Rotary Screw Trap Monitoring

The primary purpose of this second year study is to evaluate the feasibility of using rotary screw traps (RST) for juvenile Chinook monitoring efforts by 1) assessing the suitability of RST locations, 2) optimizing RST efficiencies, and 3) establishing a long term study plan for RST operation (collecting data on size, general condition, outmigration timing, and abundance estimates of naturally produced juvenile Chinook Salmon). Activities for this study began in December 2013, with the deployment of the SR-99 RST (N 36°50'37.52", W 119°55'56.54") and the San Mateo Rd. RST (N 36°46'55.80", W 120°18'47.07") on the 17th and 18th, respectively. To date, the RSTs have fished 40 out of 45 days (89%). Fish species trapped thus far include: Black Bass (*Micropterus sp*.), Bluegill (*Lepomis macrochirus*), Chinook Salmon (*Oncorhynchus tshawytscha*), Common Carp (*Cyprinus carpio*), Crappie (*Pomoxis sp*.), Green Sunfish (*Lepomis cyanellus*), Western Mosquitofish (*Gambusia affinis*), Redear Sunfish (*Lepomis microlophus*), Sculpin (*Cottus sp*.), Sacramento Pikeminnow (*Ptychocheilus grandis*), and Threadfin Shad (*Dorosoma petenense*). A total of 155 juvenile Chinook Salmon (adipose present) have been trapped at the SR-99 RST location. No Chinook Salmon have been trapped at the San Mateo RST site. Planning is currently underway for RST efficiency testing, with approximately 100,000 juveniles available for release once fish obtain a suitable size for coded wire tagging.