

More than \$130 million in Statewide Taxpayer Funds Committed to Delta Agencies for Levee Improvements and Maintenance

By the end of 2010, the California Department of Water Resources (DWR) had committed more than \$130 million in grant funding to local levee maintaining agencies in the Sacramento-San Joaquin Delta (Delta) and Suisun Marsh for levee repair, maintenance, and improvements to reduce flood risk, as well as for habitat enhancement projects. The funding was awarded through two grant programs: the Delta Levees Maintenance Subventions Program (Delta Subventions Program) and the Delta Levees Special Flood Control Projects (Delta Special Projects). All Delta projects funded through the Delta Subventions Program or Delta Special Projects must also include long-term habitat improvement components.

The Delta Subventions Program provides both technical and financial assistance to Delta reclamation and levee districts to maintain levees that preserve the network of channels in the Delta and protect the region's infrastructure. Under this program, the state can reimburse up to 75 percent of the total cost of the maintenance work. Last year, DWR committed \$15 million for levee maintenance in the Delta.

Through Delta Special Projects, the state provides both technical and financial assistance to levee maintenance agencies to improve or rehabilitate levees to provide additional flood protection. The program's goal is to help Delta levees meet one of two sets of federal standards: those required to receive federal disaster assistance funding from the Federal Emergency Management Agency, or those to qualify for emergency and levee repair assistance from the U. S. Army Corps of Engineers. Under this program, the state can cover up to the entire cost of the local project. In the last two years alone, DWR committed approximately \$115 million to projects that will repair or improve approximately 113 miles of levees protecting many Delta islands. The projects will provide the levees with at least one foot, and in some cases 1.5 feet, of "freeboard" — the distance between the top of the levee and the anticipated water level in the channel during a 100-year flood.



Photo captions from top: (1) The New Hope Project during construction in 2006 and (2) in reverse perspective after completion in 2008, used Delta Special Projects funding to improve and widen a portion of the existing levee at New Hope Tract and to install a drainage system to control seepage on the land side of the levee.

The Delta Special Projects program has been assisting the local agencies with levee improvements for the past 23 years. However, a succession of statewide voter-approved bond measures—beginning with Proposition 50 in 2002 and continuing through Propositions 84 and 1E in 2006—and the launch of FloodSAFE California have expanded both programs' opportunities to assist local agencies to protect private and public investments in the Delta, including water supply, habitat, and wildlife.

Further information on both Delta grant programs can be found at <http://www.water.ca.gov/floodmgmt/dsmo/bdlb/>.

In This Issue:

Delta flood response-related grants and activities, Page 2

Major weir renovations improve fish passage in the Butte Creek system, Page 3

Forecast-coordinated reservoir operations improve public safety, Page 4

Vision:

A sustainable integrated flood management and emergency response system throughout California that improves public safety, protects and enhances environmental and cultural resources, and supports economic growth by reducing the probability of destructive floods, promoting beneficial floodplain processes, and lowering the damages caused by flooding.

Comments Requested on Draft Flood Emergency Response Projects Grant Guidelines

Flood Emergency Response Projects grants, funded from Propositions 84 and 1E, are awarded to local public agencies for projects to improve their flood preparedness and response capabilities. Up to \$10 million will be available through 2015, including \$5 million specifically reserved for improving Delta communication tools and processes. Typical projects include purchasing and installing equipment for improved communication and multi-agency coordination; developing maps, information systems, facilities, or staging areas; and enhancing planning, preparedness and response training and programs.

Six public workshops to review the draft grant guidelines are scheduled for April and May 2011 (see “Calendar,” page 3). Written comments are due by June 4, 2011, to William Croyle, 3310 El Camino Avenue, Suite 200, Sacramento, CA 95821. The draft grant guidelines are available as a PDF for electronic download at <http://tinyurl.com/FloodERGrantGuidelines>.

Effort is Underway to Prepare State Emergency Response Plan for Delta Floods

DWR’s Delta Flood Emergency Preparedness, Response and Recovery Program works to protect lives, property, and critical infrastructure in the Delta while minimizing ecosystem impacts. Currently, the program is creating a flood emergency response plan for the Delta that describes the actions that DWR will take before, during, and after a levee-endangering event or levee failure in the Delta. The program is conducting an extensive effort to model water quality implications of levee failure and salinity changes associated with different levee repair strategies. DWR is coordinating this effort with the U.S. Army Corps of Engineers and expects to reach out to the five Delta counties during the plan development process.

Partnership to Improve Flood Release Coordination to Expand in Central Valley

Following the success of a pilot project in the Yuba-Feather River Basin, DWR recently announced a FloodSAFE grant program to support expanding the Forecast-Coordinated Operations (F-CO) program to flood control reservoirs in other parts of the Central Valley. The F-CO concept is based around a multiagency partnership of state and federal agencies and local reservoir operators. Before or during a flood event, these partners communicate, share data, and coordinate to help local water managers determine how best to operate reservoirs to reduce peak flows in downstream rivers without impacting the available water supply behind the dams. The pilot program was initiated after a devastating 1997 flood along the Feather River that resulted in loss of life and widespread property damage. Draft grant program guidelines and related information can be found at <http://tinyurl.com/FCOGrantGuidelines>.



DWR helped coordinate the state’s flood emergency response activities, such as laying sandbags to stabilize levees, following the 2004 levee break that flooded the Jones Tract in the Delta.

A new brochure titled “Implementing the FloodSAFE California Initiative” describes FloodSAFE and the effort’s achievements since its 2006 launch. The document is available as a PDF download at <http://tinyurl.com/ImplementingFS>.

Willow Slough Weir Receives a Facelift

The Willow Slough Weir recently received a much-needed renovation that replaced a set of structures representing one of the last major obstacles to Chinook salmon and steelhead passage along the Butte Creek migration corridor. DWR completed the project in late 2010 and funded it primarily using money authorized by California voters through the Disaster Preparedness and Flood Prevention Bond Act of 2006 (Proposition 1E). The California Department of Fish and Game and U.S. Fish and Wildlife Service were also critical project partners.

Located 15 miles south of Yuba City and constructed between 1924 and 1925, Willow Slough Weir is an earthen dam used to regulate the water levels in the East Borrow Canal for agricultural irrigation in the Sutter Bypass. It is now an integral component to the overall management of the drainage canal system in the Sutter Basin and is also situated in an important anadromous fish migration corridor to and from the lower Butte Creek system.

The structure's three dilapidated 85-year-old culverts and a fish ladder installed in the 1980s were no longer functioning effectively and were replaced with a new control structure featuring four culverts and a pool-and-chute fish ladder. The design and configuration of these new facilities will allow DWR to better manage flows from the canal into Willow Slough and improve fish passage. The type of fish ladder installed was selected because it meets the current fish passage standards and can operate at a wider range of flows than its predecessor. During most of the migration season, the old ladder failed to provide enough flow to attract migrating fish; instead, fish would attempt to swim against the high-velocity flows out of the culverts, which delayed their passage to the Butte Creek migration corridor and depleted them of valuable energy needed for spawning.



The recently renovated Willow Slough Weir features four new 60-inch-diameter culverts that frame a new fish ladder, at center, which will allow fish to pass more easily between the East Borrow Canal and Willow Slough.

2011 Calendar

April 8 – Flood Emergency Response Draft Grant Guidelines Public Workshop, 10 a.m., Yuba City

Sample Flood Safety Plan Public Workshop, 1 p.m., Yuba City

April 13 – Flood Emergency Response Draft Grant Guidelines Public Workshop, 10 a.m., Stockton

April 14 – Flood Emergency Response Draft Grant Guidelines Public Workshop, 10 a.m., Isleton

April 20 – Flood Emergency Response Draft Grant Guidelines Public Workshop, 10 a.m., Woodland

April 22 – Central Valley Flood Protection Board Meeting, 8:30 a.m., Sacramento

May 4 – Flood Emergency Response Draft Grant Guidelines Public Workshop, 10 a.m., Sacramento

Sample Flood Safety Plan Public Workshop, 1 p.m., Sacramento

May 19 – California Water Plan Update 2012 Public Advisory Committee Meeting, 9 a.m., Sacramento

May 27 – Central Valley Flood Protection Board Meeting, 8:30 a.m., Sacramento

<http://water.ca.gov/calendar>

On March 9, the American Society of Civil Engineers, Region 9, presented its "Outstanding Flood Management" award to the Three Rivers Levee Improvement Authority's Feather River Setback Levee project, which was featured in the July 2010 issue of FloodSAFE Focus.

Snow Surveying Data Helps DWR Respond to Flood Threats

Since 1929, the dozens of partner agencies that comprise the California Cooperative Snow Surveys program have measured the snowpack in the Sierra Nevada to help forecast runoff vital to California's water supply and reservoir operations. Today, the information from manual snow surveys, conducted at over 230 locations each month during the winter, and from 130 remotely located snow sensors provides data DWR engineers use to forecast river flows and water supply. These forecasts help water managers coordinate reservoir operations for water supply and flood control—a crucial part of the state's flood emergency response program (see "Partnership," page 2). As April begins, the statewide snowpack is in excess of 150 percent of its average, and DWR river forecasters and flood operations staff are collaborating with federal and local reservoir operators to minimize the high flows that will stress the Sacramento-San Joaquin River Flood Management System.

Three Workshops Scheduled to Help Local Agencies Draft Flood Safety Plans

Under California law, state funding for levee improvement projects in certain types of Central Valley communities is tied to a requirement that the local levee maintaining agency and the local government adopt a flood emergency or flood safety response plan that includes several specific elements.

To help local agencies meet this new requirement, DWR has released a draft of a sample flood safety plan and will hold three related public workshops in April and May throughout the Central Valley (see "Calendar," page 3). Comments or questions on the Draft Sample Flood Safety Plan should be directed to Geoff Shaw, gsham@water.ca.gov or (916) 574-2158. The draft sample plan is available as a PDF for electronic download at <http://tinyurl.com/SampleFloodSafetyPlan>.

DWR Providing Input to Delta Plan Development

With all of the recent interest in the Delta and the health of its ecosystem, many people may be curious about DWR's involvement in the current work by Delta Stewardship Council staff to develop a comprehensive resource management plan for the Delta. The Delta Plan is to achieve the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem in a manner that protects and enhances the unique cultural, recreational, natural resource and agricultural values of the Delta. The plan, to be adopted by the Delta Stewardship Council on January 1, 2012, will include a set of legally enforceable regulatory policies to guide certain state or local agency actions that could affect the Delta, including many DWR programs and activities. DWR has provided information to the Delta Stewardship Council staff from numerous DWR programs relevant to the Delta Plan.

The Delta Stewardship Council and its staff are moving at an aggressive pace to meet the January 2012 deadline, having already released two staff drafts of the plan since January with the goal of releasing, requesting comments on, and revising two more drafts before June. This accelerated schedule means that DWR and other agencies are conducting reviews and offering comments on the Delta Plan drafts during the public review cycles. DWR will continue to engage in this critical effort to shape a healthy future for the Delta. Draft plans are available on the council's website: <http://www.deltacouncil.ca.gov/>.

A periodic newsletter highlighting the progress to produce the 2012 Central Valley Flood Protection Plan and the related FloodSAFE efforts within the California Department of Water Resources



Ann Parkin
FloodSAFE Communications
(916) 574-0333

Michael Mierzwa
FloodSAFE Communications
(916) 574-0645

FloodSAFE California
P. O. Box 942836
Sacramento, CA 94236
FloodSAFE@water.ca.gov



This newsletter is printed on recycled paper