ORESTIMBA CREEK, WEST STANISLAUS COUNTY, CA FLOOD RISK MANAGEMENT PROJECT

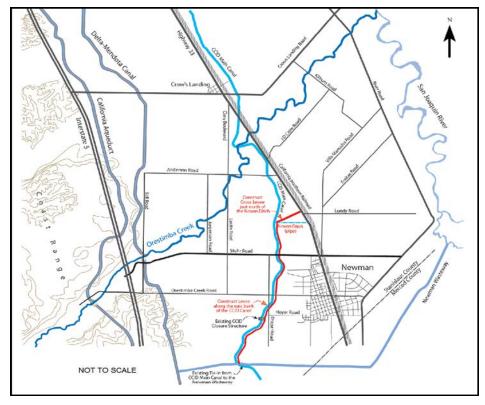
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ABSTRACT: The purpose of the Project is to provide cost effective, environmentally-sensitive, and technically feasible flood risk management for the City of Newman, Stanislaus County, California and the surrounding area. Stanislaus County is the non-Federal sponsor.

The City of Newman and the surrounding agricultural areas have been inundated by flood

flows from Orestimba Creek at least 12 times since records were initiated in 1932. In March 1995, Newman experienced the worst flood in its 125-year history. On March 10, 1995, the USGS gauge on Orestimba Creek at the California Aqueduct (at the upstream end of the study area) registered a peak flow of 12,000 cfs. On the same date, the USGS gauging station Orestimba Creek at River Road (at the downstream end of the study area) registered a peak flow of 2,650 cfs. This shows that significant flood volume was conveyed overland across agricultural fields with a portion of the flow inundating the City of Newman. Structures within the town were flooded by over two feet of sediment-laden water, including a convalescent hospital in which sixty-five residents had to be evacuated by helicopter. Many public streets



and highways, including State Highway 33, were closed. Road closures limited access for emergency vehicles which resulted in diminished local and regional emergency response capabilities. Similar public health risks caused by area flooding included contamination of domestic water wells and inundation of individual septic systems, many of which were rendered unusable. Expected annual damages without a project are \$5,600,000.

The principal feature of the recommended plan is

a partial ring levee, known as a "chevron Levee", situated on the uphill side of the City of Newman to prevent floodwaters from entering the town. The chevron levee is 4.7 miles long and ranges in height from 5.5 to 10 feet tall, depending on the ground elevation. The ASA(CW) has approved a policy exception to allow for the recommendation of the Locally Preferred Plan (LPP), which includes the same features and alignment as the NED plan, but is about 2 feet taller. The additional cost of the LPP will be funded by the non-Federal sponsor. The LPP will allow the local community to meet State of California requirements for flood risk management as well as National Flood Insurance Program accreditation requirements from FEMA.

The City of Newman is home to approximately 10,000 residents and has flooded repeatedly during its 125 year history. The recommended project would reduce the flood risk to the residents of Newman and the surrounding areas.

The estimated total first cost for the LPP, is \$45,333,000 (October 2013 price levels), for which the Federal share is estimated at \$23,681,750 (52%), and the non-Federal share is estimated at \$21,651,250 (48%). Federal cost sharing is capped at 65% of the NED plan as stipulated by the ASA(CW) in the memo approving the LPP policy exception. The non-Federal sponsors are responsible for operation, maintenance, repair, rehabilitation and replacement, at an estimated annual cost of \$180,000. Average annual flood risk reduction benefits are estimated at \$3,200,000. The LPP has an overall benefit-to-cost ratio of 1.4.

REPORT DOCUMENTATION: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington-Level Review Actions, are linked below:

- CWRB Agenda
- Project Summary
- CWRB Briefing Slides
- CWRB Lessons Learned
- CWRB Meeting Record
- State & Agency Review Comment Letters
- Documentation of Review Findings
- Signed Chief of Engineers Report
- Advance Copy to Congressional Committees
- ASA(CW) Memo to OMB
- OMB Response
- ASA(CW) Transmittal to Congress
- Signed Record of Decision
- Authorization

ADDITIONAL INFORMATION:

South Pacific Division

Sacramento District