PROPOSED AFRP GRANT FY2000
Real-Time Flow Monitoring For Butte Creek/Sanborn Slough Bifurcation

Scope of Project

Project Location: Butte Creek and Sanborn Slough

Objective: Provide real-time flow and water quality data to monitor stream conditions during the upstream migration of spring-run chinook salmon and the downstream migration of juvenile spring-run and late fall-run chinook salmon and steelhead at the Butte Creek/Sanborn Slough bifurcation. The monitoring system will also be used to verify surface water exchanges and the adjudicated division of flow at the bifurcation.

Background: The regulatory structure located at the Butte Creek/Sanborn Slough bifurcation structure is currently being replaced with a new structure and fish ladder. A recent court action has ordered a specific division of the flow to each watercourse. Due to backwater affects from downstream diversion structures and the need for high accuracy, conventional stream gaging methods are inadequate to monitor the flow either above or below the bifurcation structure.

Work to be Performed and Deliverables

Proposed Grant FY2000 C-10 would provide funding to purchase, install, and calibrate either acoustic or Doppler velocity measuring devices to accurately measure the flow to both Butte Creek and Sanborn Slough below the new bifurcation structure and fish ladder. Real-time flow and water temperature data would be telemetered to CDEC. Upon completion of these installations, the Butte Creek near Gridley station funded by AFRP Grant FY1997 C-1 would be eliminated.

Funding

Total cost of this proposal would be about $100,000. Reclamation District 1004 would provide $70,000 of this cost. The remaining cost of $30,000 is proposed to be funded by ARFP.

Proposal Coordinators

John P. Clements, DWR, 530-529-7369; and Paul Ward, DFG, 530-527-8987