



## Wildlife Survey & Photo Service

2443 Fair Oaks Blvd. # 209 • Sacramento, CA 95825 • (916) 747-8537

## REPORT 4554

### Solano Project Update

**September 3, 2013**

**To:** Rich Marovich, Putah Creek Streamkeeper  
Chris Lee, SCWA

**From:** Ken W. Davis  
Aquatic biologist  
Wildlife Survey & Photo Service

**Regarding:** Report - General Update

#### Significant Points:

1. Few juvenile Chinook Salmon at Pickerel. Large numbers not seen since May 2013.
2. "Possible" salmon at Kilkenny but have not captured close-up footage to confirm identification.
3. Small trout (young of the year) at Kilkenny. At least three different generations at Kilkenny Upper Weir



Chinook Salmon at Pickerel Weir (July 2013)

#### Chinook Salmon in Lower Putah Creek

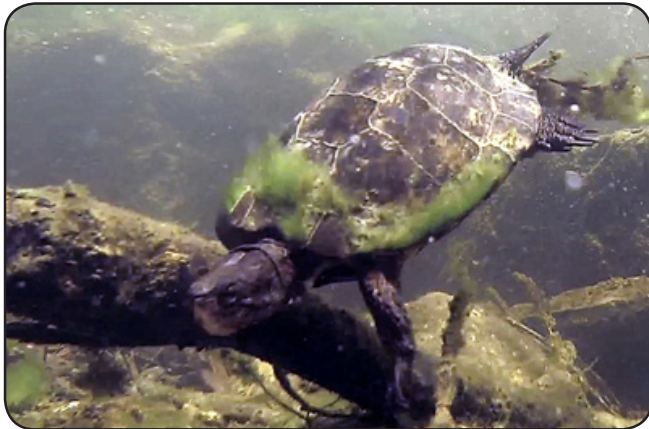
There appears to be a few salmon remaining at the Pickerel Weir (Research Weir #1). I did not get quality close up video of the salmon in August. It appears that there "might" be juvenile salmon at the Kilkenny Weir. The video from Kilkenny shows fish that appear to be young salmon, but I would prefer to capture quality images for confirmation by Peter Moyle.



Kilkenny Weir (Upper)

#### Kilkenny Weir

The Kilkenny Weir has at least ten trout represented by at least three different generations. See images on Page 2 and 3.



Western Pond Turtle filmed at Kilkenny Weir

#### Fish Video Project

The Putah Creek Fish Video Project is also documenting other creek denizens such as the Western Pond Turtles and River Otters.



Rainbow Trout at Kilkenny Weir

#### Rainbow Trout at Kilkenny Weir

There is a significant population of Rainbow Trout using the Kilkenny Weir. There are at least two the size of the fish shown on the left. I suspect they are spawning at the Kilkenny or Hasbook Weir. Conditions permitting, I will attempt to document via video if trout are spawning at either site.



Three Rainbow Trout at Kilkenny Weir

#### Rainbow Trout at Kilkenny Weir

Image on left shows the large rainbow trout in image above and two of the “middle” size of trout that are using the site.



Fish at Kilkenny Weir

QUESTIONABLE: Chinook Salmon at Kilkenny Weir?

There are several clips in the latest video taken at the Kilkenny Weir that show fish that are possibly Chinook salmon. I would prefer to get close up quality images to document that occurrence. The image on the left shows the large rainbow and a smaller fish that is significantly different in shape and color than the resident rainbow trout.



Lake Berryessa: Capell Launch Ramp

Lake Berryessa: Mussel Surveys & Watercraft Inspection:  
All mussel surveys in the Solano Project have been negative.



Capell Launch Ramp - Subsurface Image

Subsurface Mussel Surveys in Solano Project

Sites at "High Risk" for mussel infestations are now inspected using subsurface video. The technique is inexpensive, quick, and effective.



Watercraft Inspection Images at USBR Berryessa

Lake Berryessa: Watercraft Inspection Billboard Image

Assisted the USBR in developing images to be used for a mobile billboard advising boaters to Inspect, Clean and Dry their watercraft.





Barnacles (Tomaes Bay Marina)

Watercraft Inspection:

An effort in concert with a California Department of Fish & Wildlife to get images of other organisms that watercraft inspectors might find on boats entering Lake Berryessa. The effort is an attempt to avoid “false positive” identifications. The barnacles shown on the left are known to occur on boats slipped in San Francisco Bay and other estuarine marinas.



Side Channel: Pickerel Work Area

Mudsnail / Invertebrate Surveys

Recent survey (report pending) in the Pickerel Work Area, shows a dramatic increase in the invertebrate population since the construction of the Pickerel Weir (August 2009), main channel improvements, and enhancement of the side channels.



New Zealand Mudsnails

New Zealand Mudsnails

Mudsnails apparently do not survive well in areas with high sediment (cementation), faster current (weirs), and narrowed channels. A recent survey at the Pickerel area (in preparation) is significant when compared to surveys in former years.



8/30/13: Rick Fowler at Morales Work Area (NAWCA). We placed “photo posts” to allow the site to be used for comparative images. Since the image was taken, Rick has removed the invasive species on the right side (Morales) of the image. The *Arundo* on the left side (north) is not scheduled to be removed.

**RECOMMENDATIONS:**

1. Complete recent NZMS / Invertebrate Survey Report
2. Add mussel colonizers to Putah South Canal as planned, especially because SID is not going to clean the first section of the canal in 2013.
3. Videomonitor all weirs for presence of salmon, trout, and other fish
4. Concentrate videomonitor efforts on weirs and River Parkway section

Submitted 9/3/13 via e-mail:

Ken W. Davis  
Aquatic biologist / Wildlife Photojournalist  
Wildlife Survey & Photo Service  
2443 Fair Oaks Blvd., No 209  
Sacramento, CA 95825  
(916) 747-8537  
ken@creekman.com  
www.creekman.com