

Central Valley Flood Protection Plan: Rural-Agricultural Community Sustainability

State of California (State) law, enacted through the Central Valley Flood Protection Act of 2008 and codified in Sections 9600 through 9625 of the California Water Code, requires the California Department of Water Resources (DWR) to prepare the Central Valley Flood Protection Plan (CVFPP). The CVFPP proposes a State Systemwide Investment Approach for sustainable, integrated flood management in areas currently protected by facilities of the State Plan of Flood Control (SPFC). The CVFPP represents a foundational planning component of DWR's statewide FloodSAFE California Initiative.

California is a global leader in food and fiber production, and the thousands of acres of fertile Central Valley soils are critical contributors to the State economy, its social fabric, and the environment. In 2010, production in the 18 counties in and connected to the SPFC Planning Area accounted for approximately 40 percent of the State's record \$37.5 billion agricultural output.

Based on DWR's recent investigation of levees, about 60 percent of the SPFC levees protecting rural areas have a high potential for failure, and the combined resources of local agencies, the State, and the federal government would not be sufficient to improve these levees to meet current engineering standards. Meanwhile, recent federal policies for flood management, mapping, and insurance have threatened the State's ability to sustain a robust agricultural economy and discourage unsuitable urbanization in the Central Valley floodplain. Collectively, these policies have created uncertainties for insurance and loans for non-residential buildings, farm equipment, and crops.

Agricultural Sustainability in Central Valley Flood Protection Plan

The CVFPP's recommended approach – known as the State Systemwide Investment Approach (SSIA) – sets forth a strategy for responsibly meeting the State's objectives to improve public safety, ecosystem conditions, and economic sustainability, while recognizing the financial challenges facing local, State, and federal governments today. The total cost of the SSIA is estimated to be between \$14 and \$17 billion; of that, more than 23 percent is for the combination of rural-agricultural areas, small communities, and residual risk management, primarily designed to improve flood risk reduction in rural-agricultural areas.

From a systemwide perspective, it is in the State's interest to support the continued viability of small communities within the Systemwide Planning Area (which includes lands subject to flooding under the current facilities and operation of the Sacramento-San Joaquin Flood Management System) to preserve cultural and historical values and important social, economic, and public services to rural-agricultural populations, agricultural enterprises, and commercial operations. However, this should be done in a way that minimizes the potential for inducing growth in floodplains.



Agricultural production in the Central Valley

Small Communities

Many small communities in the SPFC Planning Area are expected to receive increased flood protection from implementation of system elements and improvements focused on adjacent urban areas. The SSIA also provides both structural (e.g., protection “in-place”, reconstruction or improvement of adjacent SPFC

levees) and nonstructural options for protecting small communities within the SPFC Planning Area from a 100-year flood event. Over 90 percent of the citizens in rural-agricultural areas and small communities within the SPFC Planning Area could receive additional flood protection from levee improvement measures, nonstructural floodproofing, and relocation opportunities presented in the SSIA.

Rural-Agricultural Areas (Other than Small Communities)

Rural-agricultural area levee improvements included in the SSIA are not as extensive as for urban areas and small communities, reflecting the lower levels of development within these floodplains. In these areas, the State would support actions that provide for an improved level of flood protection, emergency response, and post-flood recovery. System elements, such as bypass expansions, could also lower flood stages in rural-agricultural areas. The State will evaluate investments such as

- ◆ SPFC levee improvements in rural-agricultural areas will focus on maintaining levee crown elevations and providing all-weather access roads to facilitate inspection and floodfighting.
- ◆ Levee improvements, including setbacks, may be used to resolve known performance problems (such as erosion, boils, slumps/slides, and cracks). Projects will be evaluated that reconstruct rural SPFC levees to address identified threat factors, particularly in combination with small community protection, where economically feasible.
- ◆ Agricultural conservation easements that preserve agriculture and prevent urban development in current agricultural areas may be purchased, when consistent with local land use plans and in cooperation with willing landowners.



Downtown Colusa

agricultural conservation easements to preserve rural-agricultural activities that discourage development incompatible with existing rural uses, and encourage such compatible development, within floodplains. Flood risk reduction projects that can achieve multiple resource benefits will be preferable to single purpose projects, and are likely to be encouraged through enhanced State and federal cost-sharing. In general, the State will consider the following rural-agricultural flood protection options:

In addition, the State recognizes that federal engineering guidance and design standards may result in cost-prohibitive levee repairs for many rural-agricultural areas. As described in Section 4 of the CVFPP, the State will work with rural-agricultural communities to develop applicable repair standards for SPFC levees that are appropriate to rural-agricultural levels of protection. The State also supports efforts to reform the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program that would result in more equitable implementation while reflecting corresponding flood risks. To sustain agricultural communities and support the natural and beneficial functions of floodplains, FEMA should consider establishing a flood zone for agriculturally-based communities to allow replacement or reinvestment development in the floodplain for existing structures. The State will work with FEMA to consider a special, lower rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. In addition to assistance with emergency response and disaster recovery, the State will actively engage FEMA to help provide funding for residual risk management actions such as floodproofing and relocation.