



Wildlife Survey & Photo Service

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

Report: 3471 (Thompson Creek)

April 15, 2010



Baumanella, a common stonefly found in Thompson Creek

To: Rich Marovich
Chris Lee

From: Ken Davis
Aquatic biologist

Subject: Thompson Creek



Thompson Creek and road

Report

Background:

Ten aquatic invertebrates - important to the restoration of the aquatic food web in Putah Creek due to the invasion of New Zealand Mudsnaills and ongoing sedimentation - were discovered in the Design Channel after several storm events in 2006. Locating the source of the invertebrates is crucial to maintaining the invertebrate recruitment level and the overall restoration of Putah Creek. Thompson Creek - an intermittent waterway - has been of interest due to several invertebrates collected near the confluence with Putah Creek.

Visit to Canyon:

I recently received permission from the Putah Creek Landowner's Association to walk into Thompson Canyon. On April 14th, I walked about one mile into Thompson Canyon to determine if Thompson Creek supports any aquatic invertebrates that might recruit into Putah Creek. I also wanted to determine the level of cementation (sediment deposition) in the creek.

Sediment Issue:

The sediment deposition in Thompson Creek is significant as most cobble are 40-60% cemented.

Source of Sediment:

The sediment sources - in the first mile - appear to be related directly or indirectly to the road. Road failure (bank collapse) is occurring in a couple spots, gullies along the road, and erosion in the road base are all obvious.



Area with excess materials dumped in creek



Gully along road into Thompson Canyon.



Thompson Creek



Wyethia - Mule ears

Invertebrate Results:

- *Baetis sp.* a mayfly definitely recruits into Putah Creek.
- *Paraleptophelbia*, a mayfly, remains unidentified to species. I have only found this invertebrate in Thompson Creek.
- *Baumanella* - a large stonefly - is common in other intermittent waterways in the drainage. To my knowledge, it has never been collected in Putah Creek.

Native plants of interest in Thompson Canyon:

- *Ribes* (gooseberry)
- *Nicotiana glauca* (Indian tobacco)
- *Sambucus*
- *Wyethia* (mule ears)

Submitted 4/20/10 via e-mail

A handwritten signature in black ink that reads "Ken W. Davis". The signature is written in a cursive, flowing style.

Ken W. Davis
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