

Lake Berryessa – Quagga/Zebra Mussel Education/Prevention Plan



Napa County Watershed Symposium-May 15, 2015

Eurasian Mussel Species



Zebra Mussels
(*Dreissena polymorpha*)



Quagga Mussels
(*Dreissena rostriformis bugensis*)

Lake Erie: Sterling Beach

Monroe Wisconsin



Recreational Equipment Issues: Boats / Motors



New Zealand Mud Snails



Quagga Mussel Environmental Needs

Constituent	Optimal Level	Lake Berryessa
Calcium	12-28 mg/L	19.2 (Moderate)
pH	7.4-9.5	8.3 (High)
Total Phosphorous	5-50 ug/L	7.8 (Low)
Secchi Depth	0.1-8 m	5.3 (Low)
Dissolved Oxygen	3-8 mg/L	-
Mean Summer Temp.	6-32 C	20.7 (High)
Conductivity	30-110 us/cm	320 (High)

Lake Berryessa

Challenges/Opportunities

- Multi-Jurisdictional
- Multi-Purpose
- Access Points
- Partnerships
- Education
- Funding

Early Detection & Education Plan For Eurasian Mussels

FINAL DRAFT

Early Detection & Education Plan for Eurasian Mussels



SOLANO PROJECT

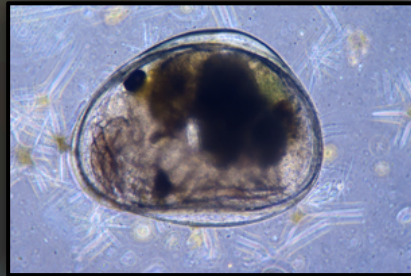
Solano County Water Agency
810 Vaca Valley Parkway, Suite 203
Vacaville, CA 95688

February 27, 2012

Lake Berryessa– Early Detection



Monitoring



Layered Science



Inspection



Education

Markley Cove Marina



Colonization Plates

Walk-by Surveys - Hydrolifts



Lake Berryessa

Visual Surveys - Hydrolifts



Boater Surveys

iPad 2:05 PM 90%

Records Unnamed

2014 Keep Our Waters Clean Questionnaire

Thank you for taking time to answer the questions below. Your input will help us work toward improving environmental education in California.

Location:

1. How long have you been boating? Year(s): or Months:

2. What is your 5-digit home zip code:
What city is that for?:

3. What type of boat(s) do you currently own?:
If other please specify:


4. What type of toilet is on your boat?:

5. In the past year, when using a sewage pump-out station, how often...

- a. Not Applicable, I use a mobile pump-out service (Skip to question 6)
- b. Is it broken?:
- c. Is it closed?:
- d. Do you wait in line?:
- e. Are you unable to find one?:
- f. Never use the installed toilet on my boat.

6. Did you know this logo represents a location where you can recycle used motor oil?

Yes No, but now I do!



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Premiums



➤ Ski Flag

➤ Metal Canteen

➤ T-shirt



➤ Tote Bag



Recreator Surveys



To all of our sponsor and Lake Berryessa Partners

THANK YOU



In addition: River Network, Berryessa Trails, Blue Ridge Berryessa Natural Area and the Cities (Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo)