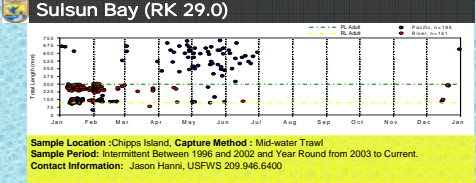
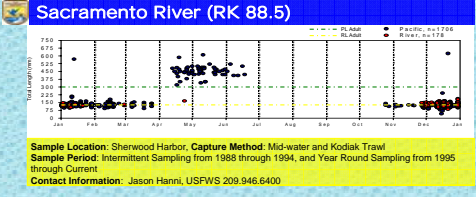
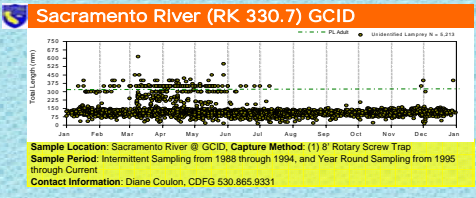
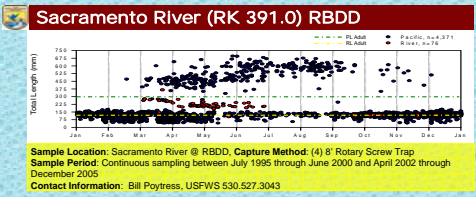
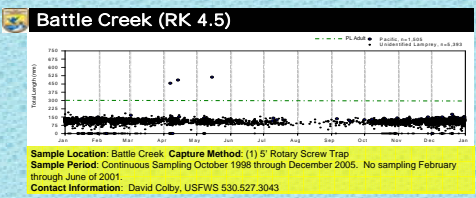
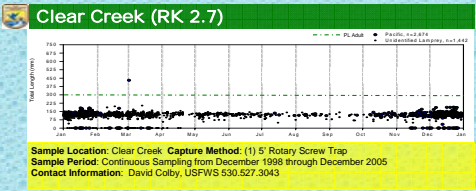


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Introduction / Methods

Relatively little information is published concerning basic life history attributes of Pacific (*Lampetra tridentata*) and river (*L. ayraei*) lamprey found in the Sacramento and San Joaquin Rivers and Delta region of California. A variety of government agencies have long-term fish assemblage data from juvenile salmonid monitoring programs, including incidental capture data for Lamprey species. These data may provide valuable insight into the spatial and temporal distribution patterns of juvenile and adult Pacific (PL) and river (RL) lamprey. In a collaborative effort, these data were examined to determine if the migration patterns of the two species were similar to that reported in literature for more northerly drainages. Data were compiled from multiple stations within the Sacramento River and San Joaquin River drainages. Specific locations, sampling strategies, and contact information for data compiled for this poster are listed with each graph.

Results

Pacific Lamprey

River Lamprey

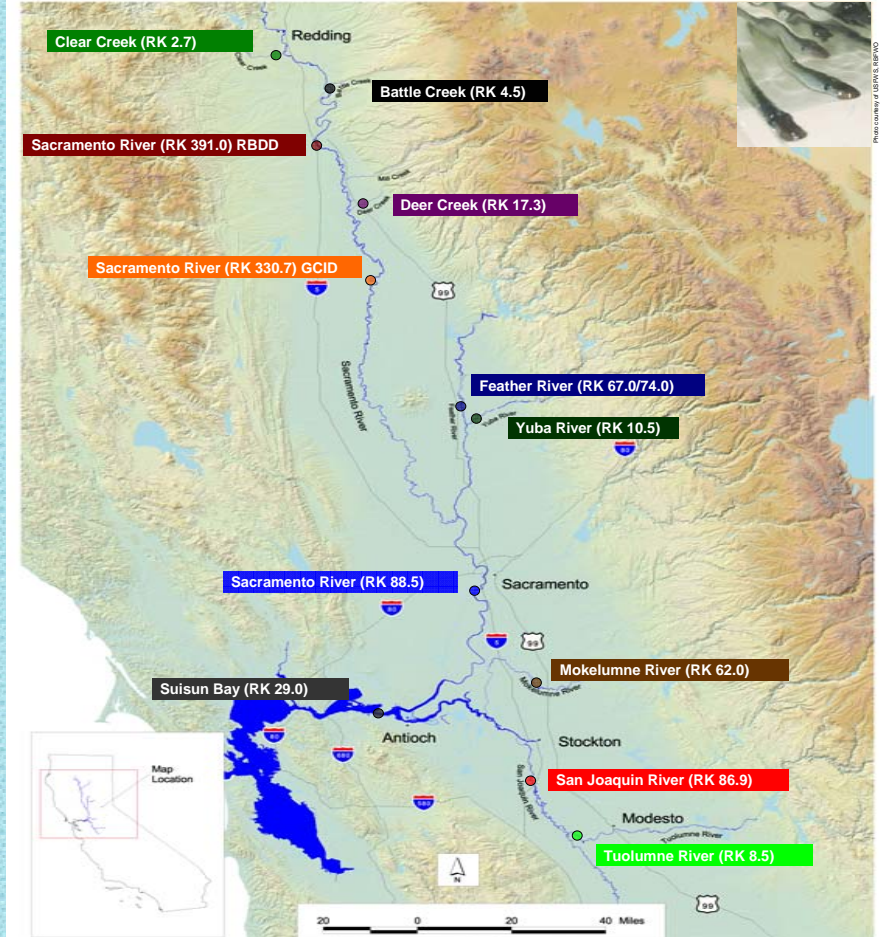
The majority of the adult (>300mm total length) PL in Suisun Bay were captured between April and July. Sacramento River Drainage – Adult PL migrate past several points within the Sacramento River during the same time period, however, they are detected at Glenn-Colusa Irrigation District (GCID) from December through July and are seen nearby all year at Red Bluff Diversion Dam (RBDD). Adults have been detected in the Feather River from April to May and in the Yuba River from January to July. San Joaquin River Drainage – Adult PL have been documented from March through October on the mainstem of the San Joaquin River and within the Mokelumne River. Few data are available for adult PL on the Tuolumne, but the species has been documented from February – June.

River lamprey data are sparse. The majority of adult RL have been detected in Suisun Bay between January through March. Sacramento River Drainage – RL have only been positively documented at two sample locations on the mainstem Sacramento River, the Lower Sacramento River (RK 88.5) from December through January and at RBDD (RK 391) from March through June. Within the Feather River, RL have been detected from November through May. San Joaquin River Drainage – Few RL have been reported from the San Joaquin River at Mossdale, which were detected from January through April.

Discussion / Recommendations

Pacific and river lamprey migration patterns are similar to patterns reported for these species from drainages in Washington and Oregon (Moyle 2002). The patterns reported here should be viewed with caution as the data aren't standardized for effort and cover many different years and time periods. Also, several gear types were used, none of which were targeted toward capturing lamprey. Lamprey-specific research and further evaluation of existing data, are needed to determine the current status and trends for these two species. Additionally, a better method for field identification of ammocoetes and juvenile lamprey is needed to improve data quality and increase our knowledge of species status. For example, ammocoetes have been detected in all months sampled using rotary screw traps, though ammocoetes are limited in samples collected while trawling.

Acknowledgements: Thank you to all data collectors and contributors including all Juvenile Monitoring Project Work Team members.



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