forum Agreement objectives of pursuing a Sacramento River diversion to meet Placer/Sacramento Region water supply needs while promoting ecosystem preservation along the lower American River.

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



A water diversion near the Sacramento River

Significant accomplishments and activities for 2003 include:

- Formulating and developing preliminary alternatives;
- Initially screening preliminary alternatives to obtain a reasonable range for environmental review;
- Initiating the development of the EIR/EIS noticing of NOI/NOP; and
- Conducted public scoping meetings and briefings.

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

WESTSIM Groundwater Model

WESTSIM is a groundwater simulation model of the Federal contract lands on the San Joaquin Valley's west side from Tracy in the north to Kettleman City in the south. Salinization, groundwater 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. GIS 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 peer review of the original Integrated Groundwater 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.

Reclamation and DWR made a joint decision to support the development of a new model engine that would replace the obsolete code. The model development work was led by DWR with guidance and support from Reclamation. Two public training workshops were held in December 2002 and December 2003 to familiarize the user community with the new model and solicit direction on future model development. The changeover from the original model code to IGSM2 brought with it delays in model calibration and required reformatting of the model data files. Bugs in the new code have been fixed through close continuing cooperation with DWR.

Reclamation completed the following major tasks in 2003 towards development of a final calibrated WESTSIM model:

- A unique, Public Domain Data Management System has been developed in parallel with the WESTSIM model which will 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.

- The IGSM2 model output routines have been modified to allow a water budget to be created for each sub region.
- All model input files were updated to the year 2000. This work proceeded in close consultation 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.
- The first phase of model calibration is under way. With the release of version 2 of the new model, calibration can begin using drain flows, water level records and stream flow gauging data. Model calibration will be complete in early summer 2004.

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 2003 Reclamation participated in the following studies:

- Bay Area Regional Water Recycling Program (BARWRP)
Reclamation transmitted the BARWRP Master Plan to Congress in December 2003. The Master Plan indicates that a regional water-recycling program is feasible in San Francisco, San Mateo, Santa Clara, Alameda, and Contra Cost Counties. The Master Plan recommends implementing recycled water projects phased to supply 125,000 af by year 2010 and 240,000 af by year 2025. Implementation cost is estimated at \$735 million for the required 2010 near-term program.
- Watsonville Area Water Recycling Project (WAWRP)
In March 2003, the City of Watsonville and the Pajaro Valley Water Management Agency completed a draft Feasibility Study report of water recycling opportunities to mitigate the impacts of ground water overdraft and for agricultural irrigation. The report recommends the construction of a project to recycle up to 4,000 af per year of effluent from the City's wastewater treatment plant, which must be blended with 10,000 af of higher quality water to reduce salinity for irrigation use. Project cost is estimated at \$78 million. The final WAWRP Feasibility Report and environmental document is scheduled for completion in June 2004.
- North San Pablo Bay Restoration and Reuse Project
In 2003, Reclamation and the Sonoma County Water Agency (SCWA) initiated a feasibility study to evaluate opportunities for water recycling supply, storage, and distribution in the northern

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

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. The feasibility study was initiated in 2003 and is scheduled for completion in 2006. The feasibility study will select a preferred alternative and develop a project cost estimate.

- North Sonoma County Agricultural Reuse Project

In 2003, Reclamation and the SCWA initiated a 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 of surface water and groundwater supplies. Six wastewater treatments plants from six different wastewater treatment districts would be linked by a regional pipeline system to provide recycled water. The feasibility study was initiated in 2003 and is scheduled for completion in 2006. The feasibility study will select a preferred alternative and develop a project cost estimate.

Water Quality Coordination

The Water Quality group in the Division of Planning manages water quality activities relating to SWRCB permits, ESA and Clean Water Act (CWA) actions, and CVP operations. The group strives to ensure minimum impact to Reclamation's operations and its ability to meet customer needs.

In 2003, the Water Quality Group participated in the following::

- CWA multi-agency/private stakeholder processes
 - Salt and Boron Total Maximum Daily Load (TMDL) in the Lower San Joaquin River at Vernalis
 - The San Joaquin River Deepwater Ship Channel Dissolved Oxygen TMDL
 - The proposed addition of DMC on the 303(d) listing as impaired water body for selenium

- National Pollutant Discharge Elimination System (NPDES) permit for Sliger Mine (an abandoned mine located on Reclamation property near the proposed Auburn Dam site)
- Warren Act Contract for DMC and Friant-Kern Canal
- Multi-agency planning and scoping sessions relating to water quality issues (within or near Reclamation facilities) that may impact daily operation
 - California Bay-Delta Authority Drinking Water Subcommittee
 - Freeport Regional Water Project
 - EWA
 - South Delta Water Quality Standards
 - Shasta Enlargement Program
 - DMC water quality monitoring for TMDL
 - Yurok Tribe Water Quality Control Plan
 - Big Sandy Rancheria Water Quality Evaluation
 - City of Fallon Storm Water Runoff and Drainage
- Reclamation Water Quality Work Group activities addressing 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 (EPA) water quality related polices



The lower San Joaquin River near Friant Dam

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

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 some of the award winners for 2003.

Several Mid-Pacific Region members were recognized during 2003 when they received Meritorious or Superior Service Awards.

Receiving Meritorious Service Awards from the Department of the Interior were:

Kirk C. Rodgers: As Mid-Pacific Regional Director, Rodgers was recognized for his outstanding contributions in the fields of water management, supply, and power generation. Previously the Region's Environmental Project Officer, Rodgers successfully directed staff in preparing the programmatic environmental impact statement that evaluated the impact of long-term delivery of CVP water supplies to 14 Federal, State, and private wetland habitat areas. As Area Manager for the Klamath Basin Area Office, he was honored for being instrumental in bringing project operations into legal compliance with the ESA. As Regional Director, he was honored for leading the most diverse organization in Reclamation and for excelling in the areas of recruitment, retention, accountability, education, and zero-tolerance policies relating to workplace discrimination. Rodgers also led the effort to improve and modify the Region's complex procurement processes to meet the requirements for Reclamation's participation in one of the nation's most significant water management initiatives, CALFED.

William H. Luce, Jr.: As Area Manager for the SCCAO, Luce was recognized for being one of Reclamation's premier managers. Among many accomplishments, he was recognized for playing an integral role in the settlement of the Sumner Peck Ranch litigation that resolved longstanding conflict over drainage issues on the San Luis Unit. Also known for his ability to build coalitions and partnerships, he was recognized for the progress made in meeting land retirement requirements under the CVPIA.

Richard A. Welsh: As Construction Engineer for Reclamation's MPCO, Welsh was honored for providing exceptional construction management leadership and expertise with multi-faceted, and complicated construction projects that have been politically and publicly visible and that involved considerable environmental consequences. He was recognized for fostering strong and frequent collaboration between construction professionals, design engineers, and procurement specialists throughout the entire design and construction process on high visibility projects such as the A-Canal Fish Screen project in Klamath Falls, Oregon, and the Folsom TCD in Folsom, California.

Receiving Superior Service Awards from the Bureau of Reclamation were:

John F. Davis: Now Deputy Regional Director, Davis was recognized for serving with distinction in a variety of capacities and for demonstrating exceptional leadership in high profile and critical water resource management activities. While negotiating contracts with water users he was recognized for a leading role in negotiations with various CVP agricultural, municipal and industrial water service contractors, the Service, and DFG, which enabled Reclamation to successfully complete several water service contracts including those addressing long-term refuge water supplies.

Susan L. Ramos: Now the Assistant Regional Director, Ramos was recognized for her exceptional expertise, innovative management, and strong leadership with CALFED. Honored for her pragmatic approach and comprehensive understanding of the issues, complexities, and competing interests that characterize CALFED, she provided valuable insight and direction as coordinator for the Federal Ecosystem Directorate, facilitating execution of the August 2000 ROD. This 30-year long-term plan seeks to restore the Delta ecosystem and improve water management.

Frank J. Michny: As the Region's Director of Environmental Affairs, Michny was honored for his extensive knowledge and understanding of environmental laws that impact the complex and highly sensitive water issues facing California. He was recognized as an expert in the interpretation of environmental laws and regulations to ensure compliance with these legal and regulatory requirements and assuring consistent interpretation and implementation. He was also honored for being the driving force in the Section 7 consultations for the CVP's long-term and interim contract renewals and for being instrumental in implementing ESA consultations on a wide variety of Reclamation programs, including the CVPIA, CALFED, CVP contract renewals, Trinity River restoration, and Klamath Project operations.

Richard J. Woodley: As Director of Human Resources, Woodley was honored for developing a sound and comprehensive human resources management program for the MP Region and for administering a significant portion of the human resources management program for the Bureau of Indian Affairs Pacific Region. Regarded an authority on application of case law affecting bargaining board employees, he effectively served as an expert witness for Reclamation at third party hearings, resolving conflicts and providing interpretive advice and guidance to MP Region management. He was recognized for improving the human resources office customer service, promoting diversity, and increasing the effectiveness of human resources programs and initiatives within the Region, and making notable strides in fostering an effective working partnership between management and the labor unions.

Max J. Stodolski: Stodolski was recognized for exceptional contributions in the fields of water resources management, design, and construction, and engineering that have been essential to successfully completing many water resource projects for the Western United States. He was honored for being a critical part of Reclamation's engineering design, construction management, and facilities operation team, and as the recognized expert within Reclamation on the fields of materials, inspection, surveying, geology, and engineering. He was also recognized for developing collaborative relationships with individuals with a variety of natural resource management interests that have enabled Reclamation to provide water to more than 100,000 acres of farmland while improving Sacramento River fisheries.

James K. Bryant: As Chief of Water and Lands for the Region's KBAO, Bryant was recognized for his exceptional contributions to Reclamation's project operations, flood control operations, and resolution of litigation issues. He was honored for successfully determining bottom line water requirements for irrigation, power, fish, and wildlife, and while serving as acting area manager, made difficult decisions regarding water use during severe drought conditions. He protected natural resources while balancing the needs of water users during extreme drought conditions when reservoir inflows were the third lowest in recorded history, and successfully resolved issues impacting Native American tribal trust, contracts for irrigation, and water for national wildlife refuges. Bryant was honored for his historical knowledge, perspective on the need for change, and the positive impacts he made in the KBAO.

Ruth J. Johnson: As Manager of the Region's Accounting Services, Johnson was honored for being instrumental in converting from Reclamation's manual accounting system to the automated Financial Accounting System via Transmission, converting to the Federal Financial System, and converting to the current programmatic budget structure. She was recognized for formulating and implementing Reclamation-wide accounting policy, and in ensuring the Region's compliance with new and evolving requirements associated with the annual Chief Financial Officer audit. She was also honored for constantly coordinating with representatives of the Office of the Inspector General, external auditors, and Regional staff on business practices.

Danny L. Mays: As Maintenance Worker Supervisor for the KBAO, Mays was recognized for being instrumental in oversight of the Safety of Dams rehabilitation of Clear Lake Dam, and in the ongoing infrastructure upgrading in the Refuge Lease Lands. During a severe drought, Mays led his crew to accommodate their normal duties, but also additional work needed to support assessment and application of the initial BO for the Klamath Project. Mays was also recognized for construction expertise that proved indispensable when a leak developed on the Lost River Diversion Channel during a flooding event. He was also honored for ingenuity that has been appreciated in activities as varied as fish screening, outlet gate stabilization, low water aeration, and radial gate maintenance.

Lauren Carly Wins National Engineering Award

Lauren Carly, an Office Engineer with the MPCO since 1993, won the Federal Engineer of the Year Award for 2003 for her work with construction contract administration on a diverse array of projects. She was presented the award in Washington, D.C., in early 2004.

Carly began her Reclamation career before she graduated from the University of the Pacific with a degree in Civil Engineering in 1978. Her planning studies, on which the CVPIA was in part founded, distinguished her from her contemporaries. At the USACE from 1983 to 1993, her leading edge work under the Water Resources Development Act in reducing flood risk, firmly established her project management expertise, a skill that Reclamation inherited upon her return in 1993.

As Office Engineer for the MPCO, Carly led her division through administering more than 200 construction contracts totaling more than \$300 million. She has been tapped to lead projects through the design and construction process due to her project management expertise. Those projects have ranged from roller compacted concrete dams (\$6 million) to gargantuan temperature control devices (\$60 million).

Included on her list of high visibility construction contracts are the Glenn Colusa Fish Screen Extension Project, Klamath A Canal and Fish Screen Project, and Casitas and Bradbury Dam modifications. Tentative contracts totaling \$95 million scheduled to begin in 2004 include Battle Creek Modifications and the Tracy Fish Collection Facility, estimated at \$20 million each.

Recognized throughout Reclamation as an expert on planning and project management, Carly has been called upon to lend her expertise to other Departments, Bureaus, and local agencies.

Carly is a member of the American Society of Civil Engineers, National Society of Professional Engineers, and the Society of Women Engineers.

For additional information, contact the Division of Human Resources at 916-978-5482 (TDD 916-978-5608).



Lauren Carly receives the Federal Engineer of the Year award from Commissioner John Keys.

New Melones Park Ranger Paul Barney Wins Safety Award

In recognition of his career-long efforts and innovation in providing for public safety and protection of reclamation resources, New Melones Lead Park Ranger Paul Barney was honored with the 2003 MP Region Safety Champion Award.

Acronyms Used

af	acre-feet
AFSP	Anadromous Fish Screen Program
ARWEC	American River Water Education Center
Authority	California Bay-Delta Authority
BARWRP	Bay Area Regional Water Recycling Program
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
FY	Fiscal Year
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
IGSM	Integrated Groundwater Surface Water Model
Interior	Department of the Interior
IRP	Integrated Resource Plan
IG	Inspector General
IT	Information Technology
JOC	Joint Operations Center
ITA	Indian Trust Asset
KBAO	Klamath Basin Area Office
LBAO	Lahontan Basin Area Office

MEID	Merced Irrigation District
M&I	Municipal and Industrial
MPCO	Mid-Pacific Construction Office
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
Mw	Megawatt
NCAO	Northern California Area Office
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration Fisheries
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
OSH	Occupational Safety and Health
PCWA	Placer County Water Agency
PEIS/EIR	Programmatic Environmental Impact Statement/Environmental Impact Report
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
SDFP	South Delta Fish Facilities Forum
SEIS	Supplemental Environmental Impact Statement
Service	U.S. Fish & Wildlife Service
SJRA	San Joaquin River Agreement
SJRGA	San Joaquin River Group Authority
SWP	State Water Project
SWRCB	State Water Resources Control Board
TCCA	Tehama Colusa Canal Authority
TCD	Temperature Control Device
TDD	Telephone Device for the Deaf
TDFP	Tracy Demonstration Fish Facility
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	Western Area Power Administration
WQCP	Water Quality Control Plan
WY	Water Year

How To Reach Us

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TDD 916-978-5608
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Area Offices

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541-883-6935
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Lahontan Basin Area Office
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Carson City, NV 89701-4015
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TDD 775-882-3436

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Shasta Lake, CA 96109
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TDD 700-450-6000

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559-487-5116
TDD 559-487-5933

On the cover:

Irrigated fields and orchards in the southern San Joaquin Valley attest to the effectiveness of the water provided by the Central Valley Project (CVP). The CVP irrigates 3 million acres in California's great Central Valley, producing a cornucopia of fruits, vegetables, nuts, and other products such as cheese, eggs, milk, livestock, poultry ... the list goes on. California farms account for 13 percent of national gross cash receipts from farming, and the state has some of the most agriculturally productive counties in the nation; eight of the nation's top 10 producing counties are in California.

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Web resources:

Department of the Interior
<http://www.doi.gov>

Bureau of Reclamation
<http://www.usbr.gov>

BOR MP Region
<http://www.usbr.gov/mp>

Reclamation Project Dataweb
<http://www.usbr.gov/dataweb>

