



## Terrestrial and Aquatic Invertebrate Sampling April 13, 2012

The San Joaquin River Restoration Program (SJRRP) is conducting monitoring activities to better understand the potential of existing habitat to support fish in the San Joaquin River. Food availability is one key aspect of fish habitat and density of invertebrates would be used as a measurable indicator of this productivity. In addition to better understanding the existing system, this monitoring data would serve to improve calibration of a model estimating fish habitat needs by basing productivity assumptions on measured conditions.

**Who:** Reclamation's Technical Service Center (TSC)

**What:** The TSC is planning to do aquatic and terrestrial biological sampling to improve understanding of habitat productivity. Sampling both aquatic and terrestrial invertebrates will allow for estimation of in-channel food productivity as well as the potential benefits of floodplain inundation.

To monitor aquatic invertebrates, a very specific type of net is used, called a slack sampler, with a very small mesh (500  $\mu\text{m}$  mesh size) inside a sampling square placed in the river to collect aquatic benthic invertebrates. This modified net allows for sampling in a variety of habitats. A plankton tow net with a Dolphin™ bucket will be used to sample zooplankton. A mechanical flow meter will be installed in the net to allow for estimates of invertebrate density.

Surveying of terrestrial invertebrates will take place using a heavy duty sweep net with the net bag made of sailcloth. Sweep netting requires the surveyor to sweep backwards and forwards across a predetermined area to collect samples of terrestrial invertebrates. Attempts will be made to relate invertebrate biomass/abundance to the area.

**When:** April 23-26, 2012

**Where:** The sampling will be conducted at 8 locations on the San Joaquin River throughout the restoration area, selected from vegetation transect sites established in 2011. All access needed on private lands will be coordinated with the landowners.

Questions about this activity should be directed to the study's agency point-of-contact using the information provided below.

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Questions about the SJRRP's field activities on public and private land should be directed to the SJRRP

Landowner Coordinator or the Outreach Coordinator using the information provided below.

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**Contact the SJRRP Hotline, 916-978-4398, or email [InterimFlows@restoresjr.net](mailto:InterimFlows@restoresjr.net) if you see any problems or have any concerns.**

**For more information, please visit the SJRRP Web site at [www.restoresjr.net](http://www.restoresjr.net).**

**Information on other field activities is available at  
[www.restoresjr.net/activities/field/index.html](http://www.restoresjr.net/activities/field/index.html)**