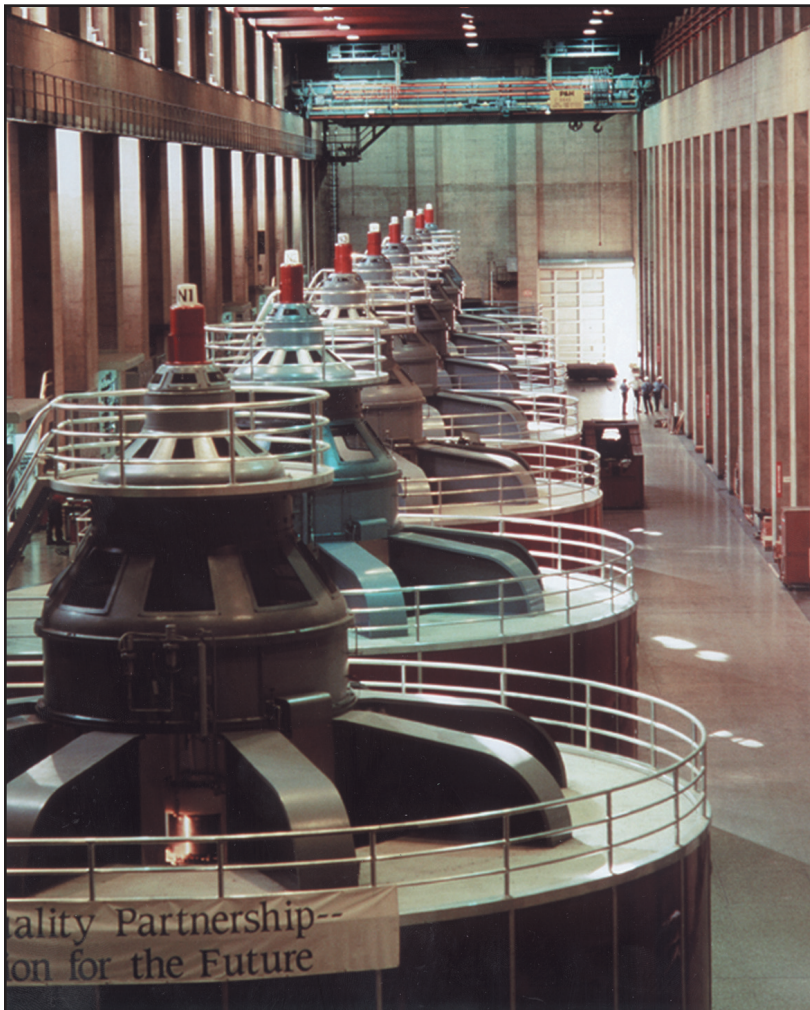


1-percent forced outage rate, far better than the industry 2.5-percent average. Reclamation hydroelectric powerplants range in size from 350 kilowatts at Lewiston Powerplant to 6.8 million kilowatts at the Grand Coulee facility, which is the largest hydroelectric powerplant in the United States.

Reclamation incorporates monthly hydroelectric powerplant performance data into numerous electronic databases. As a part of this effort to keep costs in check, we use benchmarks to measure our hydroelectric powerplant performance against comparable generators throughout the industry. The benchmarks look at the availability of the generators to deliver hydroelectric power and at the cost of production. Our power performance from 1994 through the last fiscal year is available on Reclamation's Internet site.

Future Challenges and Goals Reclamation's Hydropower program uses four key initiatives to achieve our vision of a cohesive power community poised to meet both today's and tomorrow's challenges:

Hoover Dam Powerplant generates clean electric power to meet increasing needs.



1. Coordinate power-related technical issues and provide Reclamationwide performance data to facilitate the security, reliability, and long-term viability of our hydroelectric power facilities.
2. Identify emerging issues and trends to strategically position Reclamation's Hydropower program for the future.
3. Maintain the corporate expertise and core capability of Reclamation's power personnel.
4. Represent Reclamation at various electric industry forums to develop a cohesive power community and improve individual and organizational relationships.

While Reclamation's forced outage rate is about 1 percent compared to the industry's 2.5-percent average, the Hydropower program continues to strive to improve

its performance and to optimize hydroelectric power generation, consistent with project purposes. Reclamation conducts frequent assessments of operation and maintenance effectiveness at all of its 58 hydroelectric powerplants and major pumping plants. Recommendations made to correct deficiencies or improve local programs are tracked to completion.

Reclamation is also actively tracking emerging issues and trends in the evolving wholesale energy markets. By participating in regional transmission organization development, monitoring changes and trends in regulatory policy, and providing input on renewable energy initiatives, Reclamation has begun to establish a significant presence within the wholesale electric power industry. Internally, Reclamation's Hydropower program continues to monitor the skills and abilities needed to operate our facilities. We continue to develop specialized technical training courses, such as Maintenance Excellence and the Principles of Hydropower, to ensure that current and future employees have the knowledge and skills to effectively operate and maintain our powerplants.

Our research and technology program is a key part of our efforts to meet future demands for power. We are developing power apparatus, controls, automation systems, and other devices to enhance operation and maintenance of power facilities to reduce costs and improve system reliability, stability, and safety.

Other Programs and Benefits

In addition to delivering water and power, Reclamation has the responsibility to maintain and safeguard our facilities. Under congressional authorization, our projects also provide ancillary benefits for such things as recreation, fish and wildlife, and environmental and Native American trust responsibilities.

Site Security and Law Enforcement Programs

FY 2004 Highlights In FY 2004, Reclamation continued to implement security enhancement work at all facilities. We completed security risk assessments on 55 critical infrastructure facilities, continued to implement security enhancements begun in FY 2003, and completed initial risk assessments and site verifications on an additional 120 facilities. Security Advisory Team Reviews were also completed for many of these additional facilities.

In FY 2004, we continued to work with the Interagency Forum on Infrastructure Protection to share information and best practices for critical infrastructure protection and the development and refinement of risk assessment methods. We also worked closely with the Department of Homeland Security to develop Reclamation's Dams Key Asset Plan and the emergency support function required by Presidential directives.

Other FY 2004 accomplishments included implementing a web-based employee training program on security awareness and revising our Threat Condition Protective Measures to more accurately reflect our implementation experience, while continuing to correspond with the Homeland Security Advisory System's graduated threat conditions.

We also awarded a \$4-million contract to upgrade security at Grand Coulee Dam, which provides irrigation water to more than 600,000 acres and generates about 19 billion kilowatthours of electricity annually. Through an interagency agreement between Reclamation and the U.S. Army Corps of Engineers, the contract was awarded to install and upgrade integrated systems, including video surveillance, intrusion detection, access control, and communication subsystems.

In FY 2002, congressional legislation was passed authorizing Reclamation to establish a law enforcement program to preserve public order and safety and to protect resources, facilities, employees, and the visiting public. In FY 2004, our law enforcement staff worked with security personnel to identify potential threats and implement effective security and response procedures. We also hired additional law enforcement staff, including an intelligence analyst, threat manager, and five regional special agents.

Future Challenges and Goals Reclamation plans to complete security risk assessments for all remaining facilities and will continue to implement security enhancements at all essential facilities. After initial security risk assessments are completed, we will implement a periodic security risk assessment process to ensure new information concerning threats and vulnerabilities is incorporated into our efforts to make our facilities as secure as possible. We will also continue to develop security-related policies, including policies on personnel security, information security, and minimum security standards for Reclamation facilities. Reclamation will continue to work closely with managing partners in implementing effective security measures and will work with State, local, and tribal law enforcement entities to effectively promote law enforcement at our facilities.



Dam Safety

Reclamation is responsible for 476 dams and dikes that form a significant part of the water resources infrastructure for the 17 Western States. As these structures age, concerns increase about their continued satisfactory performance. Of these dams and dikes, 369 structures whose failure or misoperation could cause loss of human life or other significant losses are included in the Dam Safety program. The objectives of our Dam Safety program are: (1) to ensure that Reclamation facilities do not present unreasonable risks to people, property, and/or the environment; and (2) to take appropriate action to reduce and manage risks in an efficient and cost-effective manner.

FY 2004 Highlights This year, we completed 35 comprehensive facility reviews; interim risk reduction actions at Hyrum Dam, Utah; and risk reduction actions at Deadwood Dam, Idaho; Pineview Dam, Utah; Scoggins Dam, Oregon; and Keechelus Dam, Washington.

Horsetooth Reservoir is a feature of the Colorado-Big Thompson Project in north-central Colorado. Four embankment dams, constructed between 1946 and 1949, surround the reservoir. Safety of Dam studies showed that modifications were needed to address seepage, piping, and seismic problems. The proximity of the city of Fort Collins, immediately downstream from the dams, was another

Friant Dam, 20 miles northeast of Fresno, California. Reclamation reviews its facilities periodically for Safety of Dams issues.

concern. Originally, repairs were expected to take up to 5 years at a total cost of \$105 million. However, once the contractor began work, we discovered conditions were not as serious as first thought. Reclamation worked with the contractor and Northern Colorado Water Conservancy District to develop a modified approach and complete repairs in a less costly manner and a much shorter time period. We began Safety of Dams modifications in spring 2001, and the project was declared substantially complete in FY 2004. Because of the reduction in the scope of work, the project was completed in only 2½ years at a cost of about \$56 million.

Future Challenges and Goals We have begun dam safety modifications to Deer Creek Dam, Utah, and Grassy Lake Dam, Wyoming; these modifications will continue into FY 2005. Grassy Lake Dam is under operating restrictions until risk reduction measures are completed. During FY 2004, we requested reauthorization of the Reclamation Safety of Dams Act of 1978 to allow the Safety of Dams program to continue.

Reclamation continues to improve its emergency management capability by planning and conducting exercises in conjunction with Emergency Action Plans, Continuity of Operation Plans, Occupant Emergency Plans, the Emergency Notification System, and the Emergency Operations Center.

Construction

Most of Reclamation's construction is in support of the Dam Safety program or is performed as part of specific projects that have been authorized by the Congress, including the Central Arizona Project, the Garrison Project, and the Animas-La Plata Project. Portions of these and other authorized projects have been contracted to Indian tribes pursuant to the Indian Self-Determination and Education Assistance Act, Public Law (P.L.) 93-638.

FY 2004 Highlights Since 2002, construction contracts in excess of \$103 million have been awarded for the Animas-La Plata Project, which is located in southwestern Colorado and northwestern New Mexico. This water delivery project is being constructed pursuant to the Colorado Ute Settlement Act and will provide water for the Ute Mountain Ute Tribe and the Southern Ute Indian Tribe, as well as benefit: (1) the Animas-La Plata Water Conservancy District, (2) the State of Colorado, (3) the Navajo Nation, (4) the San Juan Water Commission, and (5) the La Plata Conservancy District of New Mexico. The project consists of the Ridges Basin Dam and Reservoir, an inlet conduit, a pumping plant, the Navajo Nation municipal pipeline, and mitigation features. Dam and pumping plant

construction work began in FY 2003. Excavation for the inlet and outlet portals for the outlet works tunnel, the left and right abutments of the dam, and the pumping plant was completed. Construction of 5 of 13 drop structures between the dam and the Animas River was also completed. Excavation for the remainder of the dam foundation is well underway. The pumping plant intake structure and associated fish bypass pipe have also been completed, along with stage one of the inlet conduit. Preliminary design work for the Navajo Nation municipal pipeline has been completed, and work on the final design has begun.

Future Challenges and Goals Reclamation has many multiyear contracts in place for the Safety of Dams program and other authorized projects. These contracts are directly related to Reclamation's core mission: water and power delivery. The dam safety construction contracts are a major part of our continuing efforts to ensure that our structures do not present a safety risk to the public.

The Animas-La Plata Project is scheduled to be completed between 2008 and 2009 with plans to begin filling the reservoir during spring 2009 at an estimated total cost of \$500 million, plus indexing for inflation.

Serving Native American Communities

FY 2004 Highlights The mission of Reclamation's Native American program (NAP) is to help make the benefits of Reclamation programs available to Indian tribes and to assist in fulfilling Interior's Indian trust responsibilities. The Native American Affairs Office (NAAO) in the Commissioner's Office provides central coordination and policy leadership for all Native American issues throughout Reclamation.

In FY 2004, \$7.5 million was allocated to the NAAO program and projects to benefit tribes. The largest NAP expenditures are for the construction of facilities that will provide water to Indian tribes. Some of the facilities are being constructed to implement Indian water rights settlements. Some of this work is carried out by the tribes under Title I and Title IV of the Indian Self Determination and Education Assistance Act, P.L. 93-638, as amended.

The NAP program provides technical and financial assistance to Indian tribes, institutions of higher education, national Indian organizations, and tribal organizations in order to increase opportunities for Indian tribes to develop, manage, and protect their

water-related resources. Program activities include assisting tribes to better understand their water-related needs and helping them to develop their water resources, including rural water supplies on Indian reservations. This is accomplished through traditional and innovative technologies and partnerships with educational institutions for the training of Indian students in areas of water resources management.

Reclamation's Native American Program provides training and support for Native Americans to manage their own water resources.

In 2004, the NAAO continued to provide funds to each of the five Reclamation regions and the Commissioner's Office to support federally recognized tribes in their efforts to protect, manage, and develop water-related resources. Approximately \$2.4 million supported tribal project requests including such items as water management studies, water needs assessments, water quality studies,



and water measurement studies. Some of these projects were performed by tribes pursuant to Title I and Title IV of P.L. 93-638. Over 50 tribes within the Reclamation States benefited from this technical assistance program.

The Indian education programs administered by the NAAO are based on the concept that, if Reclamation can provide assistance to future tribal professionals and leaders, we will be helping Indian tribes address future water problems and issues. Reclamation also supported the Bureau of Indian Affairs Water Resources Technician Training program by providing employees as instructors for Indian students preparing to begin new careers as water resources technicians.

In FY 2004, Reclamation provided more than \$400,000 to 48 Native American students through scholarship and fellowship programs at three universities. We also provided funding for a High School to College program through a partnership agreement with Sinte Gleska University and Saint Francis Indian School.

Finally, in FY 2004, Reclamation continued its participation in the Secretary's Indian Water Rights Settlement program. The NAAO provided staff, technical, and budget support for field office participation in 22 Indian water rights negotiation teams and 12 water rights settlement implementation teams.

Future Challenges and Goals Indian country continues to show tremendous need for adequate water supply infrastructure to ensure the health and safety of reservation populations and to provide a base for economic development. Most Indian reservations have higher poverty rates than any other segment of American society, along with the other problems that generally accompany high poverty rates. While Reclamation cannot solve the problem of inadequate tribal water supply infrastructure alone, we will continue to assist federally recognized tribes located within the Reclamation States on their way to being able to develop, protect, and manage their water resources.

Over-allocated water supplies impact Indian tribes just as much as other entities in the West. Reclamation will continue endeavors to minimize conflict through our planning and management processes, as well as through participation in the Secretary's Indian Water Rights Settlement program.

Information Technology Security Program

FY 2004 Highlights As a component of its FY 2004 information technology (IT) security program, Reclamation completed the certification and accreditation of all production systems in Reclamation's current IT systems inventory. The certification and accreditation process is a comprehensive security assessment and risk management effort that must be conducted at least every 3 years. It examines the security and security controls of IT systems to ensure management is aware of all risks associated with each system's operation. Systems failing to meet baseline information system security requirements are required to be shut down. The complementary Management Control Review (MCR) process provides a less intensive, but annual, IT security performance benchmark. An MCR was also conducted on all of Reclamation's production IT systems during FY 2004. As a direct result of these intensive efforts, many improvements were made to the security of Reclamation IT systems.

Reclamation supported efforts to improve Interior's "F" grade on the Federal Computer Security Report Card by addressing each of the 31 targets identified in Interior's improvement plan. The execution of this plan, which was based directly on the requirements of the Federal Information Security Management Act (FISMA) of 2002, constituted a significant component of Reclamation's FY 2004 IT security budget and effort. FISMA efforts included improvements in many areas that impact IT security, such as IT security certification and accreditation, position sensitivity reviews, and system contingency plan testing. As a result of our efforts, Reclamation achieved a 99.5-percent score on Interior's bureau level "IT - Security" scorecard. It is expected that Reclamation's activities will contribute to a substantial improvement in Interior's Computer Security Report Card performance for this year. Other report and scorecard efforts are discussed in detail under the "Management Excellence" section.

Future Challenges and Goals Reclamation plans to continue to implement improvements and to conduct reviews and assessments to ensure that our IT systems support mission needs and are secure from unauthorized access. One of our most significant challenges results from legislative requirements that call for Reclamation to recover the full costs of its operations. We must continue to balance mandated IT security requirements with mission obligations and the need to pass the costs of these efforts on to our project beneficiaries.



Recreation

Reclamation lakes allow people to get away from day to day stress.

FY 2004 Highlights Currently, there are about 90 million visits each year to the 308 recreation sites provided by Reclamation projects. As the West's population increases, so does the demand for adequate recreational opportunities and facilities. The steady increase in visitations is a challenge to public agencies that provide recreation facilities at Reclamation reservoirs. Reclamation and our Federal and non-Federal partners are cooperating to increase management efficiency and respond to financing demands for services and new recreation facilities.

Over the last 3 years, most of Reclamation's recreation staff have been involved in the development of the Water Recreation Opportunity Spectrum (WROS). WROS is a tool for inventorying, planning, and managing water resources where recreation is an important public use. The goal of the WROS is to provide planners and managers with a framework and procedure to make better decisions for conserving a spectrum of high-quality and diverse water recreation opportunities. The U.S. Army Corps of Engineers (Corps), Tennessee Valley Authority, National Park Service, U.S. Fish and Wildlife Service, Forest Service, Bureau of Land Management, and eight of Reclamation's State park partners

provided input into this development effort. The Federal Lakes Recreation Leadership Council, of which the Commissioner is co-chairman along with the Chief of Civil Works for the Corps, contributed funds for field testing the system across the United States at both Reclamation and Corps reservoirs.

Future Challenges and Goals Recreation and tourism is one of the largest industries in the Western United States and the second-largest employer nationwide. Public reservoirs and lands are primary recreation destinations for Americans and many foreign visitors. Recreation pursuits in and around reservoirs include hunting, skiing, boating, fishing, and other water sports and activities. National surveys and statistics show that water-based recreation activities are among the most popular recreation experiences. Reclamation's future challenges and goals are to have all Reclamation recreation sites managed by other Federal and non-Federal partners such as State and local agencies.

Fish and Wildlife

FY 2004 Highlights Reclamation is committed to help balance the needs of water users and the environment. In FY 2004, we continued to work collaboratively with water users in the Middle Rio Grande Basin to meet the needs of two endangered species, the silvery minnow and the southwestern willow flycatcher. Pursuant to an agreement with the State of New Mexico, we stored water for later release to the Rio Grande to protect the habitat of the silvery minnow in the later summer months when natural flows in the river are insufficient. We supplemented this storage by purchasing water from willing sellers with storage contracts in the San Juan-Chama Project. Acquiring this water helped us meet the requirements of the current biological opinion, as well as provide water to the Middle Rio Grande Project.

In FY 2004, Reclamation also constructed islands at Nelson Reservoir in Montana to provide nesting habitat for piping plovers. These islands support nesting while allowing continued water deliveries and normal reservoir operations without causing incidental take of a protected species.

In another effort, we installed an electronic fish barrier on the headworks at the St. Mary Canal on the St. Mary's River in Montana to minimize bull trout entrainment in the canal. This experimental program is being monitored to determine its effectiveness.

Reclamation is the lead agency for the Endangered Razorback Sucker program on the Lower Colorado River. The razorback sucker is found only in the Colorado River Basin and now is restricted to a few remnant populations in the Lower Colorado River Basin. We took the lead in forming a multiagency Native Fish Work Group, a seven-agency team of biologists and resource managers whose primary goal is to replenish Lake Mohave's older adult population with young adult fish. During February and March 2004, Reclamation collected 25,000 razorback sucker larvae at spawning



Reclamation activities support wetland areas for birds such as this great blue heron.

grounds. More than 100,000 razorback suckers have been reared; large numbers of razorback sucker were released back into Lakes Mohave and Mead, as well as other areas on the river; and 20,000 young razorback suckers entered the rearing program. Reclamation and our partners continue to monitor spawning beds in Lake Mead during the drought period and document spawning fish and subadults.

Reclamation's Central Valley Project (CVP) has been instrumental in increasing the numbers of anadromous fish returning to Central Valley rivers and streams, including salmon and striped bass. Several species of salmon have returned to spawn in areas where they have not been seen for many years. Hundreds of thousands of ducks, geese, and other migratory birds are using wetland areas newly created or greatly enhanced as a result of the CVP. Avian diseases throughout the valley have declined. Tens of thousands of acres of existing habitats for listed threatened and endangered species have been acquired, and thousands more were restored or enhanced, benefiting species on the brink and increasing their chances for recovery.

Reclamation partners with the Army Corps of Engineers and Bonneville Power Administration in operating the Federal Columbia River Power System. The three organizations are implementing Endangered Species Act biological opinions to avoid jeopardizing the continued existence of 13 species of salmon and steelhead and 2 species of non-migratory fish in the Columbia and Snake River systems. The plan requires a coordinated effort to reduce mortality at mainstem dams by implementing hydropower operation and dam configuration changes; transporting juvenile fish; controlling predators; improving estuary and tributary habitats; and monitoring program effectiveness. Reclamation's major roles include modifying operations of Grand Coulee and Hungry Horse Dams and implementing innovative tributary habitat programs. All actions under Reclamation's Columbia-Snake Salmon Recovery Program are coordinated with other Federal agencies, States, and tribes in the area.

Future Challenges and Goals We awarded a \$5-million contract in 2004 for the construction of a fish screen in the Redlands Power Canal below the Redlands Diversion Dam on the Gunnison River near Grand Junction, Colorado. This work will be completed during 2005. The objective of the screen is to prevent both endangered and native fish from entering the canal and being injured or killed in the canal system. The fish screen should assist in the success and longevity of the Colorado pikeminnow and the razorback sucker, both of which are endangered species.