



Looking Forward

CHAPTER 5

CHAPTER 5

LOOKING FORWARD

Phase 3 of the Pajaro River Watershed Study defined the Soap Lake Floodplain Preservation Project alternatives. Phase 4 of the Study will include the following four tasks that contribute to or support flood protection for the Pajaro River Watershed:

- Develop the Soap Lake Floodplain Preservation Project Implementation Plan
- Create three Sediment Models
- Improve Flood Forecasting Capabilities
- Perform a Fisheries Study of San Felipe Lake

Soap Lake Floodplain Preservation Project Implementation Plan

The implementation plan for the Soap Lake Floodplain Preservation Project will define a recommended land acquisition strategy and will include the following elements:

- Land acquisition strategy: Identify purchase priority for parcels within the floodplain and which acquisition method is better suited for an area or condition.
- Refined cost estimate: Estimate land values for purchase and conservation easements.
- Standard conservation easement provisions: Develop standard flood easement provisions as a guide for future acquisitions.
- Land acquisition and management program administration recommendation: Develop a recommended strategy identifying what agency or organization could implement the program and if there will be lead roles and secondary roles.
- Agricultural mitigation bank guidelines: Develop guidelines for an agricultural mitigation banking program.
- Funding opportunities: Identify local, state and federal funding opportunities for the Soap Lake Floodplain Preservation Project.
- Recommendations for each county and water district: Develop list of recommendations for each member agency regarding the implementation of the Project.

Sediment Modeling

Three models will be created to better understand sediment transport and deposition in the Pajaro and San Benito Rivers.

- Sediment trap in the Pajaro River: Determine how feasible it would be to remove sediment from the river upstream of Watsonville.
- Two-dimensional model of benches in the Pajaro River: Determine the amount of deposition on the benches of the Lower Pajaro River.
- Sediment transport model for the San Benito River: Create a model that can be used to describe how sediment moves down the San Benito River.

Flood forecasting

There are four important aspects of flood forecasting that will be included in Phase 4.

- Rating Curve of Flow Gage of San Benito River at Highway 156: Evaluate current condition of the gage and provide recommendations as appropriate.
- Automated Local Evaluation in Real Time Gages: Evaluate existing ALERT stations and make recommendations for additional stations if necessary.
- Streamflow Time of Travel: Create time of travel curves for the Upper Pajaro River watershed.
- Pacheco Creek Streamflow Gage: Evaluate condition of the existing streamflow gage and make recommendations for rehabilitation, if necessary.

Fisheries Study of San Felipe Lake

A preliminary fisheries study of San Felipe Lake is necessary to document existing habitat conditions and species. This will help to provide some background information for future studies. Information that will be collected includes:

- Occurance of existing fish species, including size and class distribution.
- Limnological data appropriate to assess the status and quality of the lake's aquatic habitat.
- Temperature measurement at San Felipe Lake inlet and outlet.