

January 17. 2017

To: Rich Marovich

Putah Creek Streamkeeper

Re: Mertz Dam and Potential "New" Spawning Sections in Lower Putah Creek

## **BACKGROUND**

Per our discussion, on January 16, 2017, I conducted routine surveys in Lower Putah Creek, checking numerous Scarification Sites and reports of low (lower) water levels in the area between Morales and the Mertz Dam. Due to the increase in the number of salmon in the area between I - 505 and the Putah Diversion Dam I wanted to document any possibility of additional spawning areas. I walked the road between the PDD and the Mertz Dam to determine the water level and if any decrease in water level was possibly due to a breach of the Mertz Dam. I was accompanied partway by Rick Fowler.

#### REPORT

From a distance, the Mertz Dam appears to have been breached or "dismantled" by flood waters. The photos below (enlarged on Page 3) show that the Mertz Dam appears to be a collection of rip rap or other materials rather than one unified structure. A close examination by the CDFW might be warranted to document what appears to be a haphazard and degrading structure.

### **NEW SALMONID SPAWNING AREAS**

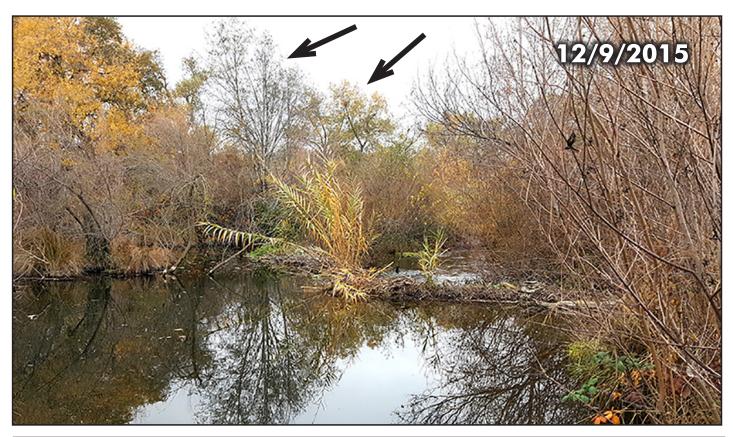
See Page 4 for information and an image showing one of two sites that are now visible due to the apparent breach of the Mertz Dam. Both sites deserve consideration for gravelbed scarification in 2017.



Mertz Dam: January 16, 2017 after a significant flood event. Arrow shows breached area of Mertz Dam



Mertz Dam: Additional images for scale and site identification. Top image was taken on 12/9/2015, the bottom image was taken on 1/16/2017. Use the trees in the background for site reference and location.









Close Up: Arrows point to a few of what appear to be Rip Rap or some sort of masonry rubble that form the dam. Closer examination must be completed to confirm identity of the materials.



### POTENTIAL "NEW" SPAWNING AREAS

The lower water level in the Parker area - possibly due to the breach of the Mertz Dam - revealed gravelbeds that appear to be ideal for scarification and salmonid spawning. We examined two exposed gravel sections, each with an estimated 200-300 feet of creek length.

The areas - identified on a map on page 5 - are in the section of Lower Putah Creek that is proving to be a prime salmon spawning area. The sites are approximately 1.10 and 1.30 miles downstream of the Putah Diversion Dam. This section has been too deep in the past for salmon spawning. A quick survey on January 16, 2017 showed no presence of salmon redds in the area. The entire stretch also appears to be highly cemented which can prevent salmon spawning. It is noteworthy that we did see an adult salmon move upstream at the site shown below. We clearly saw the salmon move through shallow water. To be clear, the salmon sighting was on January 16, 2017.

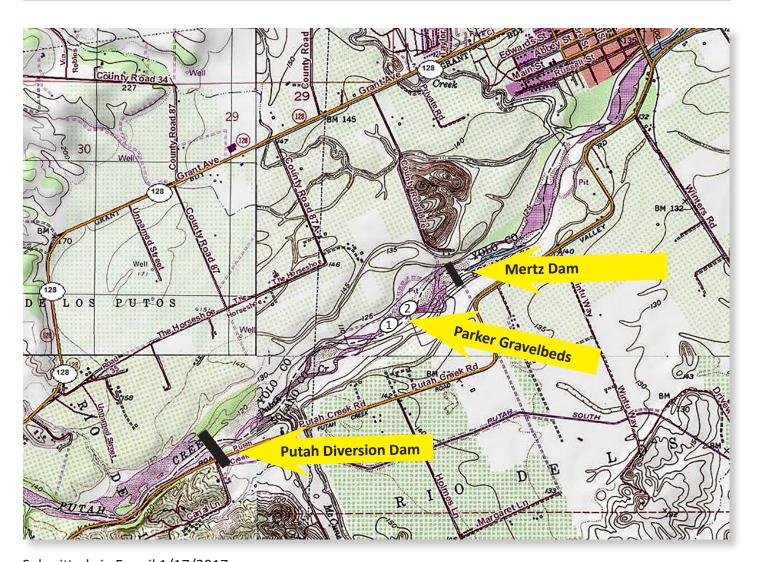
**Conclusion:** It appears that if the water in the Parker section of Lower Putah Creek remains at this level, it would be prudent to consider the two Parker sites for scarification. Scarifying these gravelbeds has the potential to add 400 - 600 feet of prime spawning beds within the main salmonid spawning reach below Putah Diversion Dam.



January 16, 2017 - Rick Fowler examining the upstream gravelbed (Parker #1). See map on Page 5.



Low Water Exposed Gravel Beds at Parker - GPS Data (WGS-84)				
Parker 1	N	38° 30′ 07″	W	121° 59′ 23″
Parker 2	N	38° 30′ 9.3″	W	121° 59′ 20.5



Submitted via E-mail 1/17/2017

Ken W. Davis

Aquatic Biologist / Wildlife Photojournalist

2443 Fair Oaks Blvd. # 209

Sacramento, CA 95825

(916) 747-8537

ken@creekman.com

www.creekman.com