

SCOPE OF WORK – MCWRA FLOOD REDUCTION BENEFITS ANALYSIS

This scope of work document outlines proposed activities FlowWest will perform on behalf of the Monterey County Water Resources Agency (MCWRA) to advance an assessment of benefits of Nacimiento and San Antonio Dams to Monterey County.

TASK 1: PROJECT MANAGEMENT

FlowWest will continue to support ongoing planning processes by attending meetings with MCWRA.

Task 1.1 General PM

FlowWest will carry out general tasks to manage progress of the project.

Task 1.2 Meeting Attendance

FlowWest will attend regular check-in meetings as needed, on approximately a monthly or bi-weekly basis.

TASK 2: HISTORICAL DOCUMENT AND METHODS REVIEW

FlowWest will review documentation provided by MCWRA, including historic benefits analysis and related sources.

Task 2.1 Review HBA documentation provided by MCWRA

FlowWest will review all previous HBA reports and documentation provided by MCWRA, particularly hydrologic methods. Flow West will research historic gage data to prepare for hydraulic and hydrologic modeling and analysis.

TASK 3: HYDROLOGIC & HYDRAULIC ANALYSIS

FlowWest will take the following steps outlined in Tasks 3.1, 3.2, and 3.3 to develop hydrology for our model based on a pre-dam scenario before Nacimiento and San Antonio Dams were constructed, model the “pre-dam” scenario, and perform a statistical analysis comparing the “pre-dam” scenario with a “post-dam” scenario.

Task 3.1 Identify/develop pre-dam hydrology

FlowWest will identify and develop hydrology for a pre-dam scenario for up to 3 simulations, including 100-year and 10-year events. Flow West will also look at any flows of interest that have historically resulted in levee breaches in Salinas Valley.

Task 3.2 Modeling pre-dam conditions

FlowWest will perform hydraulic modeling for the pre-dam scenarios developed in Task 3.1.

Task 3.3 Statistical analysis of pre- vs. post-dam scenarios

FlowWest will review the analysis performed in the HBA update, and perform a similar statistical assessment using the results from Tasks 3.1 and 3.2. The statistical analyses will determine how much more frequently damaging floods would have occurred if not for construction of the two dams.

Task 3 Deliverables:

- Map outputs of hydraulic model results
- Technical Memorandum summarizing conclusions from pre- and post-dam scenario statistical analysis

TASK 4: BENEFITS ASSESSMENT ANALYSIS

FlowWest will work with MCWRA and any other experts retained in assessing the benefits of the dams. Details of activities under this task are yet to be determined after completion of Tasks 2 and 3, but could include quantification of the secondary benefits of dam implementation, such as benefits to infrastructure and agriculture.

Task 4 Deliverables:

- Technical Memorandum summarizing benefits analysis results

ESTIMATED BUDGET

Budget Summary for the MCWRA Dam Benefit Assessment Project

Task Description		Total Cost
1	Task 1	\$ 5,616
2	Task 2	\$ 10,476
3	Task 3	\$ 32,064
4	Task 4	\$ 10,568
	Direct Costs	\$ 600
	TOTAL	\$ 59,324