

## Interagency Ecological Program

The Interagency Ecological Program (IEP) is a collaboration of the three state and six federal agencies that have resource protection or water delivery responsibilities in the Delta to conduct monitoring and research in the San Francisco Estuary and Sacramento-San Joaquin Delta. The IEP was originally charged with quantifying the impacts of the State Water Project (SWP) and Central Valley Project (CVP) on the natural resources of the Bay-Delta estuary and developing methods to minimize the loss of fish by these operations. The state and federal water projects are regulated through water rights permits, and state and federal endangered species incidental take permits and biological opinions (BO) that mandate monitoring. By employing the IEP, the agencies are able to maximize the available funding, staff, laboratories, boats and other resources while eliminating duplication of effort when collecting the information needed to comply with their permits. The IEP collaborates and contracts with various academic partners to conduct research necessary to interpret the monitoring information. In 2005, when the decline in four species of fish was realized, the IEP moved quickly to form and fund the Pelagic Organism Decline team to investigate, identify and evaluate the potential causes.

The IEP has amassed and continues to add to one of the best long-term data sets for an estuary in the world. Nearly every environmental impact report, other environmental permit or report on San Francisco Bay, San Pablo Bay and the Delta uses IEP data and findings. The IEP has moved from focusing on water project impacts on native fishes to a more ecosystem-based approach that includes the effects of contaminants and introduced species. The IEP can change in response to evolving information needs and has supported much of the research and model development in the Delta. It also has developed a system that allows for data to be made available to the SWP and CVP on a next-day basis, thus allowing for greater flexibility in meeting water demand and protecting sensitive species.

In 2010, IEP scientists will have more than 20 peer-reviewed manuscripts accepted for publication in scientific journals and are undertaking a large-scale analysis of existing data coordinated by the University of California, Santa Barbara's Bren School of Environmental Science and Management.

DFG scientists make up a large portion of the IEP and play a major role in leading IEP planning, data collection, management and analysis. DFG is working with its partners to adapt IEP as the most effective means for collecting data and information needed to support science-based creation and implementation of the Bay Delta Conservation Plan, BOs, and State Water Resource Control Board flow and water quality mandates. IEP data will also help form the scientific basis for determining if the co-equal goals for ecosystem restoration and water supply reliability mandated in the Delta Reform Act of 2009 are being achieved through implementation of the Comprehensive Delta Plan by the Delta Stewardship Council.