



Aquatic Habitat Conservation and Management

Water Quality Investigations in the Klamath River Basin

Background:

- The mainstem Klamath River and several significant tributaries are listed under Section 303(d) of the Clean Water Act (CWA) as impaired for nutrients, dissolved oxygen, and temperature.
- Naturally high contributions of phosphorus from the volcanic geology of the upper basin combined with point and non-point sources of nutrients result in eutrophic conditions in the mainstem Klamath River
- Poor water quality of the Klamath River is considered a significant factor limiting fishery restoration efforts.
- This collaborative study is critical in understanding possible associations between water quality and water quantity, fish habitat availability, and fish health.



Study Design:

- Annual coordination with Federal, State, and Tribal agencies.
- Study guidance and priority setting is provided by the Klamath River Flow Study Technical Advisory Group.
- Partners collaborate to share resources and prioritize and organize field studies.
- The Service administers funds and provides oversight and coordination of water quality investigations.
- Studies provide critical data necessary to identify factors contributing to the decline of Klamath River fish populations and support of Clean Water Act mandates and hydroelectric relicensing.

Accomplishments:

- Assessment of nutrient loading in the Klamath River from point and non-point sources.
- Assessment of water temperature, dissolved oxygen, pH, and specific conductivity throughout the Klamath River Basin, with a focus below Iron Gate Dam.
- Data are maintained in a relational database and made available to interested parties on the AFWO website.
- Contracted experts review water quality data and assessments prior to releasing to the public.



Status:

- Six years of water quality data are being processed in collaboration with contractors and collaborating agencies. This report(s) will be available by September 2007.
- A contract is established with the Karuk Tribe of California in support of maintaining sondes (continuous multiprobe instruments) at three locations of the Klamath River below Iron Gate Dam.
- Funding to support this program has largely come from the Klamath River Fish Habitat Restoration Program. The program also relies heavily on in-kind contributions of resources and staff time from Tribal and State partners.