

# Adult Chinook Salmon Trap and Haul Study















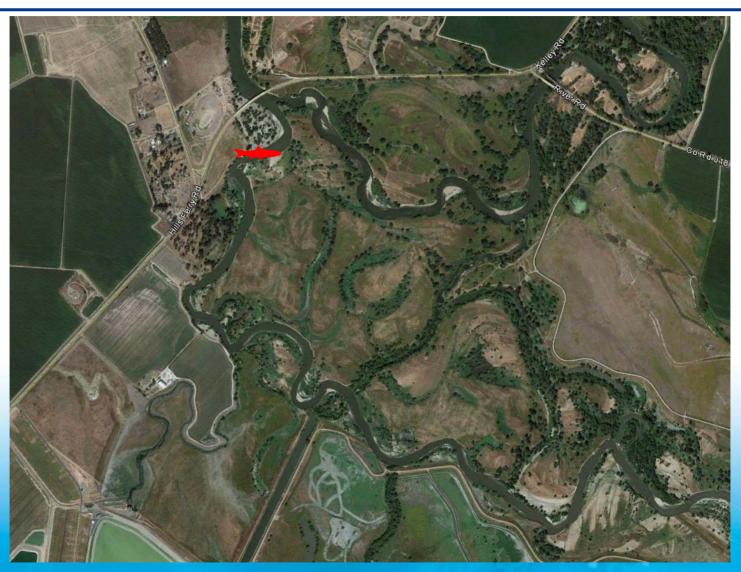
**Donald E. Portz** 

Bureau of Reclamation
Fisheries & Wildlife Resources Group

**Matt Bigelow** 

California Department of Fish & Wildlife
San Joaquin River Restoration





San Joaquin River upstream of the Hills Ferry Barrier



Fyke Net above Hills Ferry Barrier on the San Joaquin River.





Reclamation biologists prepare to transfer salmon to the transport tank.





San Joaquin River / Bear Creek





Fyke trapping on the San Joaquin River / Bear Creek at the uppermost wetted location in Reach 5.





Salt Slough at Wolfsen Road Bridge on the State Wildlife Area





Fyke trap with wing walls spanning Salt Slough

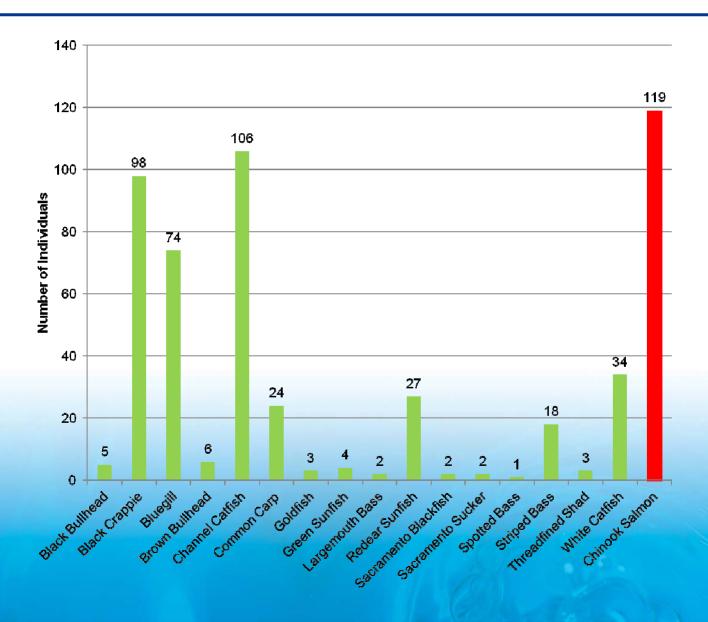




Mud Slough on North Grasslands State Wildlife Area



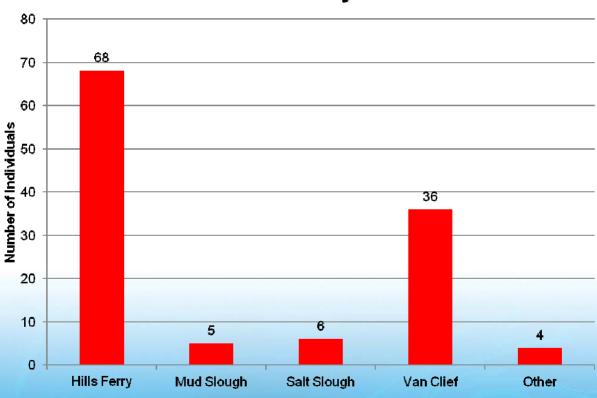
### Fish Captured in Fyke Traps





### Adult Chinook Salmon Captured

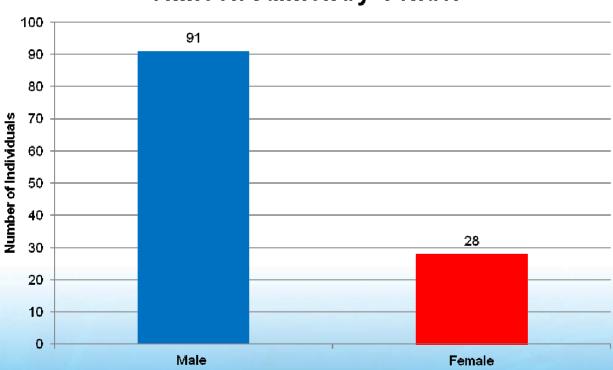
#### **Chinook Salmon by Location**





### Adult Chinook Salmon Gender Ratio

#### **Chinook Salmon by Gender**





### Adult Chinook Salmon Transport











### Adult Chinook Salmon







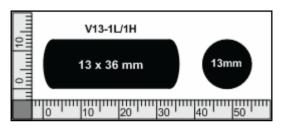




### Floy and Acoustic Tagging

#### **Esophageal Insertion of Acoustic**





**V13 Transmitter** 









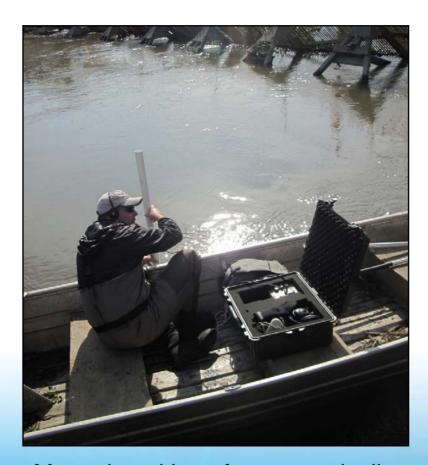


### Fish Release at Camp Pashayan





### **Acoustic Telemetry**



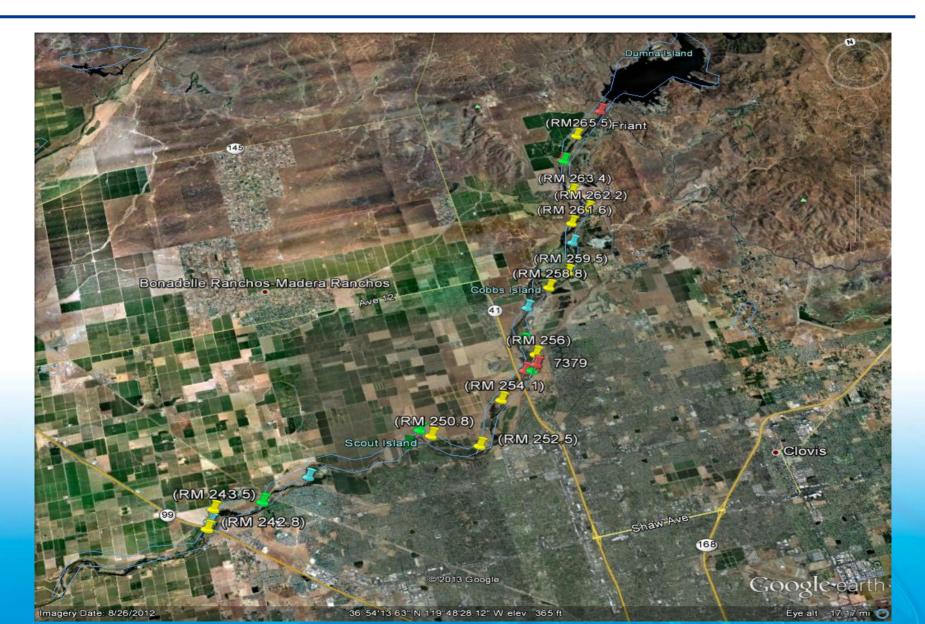
Manual tracking of an acousticallytagged Chinook salmon using a VR100 receiver with a VH110 ultrasonic directional hydrophone.



VR2W Single Channel Receiver (Photo courtesy of Vemco)

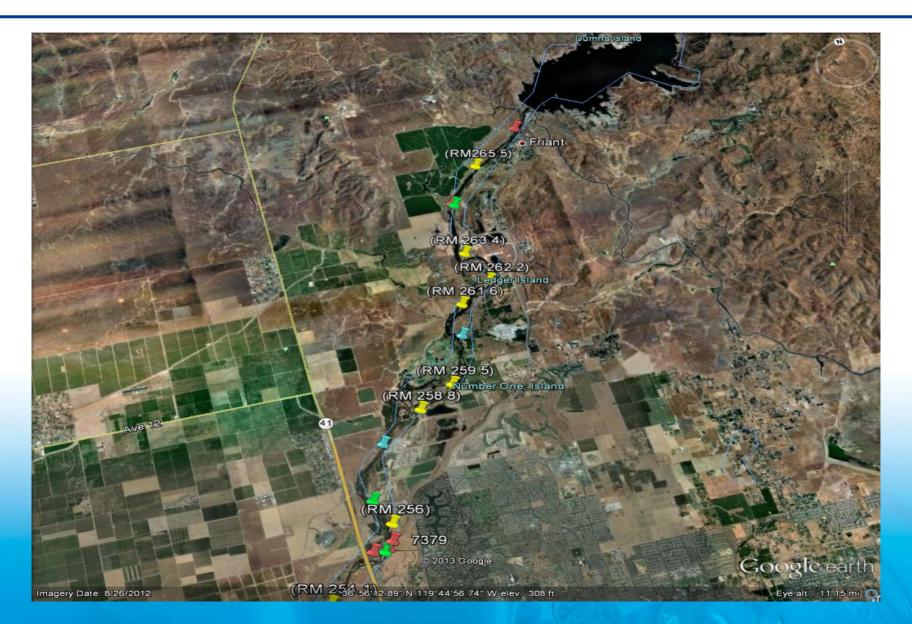


# **Telemetry Locations**



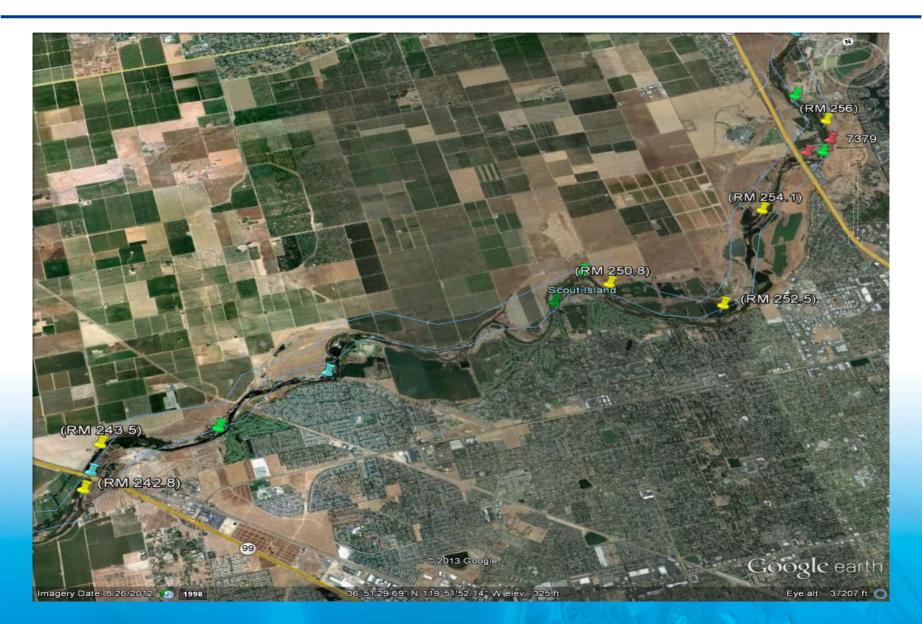


# Survey Reach 1



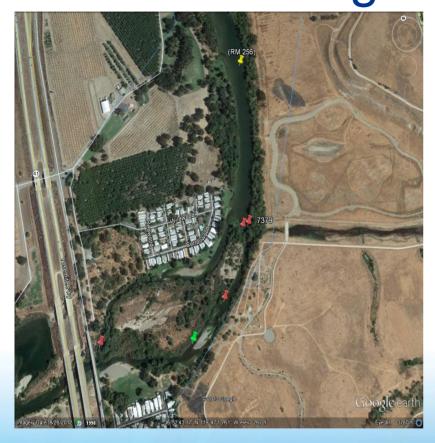


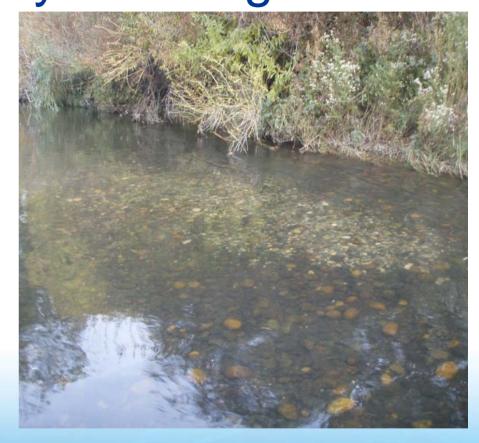
# Survey Reach 2





# Zoomed view of activity around Highway 41 Bridge

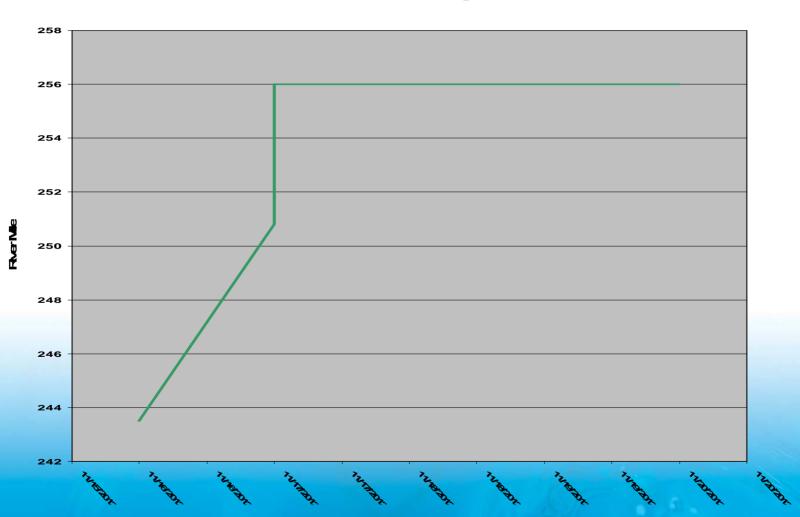




Picture of redd created by female Chinook 7379

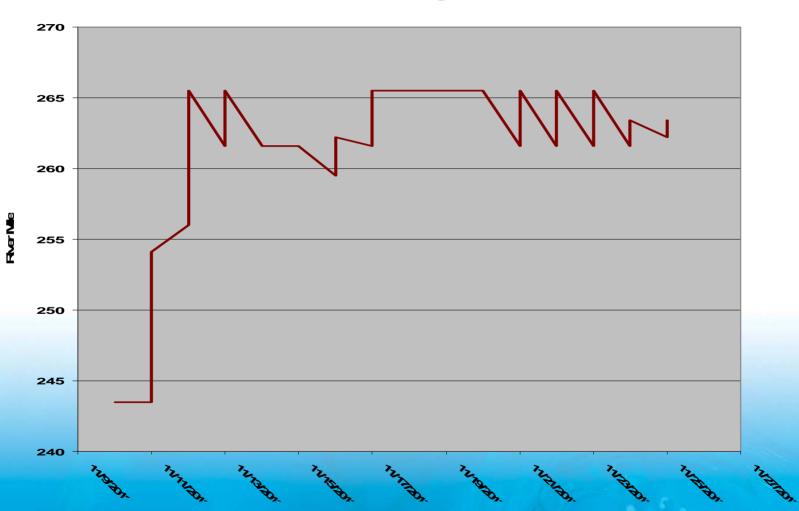
### Movement of Female 7379

#### Movement of Fall-run Chinook Salmon Tag A69-1601-7379 Over Time



### Movement of Male 3112

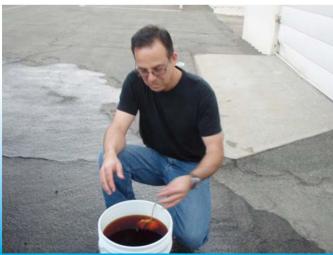
Movement of Fall-Run Chniook Salmon Tag Number A69-1601-3112 Over Time





# Streamside Spawning





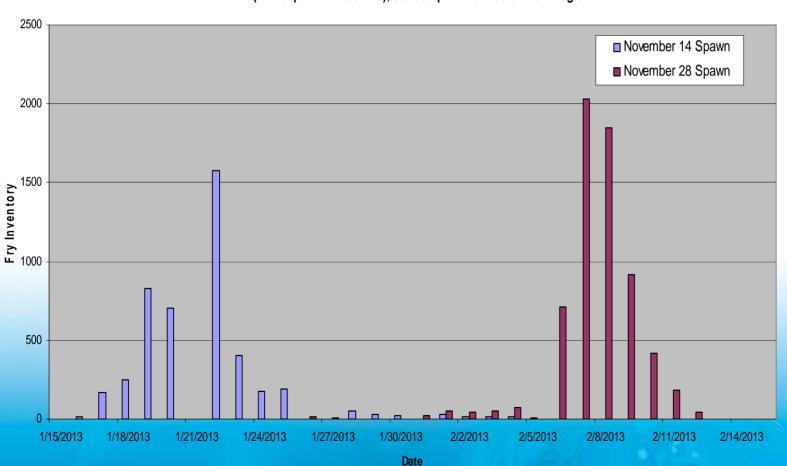






# Spawn Emergence Data

Fall-run Chinook Swim-up Emergance Fry Inventory From Two Aritificial Redds (i.e. Deep Matrix Incubars); San Joaquin River Restoration Program





# Cage rearing











## The End

Any Questions???