

### **CVFPB RESOLUTION 2012-20**

### **DEPARTMENT OF WATER RESOURCES**

### Small Erosion Repair Program Five Year Pilot Project

### April 27, 2012

Central Valley Flood Protection Board Meeting - Agenda Item No. 11B



## Small Erosion Repair Program – 1.0



### Consider adoption of Resolution No. 2012-20 to:

- Provide direction to Board staff
- Inform DWR as to the Board's intention to participate in a proposed pilot program as a State partner



# Small Erosion Repair Program - 2.0



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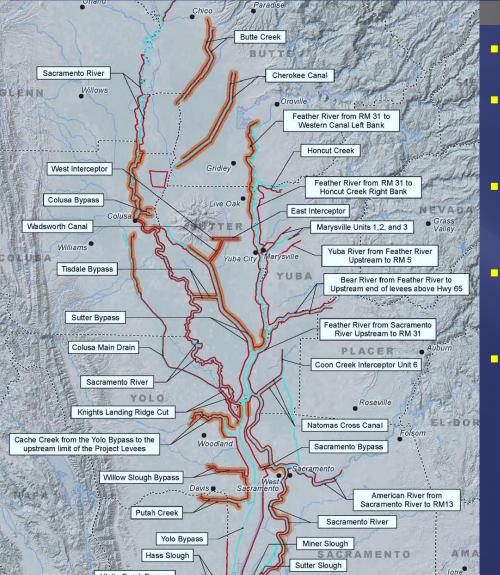
### <u>DWR Proposal:</u>

- 5-year Pilot Program
- Sacramento River Flood Control Project
- A unique collaborative approach to erosion repairs
- Specific operation and maintenance activities
- Within scope of a new program

### Please welcome Jeff Schuette

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# LOCATION - 3.0



- Staff Report Attachment C
- Portions of the leveed channels and bypasses
- within the Sacramento River Flood Control Project (SRFCP)
- maintained by the DWR Maintenance Yards
- Water Code Section 8361

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Code of Federal Regulations, Title 33 (CFR 33), § 208.10 (Levee Maintenance)

The Superintendent shall provide at all times such maintenance as may be required to insure serviceability of the structure in time of flood. Measures shall be taken to promote the growth of sod, exterminate burrowing animals, and to provide for routine mowing of the grass and weeds, removal of wild growth and drift deposits, and repair of damage caused by erosion or other forces. Where practicable, measures shall be taken to retard bank erosion by planting of willows or other suitable growth on areas riverward of the levees.

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U.S. Army Corps of Engineers, Standard Operations and Maintenance Manual for the SRFCP, § 4.02 Maintenance:

- Applicable portions of the Flood Control Regulations, paragraph 208.10(b)(1), pertaining to maintenance are quoted as follows: "(b) Levees (1) Maintenance. The Superintendent shall provide at all times such maintenance as may be required to insure serviceability of the structure at the time of flood. Measures shall be taken to promote the growth of sod, exterminate burrowing animals, and to provide for routine mowing of the grass and weeds, removal of wild growth and drift deposits, and repair of damage caused by erosion or other forces.
- (The sentence about planting of willows is not included in the reference but is instead replaced by "\*\*\*\*".) – USACE Ryan Larson states that the O&M Manual should be the same as CFR33, 208.10



U.S. Army Corps of Engineers, Standard Operations and Maintenance Manual for the SRFCP, § 4.05 Special Instructions:

The Superintendent shall provide for clearing of brush, trees, and other wild growth from the levee crown and slopes. Brush and small trees may be retained on the waterward slope where desirable for the prevention of erosion and wave wash.





California Water Code (CWC)

- § 8708: The Board has given assurances to the USACE that the State will maintain and operate federal flood control works in accordance with federal law.
- § 8361 and § 12878 et.seq.: DWR has responsibilities to maintain and operate on behalf of the State portions of the works of the SRFCP.





California Code of Regulations, Title 23 (CCR 23)

§ 3: Intent. The regulations are also intended to comply with the board's obligations to the U.S. Army Corps of Engineers pursuant to numerous assurance agreements, Corps Operations and Maintenance Manuals, and 33 C.F.R. section 208.10



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### California Code of Regulations, Title 23 (CCR 23)

§ 4: Definitions. "Maintenance activities" means any work required to retain or maintain the intended functions of flood control facilities and of existing encroachments. Maintenance activities include but are not limited to mowing, tree and brush trimming and removal, revetment restoration, rodent control, spraying, painting, coating, patching, burning, and similar works; but does not include any significant excavation or any excavation during flood season. Maintenance activities of public agencies to maintain the designated level of function of flood control facilities within their jurisdiction are authorized and defined by Water Code sections 8361...

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#### California Code of Regulations, Title 23 (CCR 23)

- § 6 (a): Need for a Permit
- Every proposal or plan of work, including the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment or works of any kind, and including the planting, excavation, or removal of vegetation, and any repair or maintenance that involves cutting into the levee, wholly or in part within any area for which there is an adopted plan of flood control, must be approved by the board prior to commencement of work.





California Code of Regulations, Title 23 (CCR 23)

- § 6 (d): Need for a Permit
- Permits are not required for maintenance activities as defined in article 2, section 4 of this title.





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SERP site repairs do not require encroachments permits

- After review of the statutes (in particular CFR 33, § 208.10 and the Standard O&M Manual for the SRFCP)
- Board staff has concluded that the Board's regulations as stated in CCR 23 § 6 (a)
- were not intended to require an encroachment permit to plant vegetation
- that is included as a component of routine maintenance activities

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#### **Geotechnical Designs**

- Board and DWR geotechnical staff have worked to review and resolve issues related to geotechnical aspects of the SERP design templates
- Board staff concerns have been sufficiently addressed to support moving forward as a pilot program partner





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#### Hydraulic Analysis

- Board and DWR staff have resolved concerns about potential hydraulic impacts due to the proposed vegetation plantings
- The SERP manual will include procedures to compare proposed SERP repair sites against a range of pre-determined channel cross-sectional geometry thresholds for hydraulic impacts, and when necessary perform additional site-specific hydraulic analysis for those sites falling outside the thresholds
- Board staff concerns have been sufficiently addressed to support moving forward as a pilot program partner

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#### Long-Term Vegetation Management

- Vegetation will be installed and maintained in a manner consistent with the Vegetation Management Strategy proposed in the 2012 Public Draft Central Valley Flood Protection Plan (CVFPP) and Conservation Framework
- SERP waterside vegetation lost due to subsequent erosion would be replaced at a one to one ratio

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Annual (July) Review of Proposed SERP Repair Sites

- Designs according to SERP Manual?
- Geotechnical designs consistent with templates?
- No adverse hydraulic impacts?
- Long-term vegetation management in place?
- Public notice of proposed (and approved / rejected sites) on Board and DWR web sites
- Annual report to the Board on Chief Engineer's determination (Aug)

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### **CEQA Actions - 6.0**



- DWR Notice of Preparation, November 2009
  - Board staff comments, December 2009 (Need for Permit, Detailed Vegetation Designs)
  - DWR Draft Program Environmental Impact Report (after Manual)
    - Board staff prepares (and report) Responsible Agency comments
- DWR Final PEIR

 Board staff prepares Responsible Agency findings for Board to adopt

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## **STAFF RECOMMENDATION - 7.0**



#### Board adopt Resolution No. 2012-20 to:

- Deem SERP Operations and Maintenance (no Board permitting)
- Direct staff to assist DWR to finalize the SERP Manual
- Direct staff to prepare Responsible Agency comments when DWR
  Draft Program Environmental Impact Report is circulated
- Direct staff to prepare Responsible Agency findings when DWR Final Program Environmental Impact Report is circulated



# STAFF RECOMMENDATION - 7.0



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#### Board adopt Resolution No. 2012-20 to:

- Direct staff to review annual SERP repair proposals, and to determine:
  - whether or not each SERP site has been designed according to the Manual
  - that geotechnical design issues have been considered
  - that there are no adverse hydraulic impacts
  - that long-term vegetation management actions have been addressed
  - and that annual noticing of SERP member agencies and the public is carried out, all in conformance with the SERP Manual.
- Delegate to the Chief Engineer authority to annually execute documents necessary to authorize or reject proposed SERP repair sites

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Direct staff to provide an annual report to the Board







#### Presented by:

Jeff Schuette, DWR Eric Butler, CVFPB

Prepared by:

Eric Butler, CVFPB

Staff Report Reviewed by:

Len Marino, CVFPB Chief Engineer

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