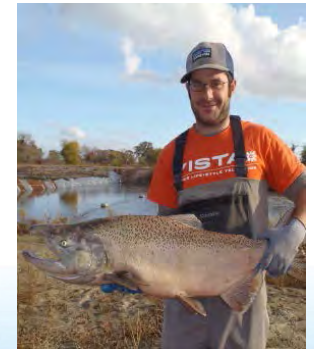


San Joaquin River Chinook Salmon Trap and Haul



Donald E. Portz
Bureau of Reclamation
Fisheries & Wildlife Resources Group

Adult Chinook Salmon Trapping




Adult Chinook Salmon Trapping Locations

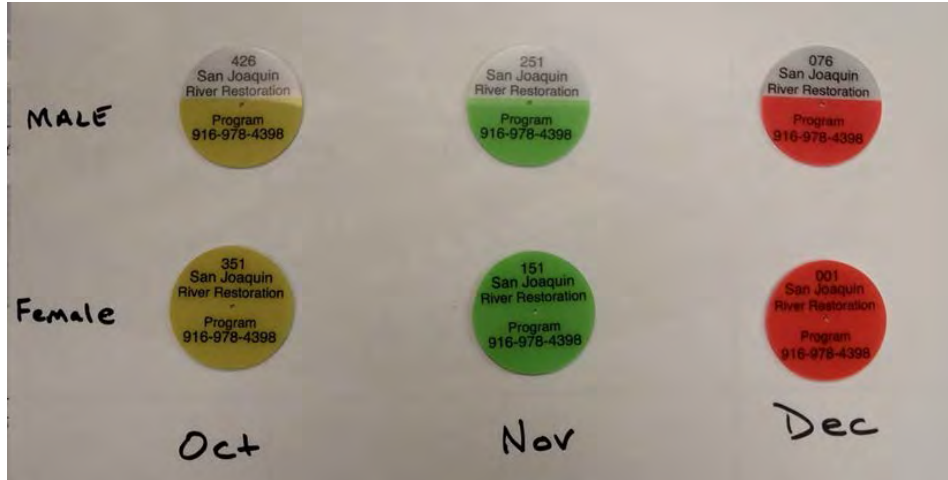
Fyke Trap Locations

-  **Upstream of Hills Ferry Barrier**
-  **1/2 mile upstream of Hills Ferry Barrier**
-  **Mud Slough (North Grasslands State Wildlife Area)**
-  **Salt Slough at Wolfsen Road**
-  **San Joaquin River (confluence with Bear Creek)**

Dip Netting Locations

-  **California Department of Fish and Wildlife captured salmon in irrigation canals near Los Banos, CA:
Delta, Midway, Hereford, Deepwell, and Britto Roads, and Cozzi Ave.**

Adult Chinook Tagging



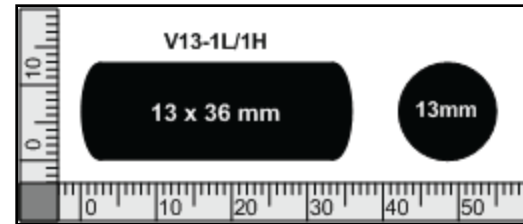
Peterson disc tags used for identification of salmon by gender and month of capture

Salmon displaying Peterson disc tag



Adult Chinook Acoustic Transmitters

Esophageal Insertion of Acoustic Transmitter

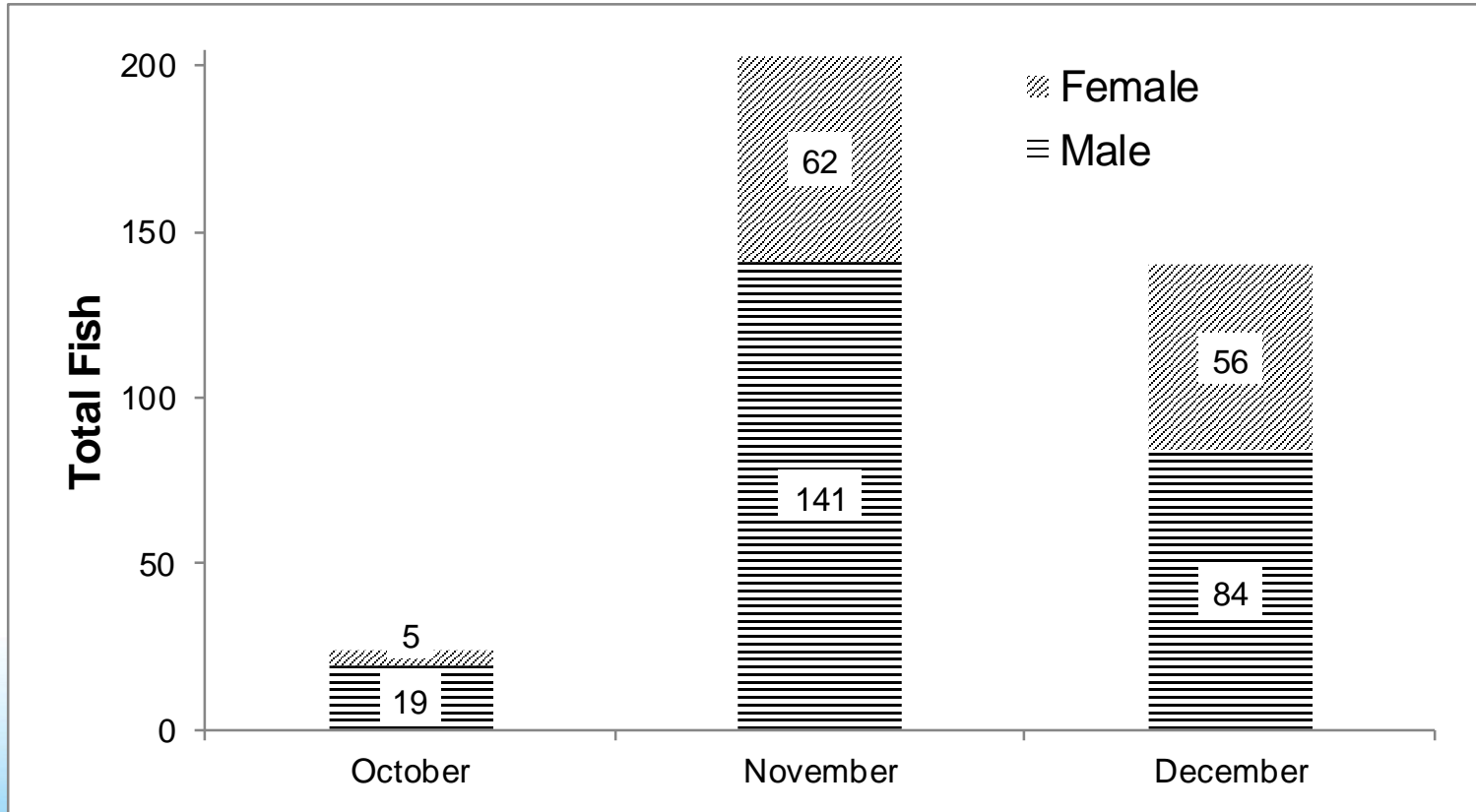


V13 Transmitter



Acoustic transmitter inserted via a modified bovine piller with glycerin lubrication

Adult Chinook Salmon Captured

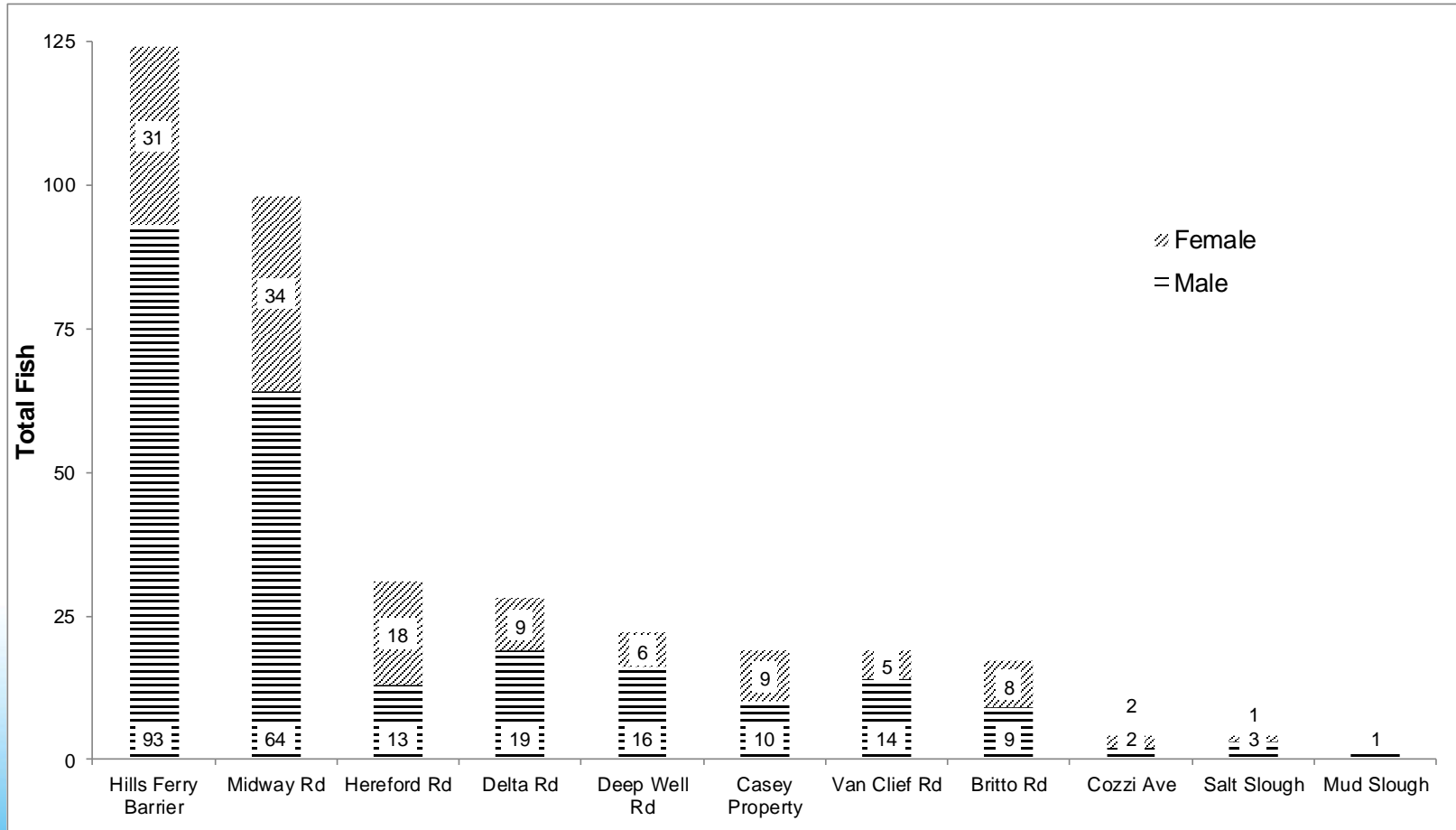


 367 Chinook salmon were captured, tagged, and released between October 1 and December 15, 2013

 123 (33.5%) were female and 244 (66.5%) were male

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Adult Chinook Salmon Captured



Majority of fish were captured at the fyke net above Hills Ferry Barrier (33.8%) and with dip nets at the irrigation canal located near Midway Rd. (26.7%).

Remaining 39.5% of fish were caught among the other 9 locations.

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Acoustic Telemetry



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



VR2W Single Channel Receiver
(Photo courtesy of Vemco)

Telemetry Locations





Chinook Salmon Redd Monitoring



➤ 67 redds upstream of Hwy 99

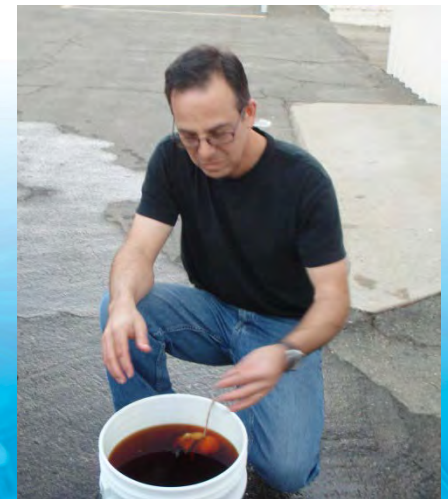
➤ 5 redds downstream of Hwy 99

Streamside Spawning

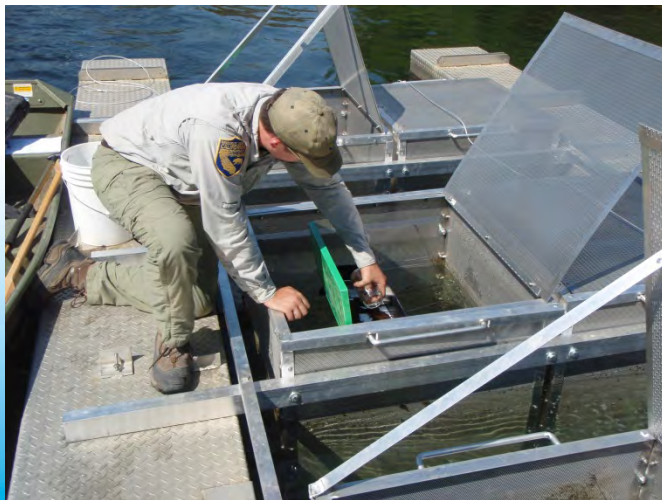
12 Spawns:

11 females from Trap & Haul

1 male & conservation facility female



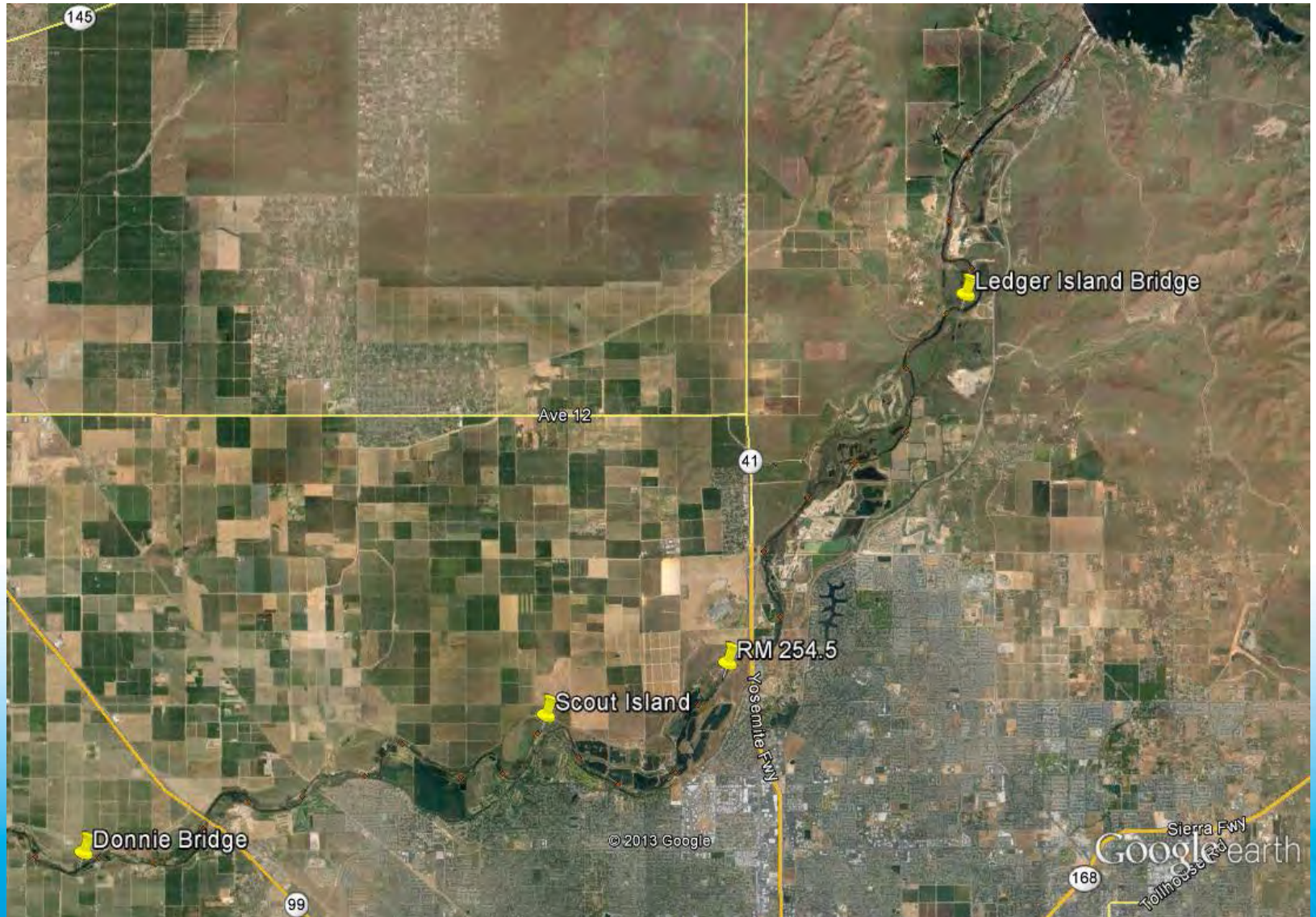
Juvenile Chinook Cage rearing



Wild Caught Juvenile Chinook



Juvenile Salmon Trap & Haul Locations



Juvenile Salmon Collection



Rotary Screw Trap at Ledger Island

Juvenile Salmon Collection



Fish Collection Weir near Highway 41
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Juvenile Salmon Collection



Fish Collection Weir at Scout Island

Juvenile Salmon Collection



Weir collection box



Chinook Salmon Capture Data



823 juvenile Chinook caught in Reach 1

723 juvenile released in Reach 5

as of 3/19/14

Difference in values:

- Fish captured dead
- Fish impinged or killed from high debris loads
- Transport deaths (13)
- Net Pen deaths (2)
- Sacrificed for Genetic & Stomach content analyses

Juvenile Salmon Release



Release Site near San Joaquin River with Merced River

