Meeting of the Central Valley Flood Protection Board January 28, 2011

Staff Report Approval of Resolution 11-02 - Schedule of Mapping Activities for the Central Valley Floodplain Evaluation and Delineation Program

Subject

Consider adopting Resolution 11-02, the updated schedule for mapping areas at risk of flooding in the Sacramento-San Joaquin Valley stream systems as part of the Central Valley Floodplain Evaluation and Delineation Program (CVFED), as prepared by the Department of Water Resources (Department).

Background

California Water Code Section 8612 states the following:

8612(a) On or before December 31, 2008, the department shall prepare, and the Board shall adopt, a schedule for mapping areas at risk of flooding in the Sacramento River and San Joaquin River drainage.

(b) The department shall update the schedule annually and shall present the updated schedule to the Board for adoption on or before December 31 of each year. The update shall include the status of mapping in progress and an estimated time of completion. The schedule shall be based on the present and expected future risk of flooding and associated consequences.

At the December 19, 2008 meeting of the Central Valley Flood Protection Board (Board) the Department presented a mapping schedule that was adopted by the board as Resolution 08-28. At the January 29, 2010 Board meeting, the Department presented an overview of CVFED (Informal Briefing), and presented the mapping schedule at the following February 26, 2010 Board meeting, where the Board approved the schedule through Resolution 10-06. This mapping effort supports the FloodSAFE California Initiative (FloodSAFE) and is being accomplished through CVFED.

CVFED Mapping Status and Schedule

The principal objectives for the CVFED Program are to assist risk identification and notification for the Central Valley Flood Protection Plan and associated feasibility studies by providing hydrology and hydraulics support, evaluating and delineating potential floodplains to aid land use planning, and providing necessary information to support project design. The CVFED program consists of three major projects (described below), which culminate in the creation of floodplain maps identifying flood risk for all areas protected by the State Plan of Flood Control.

The CVFED Program consists of three (3) interrelated projects:

1. Central Valley Topography Acquisition Project

CVFED Project 1 acquires detailed topographic data to support the development of new hydraulic models. This data consists of Digital Aerial Photograph (DAP) (9,000 square miles), Initial Post-Processed Light Detection And Ranging (LiDAR) (7,800 square miles) and Final Post-Processed LiDAR (5,800 square miles) and bathymetric and field surveys (5,500 cross sections).

Project 1 is currently finalizing post processing of the LiDAR and survey data for the entire study area, with a planned completion date of May 2011. DWR is currently releasing the DAP and Initial Post-Processed LiDAR to local, state and federal agencies, and will make the Final Post-Processed LiDAR and survey data available when complete.

2. Central Valley Hydraulic Evaluation Project

CVFED Project 2 will develop new base hydraulic models (i.e., HEC-RAS and FLO-2D) for use in understanding how flood events can be expected to migrate through the Central Valley (1,800 miles of streams).

The bulk of the CVFED program consists of this development of the hydraulic models, from which the mapping of areas at risk of flooding in the Sacramento-San Joaquin Valley stream systems will be created. Currently underway, Project 2 is anticipated to be completed by March 2012.

3. Central Valley Floodplain Delineation Project

CVFED Project 3 will Delineate floodplains for the 100-, 200-, and 500-year flood events (both location and frequency) supporting the analysis of the existing SPFC and proposed future studies by DWR and others. This is the development of the final mapping for the CVFED Program.

Preliminary scoping activities have begun for Project 3, with the majority of the effort contingent on the modeling efforts from Project 2. Project 3 is anticipated to be completed in December 2012.

The CVFED mapping effort has experienced some schedule delays as a result of several factors including bond and contractor payment issues, mandated furlough schedules, changes in internal Task Order processing requirements, accommodation of parallel program deliverables, some isolated data collection failures, and unanticipated increases in deliverable reviews. The proposed schedules are compatible with products to be delivered by other Department programs.

Staff Recommendation

Staff recommends that the Board approve Resolution 11-02 and adopt the updated CVFED mapping schedule.

CENTRAL VALLEY FLOOD PROTECTION BOARD RESOLUTION NO. 11-02 APPROVAL OF THE SCHEDULE OF MAPPING ACTIVITIES FOR THE CENTRAL VALLEY FLOODPLAIN EVALUATION AND DELINEATION PROGRAM

WHEREAS, Section 8612 of the California Water Code requires the Central Valley Flood Protection Board (Board) to adopt the schedule for mapping areas at risk of flooding in the Sacramento River and San Joaquin River drainage on or before December 31, 2008; and

WHEREAS, the Department of Water Resources (Department) prepared a mapping schedule and the Board adopted it at the December 19, 2008 Board meeting; and

WHEREAS, the Department of Water Resources (Department) prepared a mapping schedule and the Board adopted it at the February 26, 2010 Board meeting; and

WHEREAS, this mapping effort is in support of the FloodSAFE California Initiative (FloodSAFE); and

WHEREAS, this mapping effort is being accomplished through the Central Valley Floodplain Evaluation and Delineation Program (CVFED), a component of FloodSAFE; and

WHEREAS, Proposition 84 and Proposition 1E provide funding and support for this mapping effort; and

WHEREAS, Section 8612 of the California Water Code requires the Department to update the mapping schedule annually and present it to the Board for adoption on or before December 31 of each year; and

WHEREAS, the Department has prepared the updated mapping schedule.

NOW, THEREFORE, BE IT RESOLVED BY THE CENTRAL VALLEY FLOOD PROTECTION BOARD THAT:

1. The Board adopts the following updated CVFED mapping schedule.

a. Topography Acquisition

May 2011

b. Riverine and Floodplain Hydraulic Model Development
c. Floodplain Delineation

March 2012 December 2012

PASSED AND ADOPTED by vote of the Board on _____, 2011.