Report: 3700 **Update** 

November 8, 2010

To: Chris Lee, SCWA

Rich Marovich, LPCCC

Subject: Update - Surveys in Solano System

Dreissena Mussel Project:

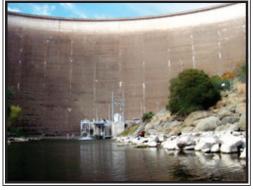


Pleasure Cove, Lake Berryessa

Docks at Pleasure Cove. As part of the Dreissena Mussel survey program, docks are checked for adult mussels by running your hand along base.



Lake Berryessa: Area near Monticello Dam used for early morning plankton tow.



Monticello Dam: Low water allowed the visual survey of the lower face of the dam.

## Lake Berryessa:

The following methodologies are used on a regular basis in the Lake Berryessa basin.

- **Plankton Tows** 1.
- 2. Microscopic exam of plankton collections
- Visual Inspection of Marinas
- Physical inspection of marinas
- 5. Education

#### Monticello Dam:

Mussel and Mudsnail surveys are conducted on routine basis. Lower conditions allowed a complete survey for adult mussels along the banks immediately below the dam and the face of Monticello Dam.

## Methodology:

- 1. Plankton Tows
- 2. Microscopic exam of plankton collections
- 3. Visual Inspection of boulders
- 4. Physical inspection of colonization plates

#### Education:

I'm working with numerous fishing groups, including the Foothill Angler Coalition in Auburn, to prevent translocation of invasive species by anglers from Sierra streams.

#### Dreissena Mussel Conference 10/22/10

The recent mussel conference revealed a significant fact:

1. Six western states sent a letter to the National Park Service requesting that they do more (something) to prevent the movement of Quagga Mussels from Lake Mead. California refused to sign the letter.



Monticello Dam: Shows algae on dam face.

## Monticello Dam:

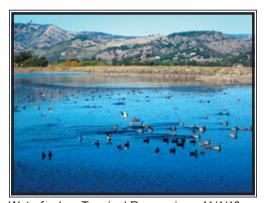
Mussel infestations typically begin in dark, well protected areas. The lower face of Monticello Dam should be visually surveyed on annual basis.



Putah South Canal: Visual inspection of canal infrastructure for adult mussels is accomplished on a regular basis. 11/10/10.

# Putah South Canal:

The cleaning of Putah South Canal presents an excellent opportunity to examine infrastructure and the material removed from the canal.



Waterfowl on Terminal Reservoir on 11/1/10.

#### Terminal Reservoir:

Terminal Reservoir is a significant resting and feeding ares for migrating waterfowl. San Justo Reservoir, the site a major zebra mussel infestation, is also a resting area for waterfowl. San Justo Reservoir is 100 miles due south of Terminal Reservoir. We know that waterfowl move mussels, we just don't know the distance and the survivability.



New Zealand Mudsnails

#### New Zealand Mudsnails:

NZMS densities are high in some areas of the Interdam Reach and Lower Putah Creek.

NZMS densities are moderate in some areas of the Putah South Canal.





Shows *Glossosoma* pupal cases "stranded" on a rock at Fishing Access # 5.

Glossosoma caddisflies stranded by low water flows: Anglers routinely complain about the stranding of Glossosoma caddisflies. I have several years of data showing that the majority of "tortoise case caddisflies" have emerged prior to the low-water flows. I am continuing that work during routine mudsnail surveys.



<u>Subsurface image</u>: *Glossosoma* larvae moving across a rock below the Pickerel Weir.

## Glossosoma;

Image on left shows *Glossosoma* caddisfly larvae in Putah Creek below the Pickerel Weir. Weir construction and the realignment of the Design Channel have extended the *Glossosoma* population from the Morales property to an area downstream from I-505.



Neil Property: Shows riffle area at the Neil Property access.

## Neil Property:

Completed baseline community study at the site which is the upstream site for the River Parkway Project.

Submitted 11/10/10 via e-mail:

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