

1.0 Introduction

With few exceptions, the largest and most damaging floods in California have occurred in the Central Valley. A complex system of dams and reservoirs, levees, weirs, bypasses, and other features constructed piecemeal over the last 150 years protects urban and rural areas against most flooding, and has prevented billions of dollars in damages. Still, only small portions of the system provide protection from rare and substantially large flows that cause severe damage when they occur. Portions of the system can be damaged and fail during floods that happen as frequently as every 5 to 10 years.

A portion of this complex flood protection system includes State- and federally authorized projects for which the Central Valley Flood Protection Board (Board), formerly The Reclamation Board, or the California Department of Water Resources (DWR) has provided assurances of cooperation to the federal government. This portion of the flood protection system is known as the State-federal flood protection system.

This section presents introductory information, including the definition of State Plan of Flood Control (SPFC), legislative requirement, purpose and scope for the document, description of Board or DWR assurances of cooperation to the federal government, local assurances to the State, the geographic focus area covered by the SPFC, and a brief acknowledgment of the importance of the remainder of the flood protection system.

1.1 Definition of State Plan of Flood Control

Section 9110 (f) of the California Water Code (CWC) defines the SPFC as follows:

“State Plan of Flood Control” means the state and federal flood control works, lands, programs, plans, policies, conditions, and mode of maintenance and operations of the Sacramento River Flood Control Project described in Section 8350, and of flood control projects in the Sacramento River and San Joaquin River watersheds authorized pursuant to Article 2 (commencing with Section 12648) of Chapter 2 of Part 6 of Division 6 for which the board or the department has provided the assurances of nonfederal cooperation to the United States, and those facilities identified in Section 8361.

In summary, flood control features may be part of the SPFC if they are as follows:

1. Part of the Sacramento River Flood Control Project described in CWC Section 8350; **or**
2. Part of projects authorized pursuant to CWC Division 6, Part 6, Chapter 2, Article 2, **and** located in the Sacramento River or San Joaquin River watersheds, **and** the Board or DWR has provided assurances of cooperation to the federal government; **or**
3. Identified in Section 8361 of the CWC.

Sections of the CWC cited in the definition may be found at the following Web site:

http://www.leginfo.ca.gov/html/wat_table_of_contents.html

The Sacramento River and San Joaquin River watershed boundaries for the SPFC are shown in Figure 1-1.

1.2 Legislative Requirement

Proposition 1E (Disaster Preparedness and Flood Prevention Act of 2006), approved by California voters on November 7, 2006, requires that information on the SPFC "...be updated by the department and compiled into a single document entitled 'The State Plan of Flood Control.'"

1.3 Report Purpose and Scope

The purpose of this report is to serve as the reference document required by Proposition 1E, Disaster Preparedness and Flood Prevention Act of 2006, for the project facilities, lands, programs, plans, conditions, and mode of operations and maintenance (O&M) that comprise the SPFC. This report is not a plan for the future, but a description of what is known about the current SPFC, with future updates to be prepared as changes are made to the SPFC. The nature of the SPFC makes the following information especially important:

- The State-federal flood protection system includes numerous separate projects along the Sacramento and San Joaquin rivers and tributaries.
- The system has been developed incrementally since before the first federal authorization for projects in 1917. Because of the incremental nature of building the system over many decades, and the system's evolution, comprehensive information was not available in a single location.
- Many of the SPFC levees and the Sacramento Weir predate the first federally authorized projects and were either accepted as meeting federal standards or modified to meet federal standards.
- Two standard O&M manuals describe O&M requirements for the Sacramento River, San Joaquin River, tributaries, and distributaries.
- Numerous separate unit-specific O&M manuals and O&M requirements are applicable to each unit of the system.
- Thousands of individual land records define the property rights held by the Sacramento-San Joaquin Drainage District (SSJDD) as part of the SPFC. The SSJDD is under the jurisdiction of the Board and was created by State legislation in 1913.

- DWR and local maintaining agencies (LMA) perform O&M in 110 jurisdictional areas (see Table 5-1). LMAs include levee districts, reclamation districts, cities, counties, and other public agencies and municipalities.
- Numerous plans and programs have evolved during the life of the State-federal flood protection system in the Central Valley.
- In some cases, the Board, jointly with an LMA, provided assurances of cooperation to the federal government.

This report describes the major elements of the SPFC, but only in a level of detail necessary to orient the reader to the SPFC and reference where more information can be found. For example, a given reach of levee may have many encroachments such as pipes that cross under, through, or over the levee. In addition, a given river reach may have associated bridges, stream gages, drainage facilities, etc. No attempt was made to itemize of all these encroachments and associated facilities in this SPFC Descriptive Document. Because of the volume of this available information, a reference digital versatile disc (DVD) is located in a pocket at the end of this report. The DVD provides more details than can be contained in the following sections.

1.4 State Assurances of Cooperation to the Federal Government

An important distinction of the projects included in the SPFC is that the Board or DWR, as the non-federal sponsor, has given assurances of cooperation to the federal government². At a minimum, the assurances include that the Board or DWR provide without cost to the United States, all lands, easements, and rights-of-way necessary for completion of a project; bear the expense of necessary highway, railroad, and bridge alterations; hold and save the United States free from claims for damages resulting from construction of the works (facilities); and maintain and operate all works (facilities) after they are completed. Depending on when a facility was authorized and constructed, there could be additional assurances of cooperation, including providing replacement, rehabilitation, and repair (see project-specific agreements).

²SPFC facilities also include other features identified in Section 8361 of the CWC.

The unit-specific O&M manual files contained on the reference DVD generally include a letter indicating that the project has been transferred from the federal government to the nonfederal sponsor for O&M responsibilities.

The Board or DWR has not provided assurances of cooperation for all parts of the flood protection system in the Central Valley. This SPFC Descriptive Document does not include details on projects without Board or DWR assurances because those projects are not part of the SPFC (except the overflow areas into the Butte Basin identified in Section 8361 of the CWC). The SPFC Descriptive Document does, however, provide a brief overview of those existing facilities in Sections 2.3 and 2.4 as context that the flood protection system includes more than the SPFC facilities. In cases when local entities have given assurances of cooperation directly to the federal government, the projects are not considered part of the SPFC.

1.5 Local Assurances of Cooperation to the Board

For most units of the flood protection system, the responsibility for O&M has been transferred from the Board to LMAs. Generally, the LMAs gave assurances of cooperation to the Board under which the LMAs are responsible for operating and maintaining, replacing, rehabilitating, and repairing the completed facilities in accordance with the federal requirements described in the O&M manuals and federal regulations.

1.6 Flood Protection System

The SPFC is only a portion of the larger system that provides flood protection for the Central Valley. In addition, the State and federal governments have invested in California flood protection projects outside the Central Valley.

The SPFC relies on many other features that do not technically meet the definition of the SPFC (Section 1.1). For example, non-SPFC reservoirs provide substantial regulation of flows to levels that SPFC facilities can generally accommodate – without these reservoirs, flows could overwhelm SPFC facilities frequently. In addition, other public and private levees, locally operated drainage systems, and other State, federal, and local facilities work in conjunction



Non-SPFC dams such as Shasta Dam provide substantial regulation of flows that affects SPFC facilities

with SPFC facilities. Management practices such as emergency response, floodplain management, and other practices are part of the overall flood protection system. All parts of the system, including the SPFC and other facilities and management practices, depend on other parts of the system to operate as a cohesive unit.

Since this report is structured as a reference document for the SPFC, it does not provide detailed information on non-SPFC features of the system. However, it does provide short descriptions of other non-SPFC flood protection projects in Sections 2.3, 2.4, and 2.5. Additional system descriptions, including the interrelationship among SPFC facilities and non-SPFC facilities, can be found in the Flood Control System Status Report (FCSSR) and the Central Valley Flood Protection Plan (CVFPP).