

**Trinity Public Utilities District  
MINUTES OF THE REGULAR MEETING OF THE BOARD  
February 12, 2026**

Location: Trinity Public Utilities District Community Room  
26 Ponderosa Lane, Weaverville, California

Board Present: Alex Cousins, Michael Rourke, Joseph Trindade, Nick Goulette, Andy Johnson

Board Absent: None

Others Present: Paul Hauser, Jim Underwood, Marjie Watkins, Julie Catanese, Dave DeLange, Delmont Senter, Wes Scribner, Jim Aven, Annyssa Inferante

**1. President Rourke called the meeting to order at 2:00 p.m.**

**2. Approval of the Agenda Order**

a. Director Cousins made a motion to approve the Agenda Order. Director Goulette seconded the motion. The motion passed with the following voice vote:

Ayes: Alex Cousins, Mike Rourke, Joe Trindade, Nick Goulette, Andy Johnson

Noes: None

Absent: None

Abstain: None

**3. Public Comment**

None

**4. Presentation, Golden Mussel: Annyssa Interrante, Ecological Monitoring Program Manager, Trinity County Resource Conservation District**

Ms. Interrante provided a presentation on the Invasive Golden Mussel, attached and incorporated herein. This species of mussels is not found in Trinity or Lewiston Lakes due to low levels of calcium. Ms. Interrante included information about what other bodies of water in California are doing to prevent the spread of this invasive species. The Board inquired what steps they could take to assist with educating the public, perhaps using the back of the Trinity PUD monthly bills as a communication method.

**5. Consent Calendar**

Director Trindade made a motion to approve the Consent Calendar. Director Goulette requested that Item 5e, be pulled for further discussion. Director Trindade amended the motion to approve the Consent Calendar excepting Item 5e. Director Cousins seconded the amended motion. The Consent Calendar included:

- a. Approve Minutes of Regular Meeting, January 8, 2026
- b. Accept Minutes of the Safety Meeting, January 6, 2026
- c. Accept Minutes of the Safety Meeting, February 3, 2026
- d. Validate Bills of January 2026
- e. ~~Approve Financial Reports for December 2025~~

The motion passed with the following voice vote:

Ayes:	Alex Cousins, Mike Rourke, Joe Trindade, Nick Goulette, Andy Johnson
Noes:	None
Absent:	None
Abstain:	None

## 6. Action Items

### a. Items Pulled from Consent Calendar

#### 5e. Approve Financial Reports for December 2025

Director Goulette inquired about the Operation and Maintenance expenses, which is currently showing a 30 percent variance from Budget to Actuals. Ms. Catanese advised that the budget nets out with the labor costs included in Capital expenditures, which can vary based on when and to which account field staff charges time. For example, pole change outs can be charged to Operation and Maintenance or Capital Expenditures. President Rourke requested that the month be included in the header of the report, for example, December is month 6 of 12. Director Johnson inquired if the budget column is derived by taking the annual column and dividing it by twelve. Ms. Catanese advised, yes, with the exception of some items that are lump sum payments in certain months. Mr. Hauser advised a more detailed Financial Report would be provided at the March 2026 Board meeting. Director Goulette made a motion to approve the Financial Reports for December, 2025. Director Cousins seconded the motion. The motion passed with the following voice vote:

Ayes:	Alex Cousins, Mike Rourke, Joe Trindade, Nick Goulette, Andy Johnson
Noes:	None
Absent:	None
Abstain:	None

## 7. Reports

### a. Wildfire Mitigation Plan (WMP) Reporting Metrics Update – January 2026

Mr. Delange reviewed the Report with the Board highlighting inspection progress and the new format.

### b. General Manager's Reports

#### i. Land Exchange

Mr. Hauser reported that he anticipates the Land Exchange will be complete in Spring 2026.

#### ii. Right of Way Project Update

Mr. Hauser reported that the District has submitted exemptions, with no indication that we won't be ready to continue work on private property in Spring 2026. The United States Forest Service brought the Chief out to view progress on Sierra Pacific Industries property on Bowerman Ridge.

#### iii. Balancing Authority of Northern California (BANC)

Mr. Hauser advised there is nothing new to report on BANC.

iv. Power Outage Summary, January 2026

Mr. Hauser reviewed the Summary with the Board, noting that most of the outages were due to maintenance.

v. Re-initiation of Consultation on the Long-Term Operation of the Central Valley Project

Mr. Hauser advised that the Trinity Division draft for public comment is expected this April.

vi. Fix Our Forests Act

Mr. Hauser advised that the District would be lobbying for support on the Fix Our Forests Act at the American Public Power Association's Legislative Rally at the end of the month.

vii. Grants Update

Mr. DeLange reported on the grant status for the following grants currently being tracked:

Community Facilities Grant (FY 2026) – Fault Tamers - \$360,000  
Status: Bid Pending

United States Department of Agriculture (USDA) Community Wildfire Defense Grant, \$9.5 million funded by the Bipartisan Infrastructure Bill (IIJA)

Status: Mr. DeLange reviewed the report with the Board and advised that the District has recouped approximately \$448,000 of the \$9.5 million to date. A drone video will be provided at the March meeting.

viii. Financial Report

A more detailed Financial Report will be provided at the March meeting.

ix. Susan Stohr, Letter of Appreciation

Mr. Hauser presented the letter of appreciation to Ms. Stohr for her decades of service to the District.

c. Committee Reports

- Ad-hoc Forestry Committee  
None

d. Board Member Reports

- Director Johnson reported that he will be attending a Local Agency Formation Commission Meeting next week.
- Director Goulette reported on a recent meeting with the United States Forest Service Chief, with lunch at the Conservation Camp being a highlight.

**8. Discussion Item(s)**

None

**9. Communications Received**

The Lewiston Sparkies provided a thank you note for the District's assistance with the Bridge Lighting event.



# Golden Mussel Prevention Efforts



ANNYSSA INTERRANTE  
ECOLOGICAL MONITORING PROGRAM MANAGER



Trinity County  
Resource Conservation District

Updated 2/12/2026



# Overview

- Life History
- Similar Freshwater Species
- Current Identified Range
- Concerns
- State and Local Efforts

MEET THE  
**GOLDEN MUSSELS**  
*LIMNOPERNA FORTUNEI*

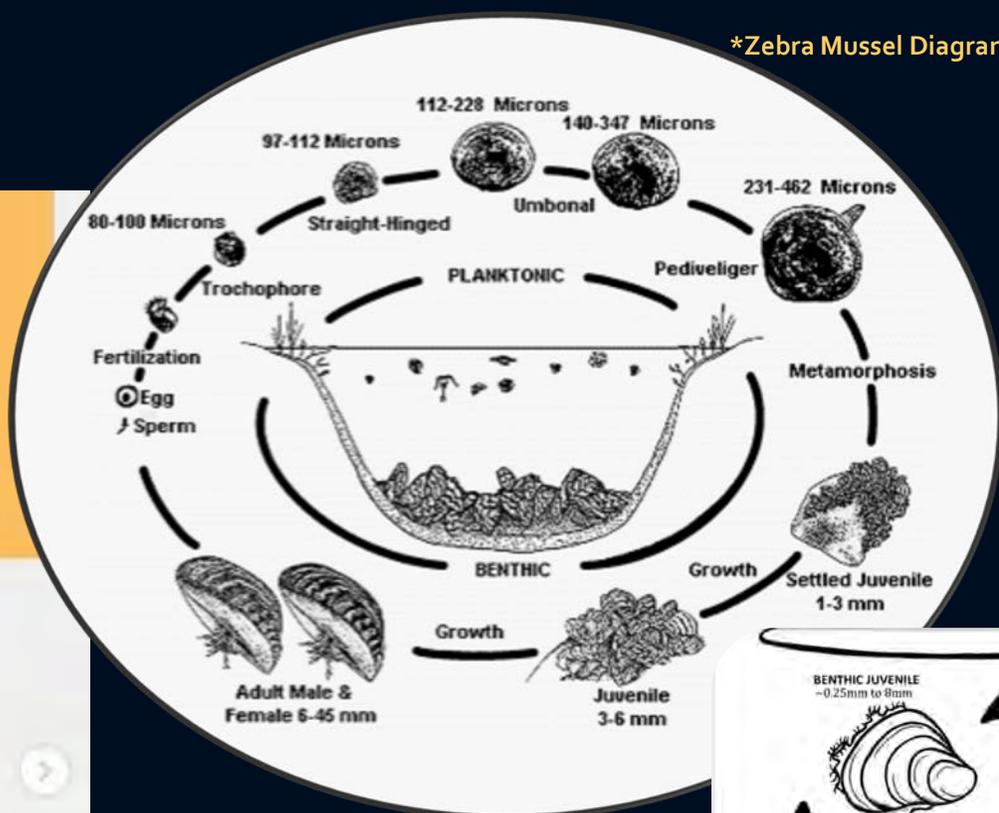
Juvenile



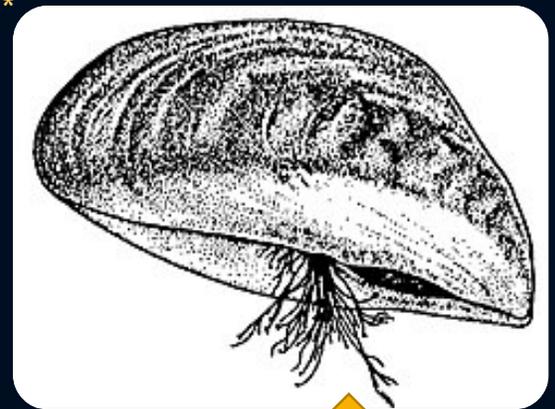
Adult



Credit: USFWS, Instagram, 6/7/2025



\*Zebra Mussel Diagrams\*

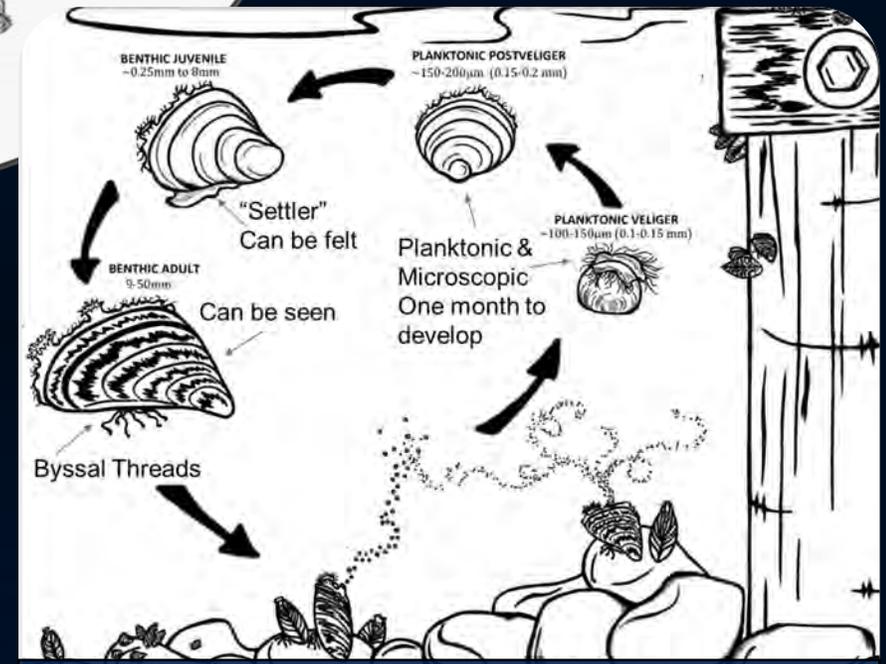


Byssal threads

Used for attachment to surfaces, common in marine species, many native freshwater species burrow in sediment and do not grow byssal threads

- Dark brown to gold coloration
- Max size 1.75"
- Byssal threads
- Can inhabit fresh and brackish-water lakes, rivers, creeks, wetlands, bays, and canals
- Thermal ranges 41-95°F
- Calcium threshold of < 3mg/L required for life cycle completion
- Can colonize hard and soft surfaces

CDFW Invasive Species Fact Sheet, Golden mussel, *Limnoperna fortunei* 11/4/2025



Spawning occurs multiple times a year and can produce thousands of planktonic offspring, called **veligers**

Credit: Graphic adapted from material created by the Flathead Biological Station

# Similar Freshwater Species

Native



(c) Tommi G – (CC BY-NC)  
Salzburg, Austria

**Zebra mussel**  
*Dreissena polymorpha*

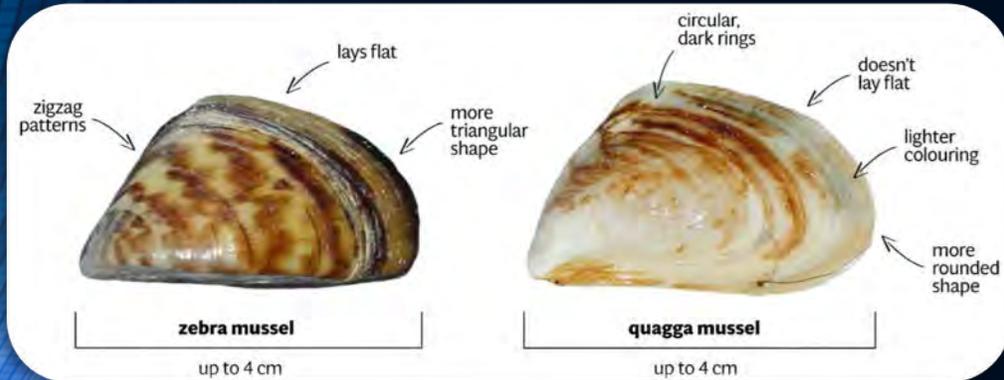


(c) Liz – (CC BY-NC) - Sawyer, Michigan



(c) Jakob Stanič – (CC BY-NC)  
Slovenia

**Asiatic clam**  
*Corbicula fluminea*



**Quagga mussel**  
*Dreissena bugensis*



(c) herexton, (CC BY-NC)  
Ontario, Canada



By calibas – (CCo) - Scott River, California



(c) Megan Cosand - (CC BY-NC)  
Stanwood, Washington

**Western  
pearlshell mussel**  
*Margaritifera falcata*

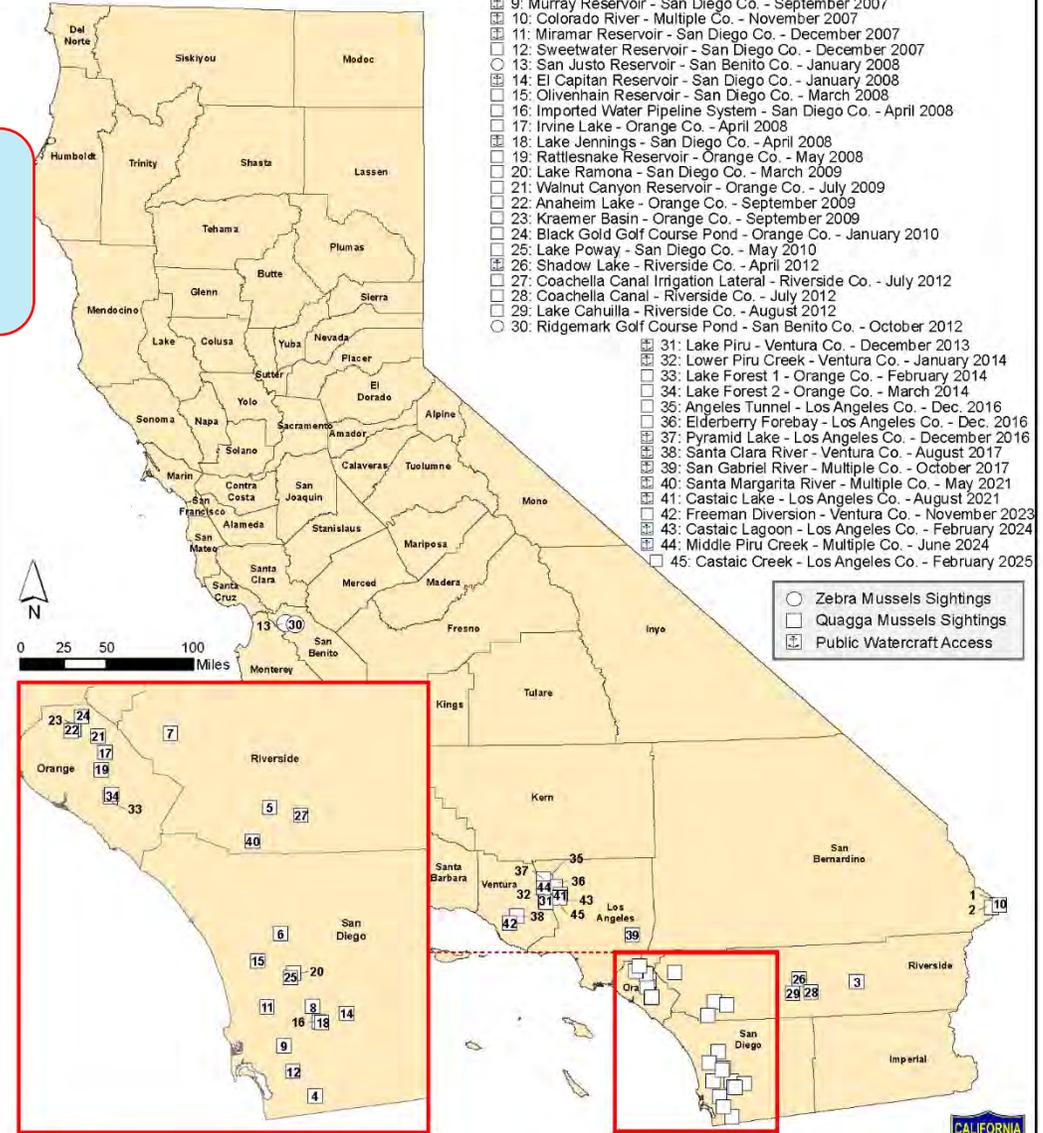
# Similar Freshwater Species Invasives

**Zebra mussel**  
*Dreissena polymorpha*



(c) Tommi G – (CC BY-NC) Salzburg, Austria

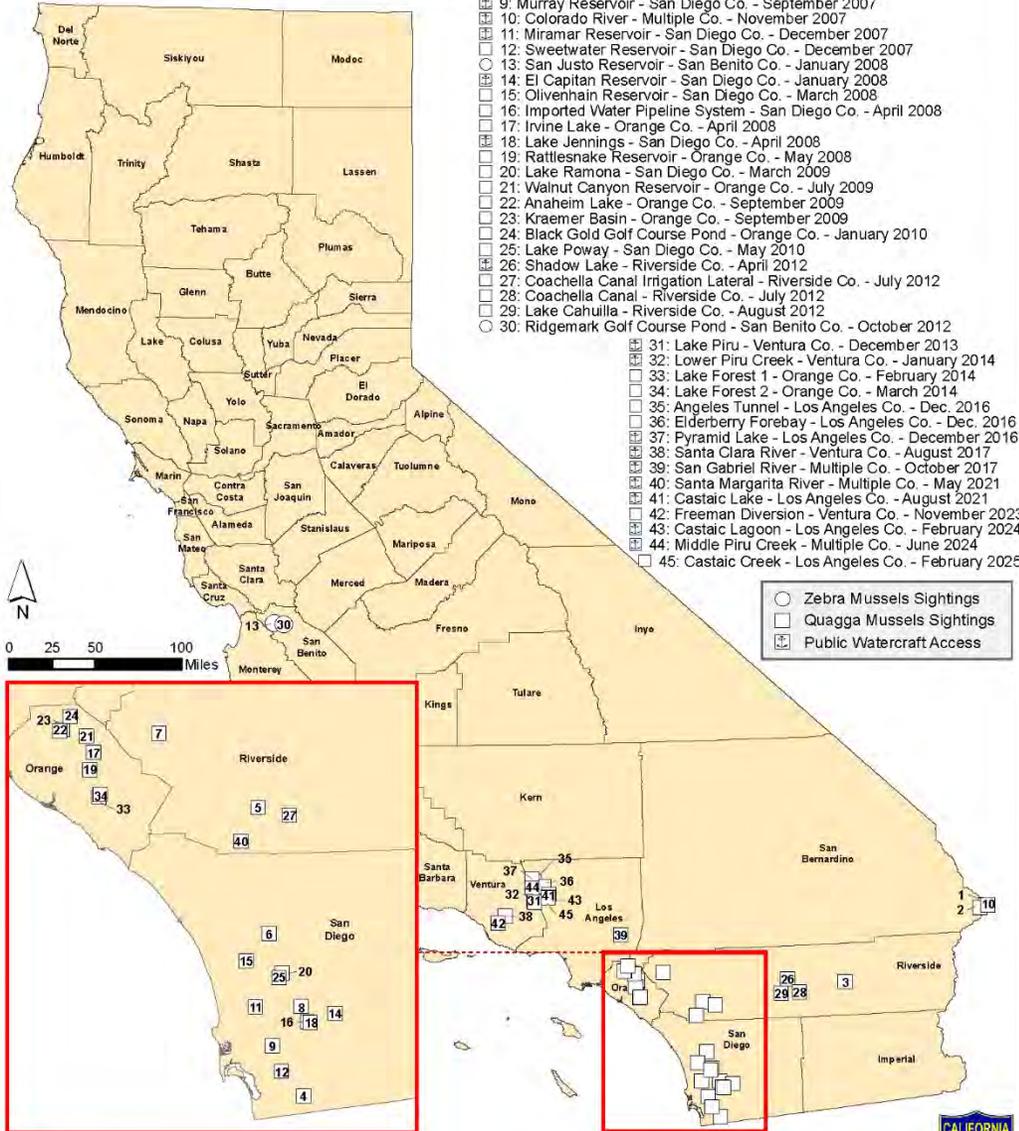
## Quagga and Zebra Mussel Sightings Distribution in California, 2007 - 2025



Note: Numbering of locations changed from earlier versions, because duplicates (additional sightings within the same waterbody or conveyance) were dropped.  
Data Sources: CA Department of Fish and Wildlife, City of San Diego Water Authority, Imperial Irrigation District, Helix Water District, Irvine Ranch Water District, Coachella Valley Water District, National Park Service, CA Department of Water Resources, Los Angeles Department of Water and Power, United Water Conservation District. Map produced by the California Department of Fish and Wildlife, March 18, 2025.



# Quagga and Zebra Mussel Sightings Distribution in California, 2007 - 2025



- LOCATIONS**
- 1: Lake Havasu - San Bernardino Co. - January 2007
  - 2: Copper Basin Reservoir - San Bernardino Co. - March 2007
  - 3: Colorado River Aqueduct - Multiple Co. - July 2007
  - 4: Lower Otay Reservoir - San Diego Co. - August 2007
  - 5: Skinner Reservoir - Riverside Co. - August 2007
  - 6: Dixon Reservoir - San Diego Co. - August 2007
  - 7: Lake Matthews - Riverside Co. - August 2007
  - 8: San Vicente Reservoir - San Diego - August 2007
  - 9: Murray Reservoir - San Diego Co. - September 2007
  - 10: Colorado River - Multiple Co. - November 2007
  - 11: Miramar Reservoir - San Diego Co. - December 2007
  - 12: Sweetwater Reservoir - San Diego Co. - December 2007
  - 13: San Justo Reservoir - San Benito Co. - January 2008
  - 14: El Capitan Reservoir - San Diego Co. - January 2008
  - 15: Olivenhain Reservoir - San Diego Co. - March 2008
  - 16: Imported Water Pipeline System - San Diego Co. - April 2008
  - 17: Irvine Lake - Orange Co. - April 2008
  - 18: Lake Jennings - San Diego Co. - April 2008
  - 19: Rattlesnake Reservoir - Orange Co. - May 2008
  - 20: Lake Ramona - San Diego Co. - March 2009
  - 21: Walnut Canyon Reservoir - Orange Co. - July 2009
  - 22: Anaheim Lake - Orange Co. - September 2009
  - 23: Kraemer Basin - Orange Co. - September 2009
  - 24: Black Gold Golf Course Pond - Orange Co. - January 2010
  - 25: Lake Poway - San Diego Co. - May 2010
  - 26: Shadow Lake - Riverside Co. - April 2012
  - 27: Coachella Canal Irrigation Lateral - Riverside Co. - July 2012
  - 28: Coachella Canal - Riverside Co. - July 2012
  - 29: Lake Cahulla - Riverside Co. - August 2012
  - 30: Ridgemark Golf Course Pond - San Benito Co. - October 2012
  - 31: Lake Piru - Ventura Co. - December 2013
  - 32: Lower Piru Creek - Ventura Co. - January 2014
  - 33: Lake Forest 1 - Orange Co. - February 2014
  - 34: Lake Forest 2 - Orange Co. - March 2014
  - 35: Angeles Tunnel - Los Angeles Co. - Dec. 2016
  - 36: Elderberry Forebay - Los Angeles Co. - Dec. 2016
  - 37: Pyramid Lake - Los Angeles Co. - December 2016
  - 38: Santa Clara River - Ventura Co. - August 2017
  - 39: San Gabriel River - Multiple Co. - October 2017
  - 40: Santa Margarita River - Multiple Co. - May 2021
  - 41: Castaic Lake - Los Angeles Co. - August 2021
  - 42: Freeman Diversion - Ventura Co. - November 2023
  - 43: Castaic Lagoon - Los Angeles Co. - February 2024
  - 44: Middle Piru Creek - Multiple Co. - June 2024
  - 45: Castaic Creek - Los Angeles Co. - February 2025

Note: Numbering of locations changed from earlier versions, because duplicates (additional sightings within the same waterbody or conveyance) were dropped.  
 Data Sources: CA Department of Fish and Wildlife, City of San Diego Water Authority, Imperial Irrigation District, Helix Water District, Irvine Ranch Water District, Coachella Valley Water District, National Park Service, CA Department of Water Resources, Los Angeles Department of Water and Power, United Water Conservation District. Map produced by the California Department of Fish and Wildlife, March 18, 2025.

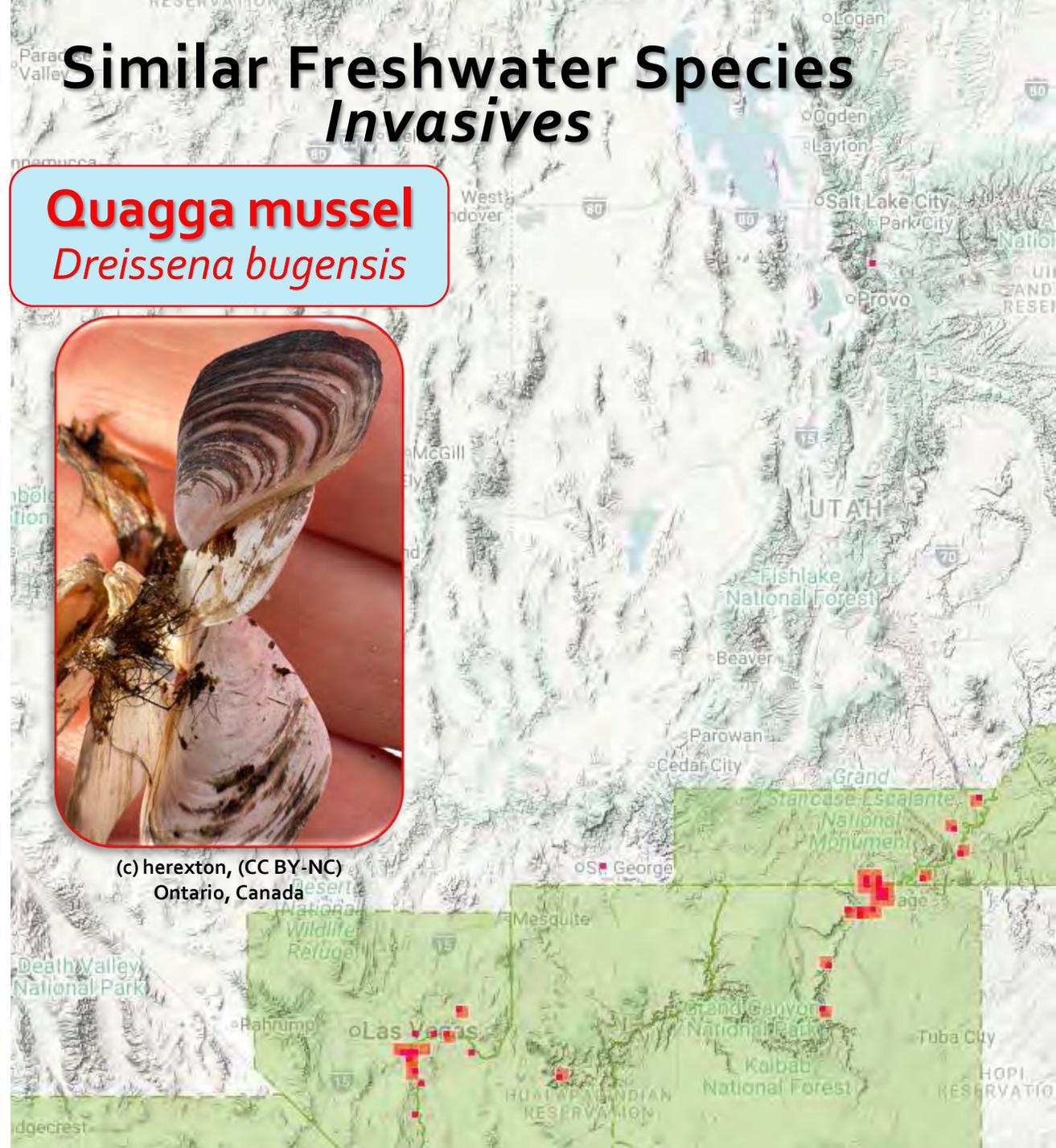


# Similar Freshwater Species Invasives

**Quagga mussel**  
*Dreissena bugensis*



(c) herexton, (CC BY-NC) Ontario, Canada



# Similar Freshwater Species *Invasives*

**Asiatic clam**  
*Corbicula fluminea*



(c) Jakob Stanič – (CC BY-NC)  
Slovenia

# Similar Freshwater Species Survival Thresholds



	<b>Zebra mussel</b> ( <i>Dreissena polymorpha</i> )	<b>Quagga mussel</b> ( <i>Dreissena bugensis</i> )	<b>Asiatic clam</b> ( <i>Corbicula fluminea</i> )	<b>Golden mussel</b> ( <i>Limnoperna fortunei</i> )	<b>Trinity Lake</b>	<b>Lewiston Lake</b>
<b>Origin</b>	Ukraine and Russia	Ukraine and Russia	Southeast Asia, East Asia, Australia, and Africa	China, Thailand, Korea, Laos, Vietnam, Indonesia, and Cambodia		
<b>First in CA</b>	January 2008, San Justo Reservoir	January 2007, Lake Havasu, traveled into CA through Colorado River Aqueduct	1980s San Francisco Bay Delta 2002 Lake Tahoe	October 2024 San Juaquin Delta and O'Neill Forebay		
<b>Temperature</b>	54-82°F <sup>(6)</sup> (Spawning & Juvenile survival range, Adult range is larger)	54-82°F <sup>(6)</sup> (Spawning & Juvenile survival range, Adult range is larger)	41-93°F <sup>(3)</sup>	<b>* 41-95°F <sup>(2)</sup></b> 108 days overwintering < 41°F with 27% survival	<b>43.4-81.1°F <sup>(6)</sup></b>	<b>41-74°F <sup>(8)</sup></b>
<b>Salinity</b>	< 6 ppt <sup>(6)</sup>	< 6 ppt <sup>(6)</sup>	0-20 ppt <sup>(3)</sup>	<b>* &lt; 3 ppt <sup>(2)</sup></b> Can survive short term shock of 23ppt	<i>Unknown</i> Freshwater Lakes are typically < 1 ppt	<i>Unknown</i> Freshwater Lakes are typically < 1 ppt
<b>Calcium Concentration</b>	> 15mg/L <sup>(6)</sup>	> 18 mg/L <sup>(6)</sup>	> 6mg/L <sup>(5)</sup>	<b>* &gt; 3mg/L <sup>(1)</sup></b>	<b>4.4mg/L <sup>(7)</sup></b>	<b>4.9mg/L – 8.9mg/L<sup>(9)</sup></b>
<b>CA Ranking</b>	Highly Invasive, Restricted Species	Highly Invasive, Restricted Species	Highly Invasive	Highly Invasive, Restricted Species	(6)USBR – G.Gotham – 2024 (7) Personn. Comms. K.Hubbard – CDFW	<sup>(8)</sup> <a href="http://lakemonster.com/lake/CA/Lewiston%20Lake-water-temperature-737">lakemonster.com/lake/CA/Lewiston%20Lake-water-temperature-737</a> (9) Personn. Comms. K. Hubbard, 2023-2024 data - CDFW
<b>US Ranking</b>	High Risk	High Risk	High Risk	High Risk		

\*Subject to evolving science and understanding of adaptive capacity in North America and California

(1) [https://nas.er.usgs.gov/queries/greatlakes/FactSheet.aspx?Species\\_ID=3653&Potential=Y&Type=2&HUCNumber=](https://nas.er.usgs.gov/queries/greatlakes/FactSheet.aspx?Species_ID=3653&Potential=Y&Type=2&HUCNumber=)

(2) <https://www.fws.gov/sites/default/files/documents/2025-08/ecological-risk-screening-summary-golden-mussel.pdf>

(3) <https://www.fws.gov/sites/default/files/documents/2024-11/ecological-risk-screening-summary-basket-clam.pdf>

(4) California Department of Fish and Wildlife, Invasive Species Program, September 2020 "Recommended Minimum Dreissenid Mussel Early Detection Monitoring"

(5) <https://www.michigan.gov/-/media/Project/Websites/invasives/Documents/Response/Status/egle-ais-corbicula-fluminea.pdf?rev=8aa6be097e534cd9fed31eb30768483>

# Current North American Range of Golden Mussels



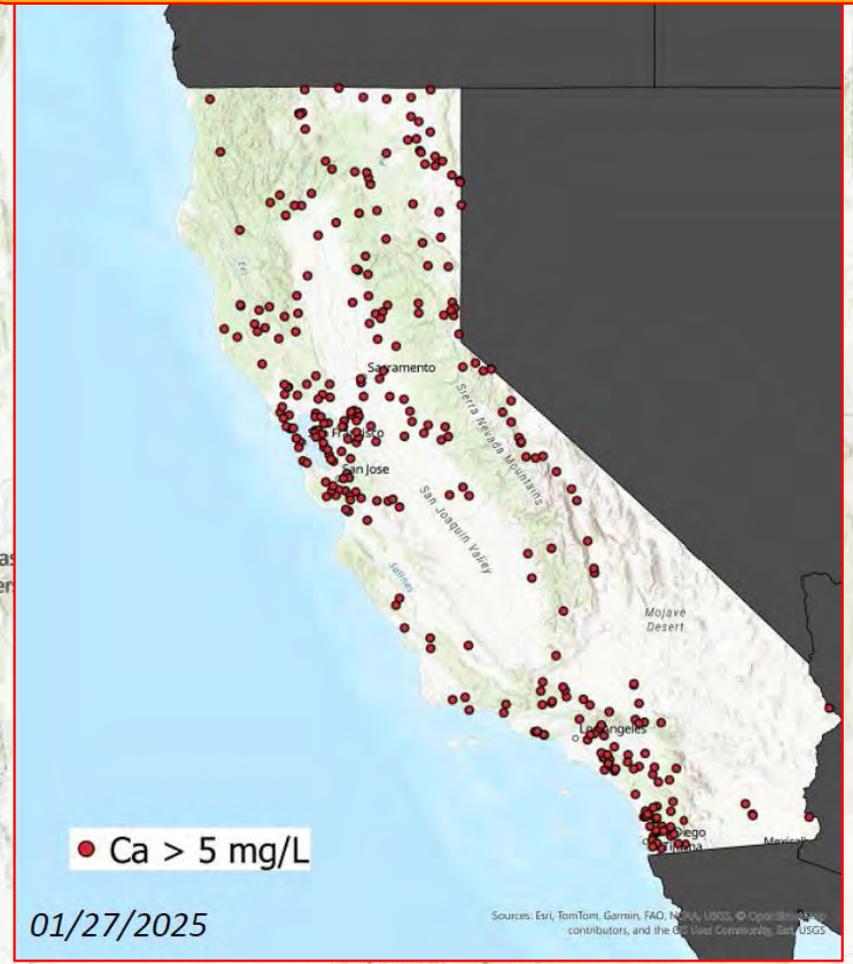
Folsom Lake (06/3/2025)



O'Neill Forebay (05/2025)

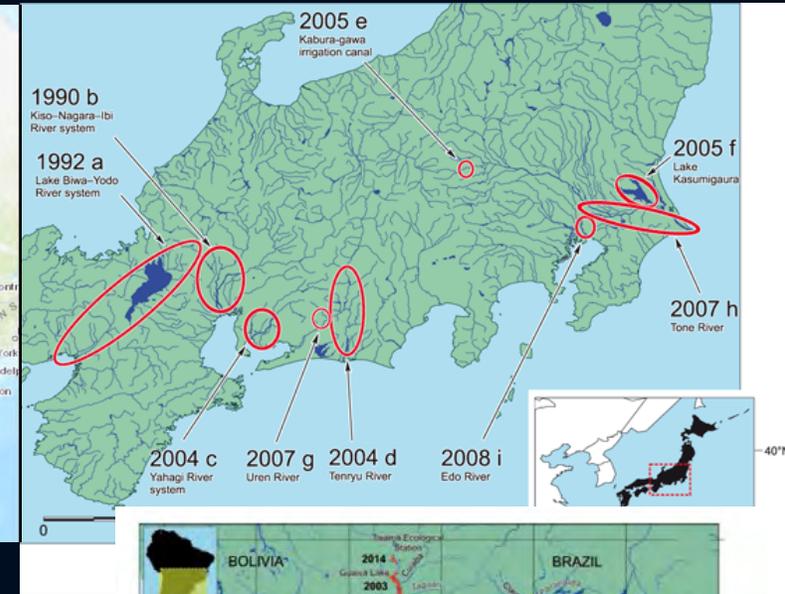


# Suitable Habitats



# Concerns

- **Rapid consumption of available food sources**
  - Can outcompete native species for resources
  - Alter balance of water nutrients and can trigger Harmful Algal Blooms (HAB)
- **Formation of dense colonies**
  - Rapid reproduction, 1 female can produce 1 millions eggs per year
  - Damages watercraft motors, hydroelectric infrastructure, and water conveyance pipes
  - Health hazards to recreationists on boat ramps and shorelines
  - Can attach to soft substrates and aquatic plants



- **"Invisible" modes of transport**
  - Immature mussels can be unknowingly transported in water found in boat ballasts or bait livewells
  - Natural flow to downstream resources

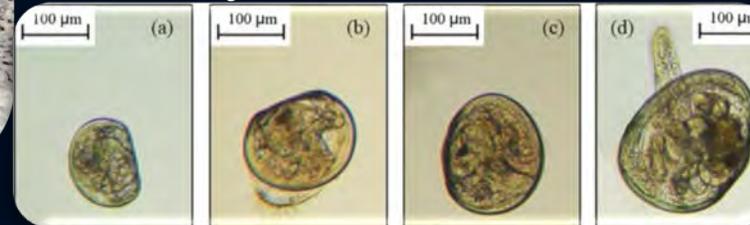


Photo: Carlos Eduardo Belz

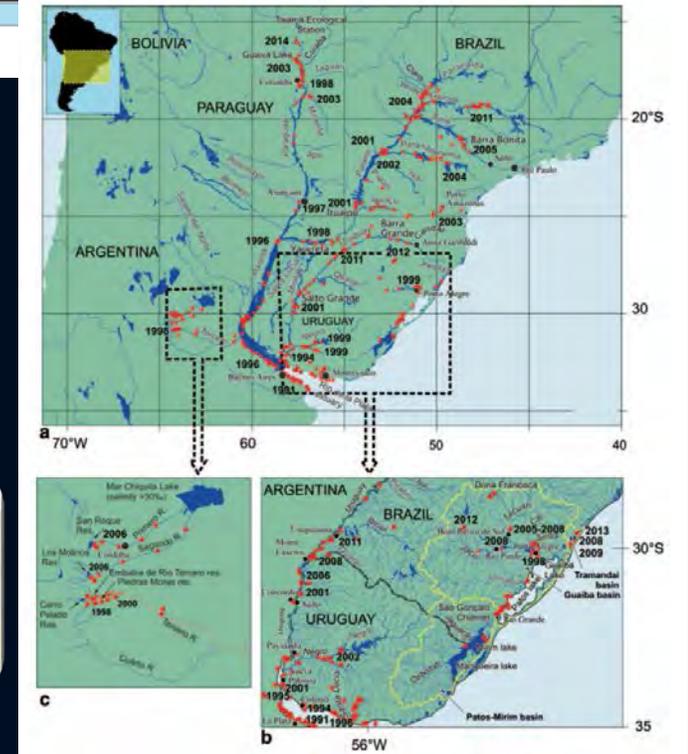


Governor Jose Richa Power Plant in Brazil

Larval veliger sizes 80-237 micrometers  
 Note: The average diameter of a human hair is 100 micrometers



<https://doi.org/10.1016/j.ecoleng.2017.08.024>



# Economic Costs

Damage to

- Hydroelectric Infrastructure
- Nuclear Power Plants
- Agricultural Irrigation
- Water Storage

Haubrock et al 2022 estimated that global annual costs to infrastructure from aquatic invasive species to exceed **\$1.5 billion dollars annually**.

**In China**, annual costs of maintenance and cleaning tasks owing to *Limnoperna* biofouling in one pipeline project have been reported at over **\$ 1 million**.

**In Brazil**, over **30 hydroelectric power plants** along the Paraná River and its tributaries have been colonized by *L. fortunei*;

- Estimated annual losses of **\$120 million** to hydroelectric dams across the Paraná, Alto Paraguay, Tocantins, and São Francisco river basins—and poses an imminent threat to rivers in the Amazon.

Irrigation intake pipe in the San Joaquin Valley 10/6/2025



**Golden mussels colonizing the inside of a water pipe.**

SOURCE: Presentation by Arvin-Edison Water Storage District 1/6/2026

# State-Wide Efforts

- 1,300 Named Reservoirs in California
- 103 Waterbodies with recreational boating management
- 41 with Restrictions
  - Self-Certification
  - Quarantining
    - Maintaining Clean, Drain, Dry in storage
    - If contaminated, handled by CDFW/CDFA
  - Inspections
  - Decontaminations
  - Mussel Fee + Local Stickers
  - Banding/Sealing
    - Fees, fines, and potential impoundment for non-compliance or tampering
  - Closures
    - Motored Watercraft
    - Vessels from infested waters
    - Swimming

*Effective September 2, 2025, swimming, wading, and other body-to-water contact activities will be prohibited at Woodward Reservoir. This restriction is in partnership with SSJID to meet water quality regulations. We will provide notice once the restriction has been lifted.*

East Of Stockton

## Annual California Mussel Fee Sticker

- \$16/year
- Required for all motorized watercraft in California



Lake	Banding	Sticker	Inspections, Restrictions, and Quarantines**	Closed
Berryessa, Lake	Yes		30 Day Quarantine	
Big Bear Lake	Yes		30 Day Quarantine	
Cachuma Lake			30 Day Quarantine	
Calero Reservoir			5 Day Quarantine for moisture presence, 30 Day Quarantine for tampering	
Camanche Reservoir				Closed as of 4/9/2025
Casitas, Lake	Yes		35 Day Quarantine, and inspection	
Chabot, Lake	Yes		5 Day Quarantine for inspection failure	
Clear Lake		Yes	Inspection and Decontamination from QZ waterbodies	
Clementine, Lake	Yes		30 Day Quarantine	
Contra Loma Reservoir	Yes		5 Day Quarantine for inspection failure	
Coyote Reservoir			5 Day Quarantine for moisture presence, 30 day for tampering	
Del Valle, Lake	Yes		5 Day Quarantine for inspection failure	
East Park Reservoir			Self Certify, 5-30 Day Quarantine, or Decontaminate	
Echo Lake	Yes		2 stroke engines prohibited, mandatory inspection w/o seal	
Fallen Leaf Lake	Yes		2 stroke engines prohibited, mandatory inspection w/o seal	
Folsom Lake	Yes		30 Day Quarantine	
Highland Springs Reservoir		Yes	Required inspections from QZ waterbodies	
Jackson Meadows Lake			Non-motorized only	
Lake of the Pines			60 Day Quarantine	
Lexington Reservoir			5 Day Quarantine for moisture presence, 30 day for tampering	
Millerton Reservoir			Self Certification	
Milton Reservoir			Non-motorized only	
Modesto Reservoir			No vessels from the Sacramento-San Joaquin Delta or from San Luis Reservoir	
New Bullards Bar Reservoir			Screenings for vessels are expected to start during summer 6 a.m. to dusk.	
New Hogan Lake			Random Inspections, Mussel Fee sticker	
New Melones Lake	Yes			
Oroville, Lake	Yes		Inspection Program starting May 19, 2025	
Pardee Reservoir				Closed as of 4/9/2025
Quarry Lakes	Yes		5 Day Quarantine for inspection failure	
Rancho Seco Lake			Various restrictions as of March 25, 2025	
Rollins Lake			30 Day Quarantine for motors, 60 Day Quarantine for motors with ballasts, or WID decontamination	
Ruth Lake	Yes		30 Day Quarantine with ballast	
San Pablo Reservoir				Closed as of 4/9/2025
Scotts Flat Lake			30 Day Quarantine for motor, 60 Day Quarantine for motor with ballasts, or WID Decontamination	
Shadow Cliffs Lake	Yes		5 Day Quarantine for inspection failure	
Stevens Creek Reservoir			5 Day Quarantine for moisture presence, 30 day for tampering	
Stony Gorge Reservoir			Self Certify 5-30 Day Quarantine, or Decontaminate	
Tahoe, Lake	Yes	Yes	2 stroke engines prohibited, mandatory inspection w/o seal	
Trinity Lake			Self Certification	
Tulloch Reservoir			April 9, 2025: Tri-Dam is temporarily accepting quarantine bands from other lakes	Closed as of 2/11/2025
Woodward Reservoir			No vessels from the Sacramento-San Joaquin Delta or from San Luis Reservoir	Closed to swimming 9/2/2025

\*\* Confirm all local restrictions with waterbody managers - [https://dbw.parks.ca.gov/?page\\_id=29367](https://dbw.parks.ca.gov/?page_id=29367)

# Banding Seals/Quarantine

- Metal wire fed through boat *and* trailer and closed permanently with a plastic ID tag
- Aimed at preventing unlawful launching into new waterbodies
- Still faces issues with tampering and enforcement waterbody personnel
- Vary from waterbody to waterbody
- Often denote CDFW/CDFA Quarantine, Inspections, and Exiting Waterbodies



**ATTENTION BOATERS!**

Boats launching in Lake County must display both a Lake County Mussel Sticker and a CA State Mussel Fee Sticker

Visitor Sticker      Resident Sticker

LAKE COUNTY      LAKE COUNTY

CA State Sticker      Purchase the CA State Mussel Fee Sticker (aka Quagga Sticker) at [www.dmv.ca.gov/musselfee](http://www.dmv.ca.gov/musselfee) or click on the QR code to the right using your smart phone. Keep your receipt in your sticker arrives.

SCAN ME

*Additional Options:* Annual stickers for local boaters



Tahoe Regional Planning Agency:

[Lake Tahoe](http://www.laketahoe.org)

[www.tahoebotinspections.com](http://www.tahoebotinspections.com)

888-824-6267

Exit Band

**California Department of Fish and Wildlife (CDFW):**

Contact the [CDFW Regional Scientist](#) responsible for the county in which the watercraft was intercepted.

Issued to watercraft infested with quagga/zebra mussel and placed under quarantine by CDFW. Watercraft is prohibited from launching in California until released from quarantine by CDFW.

**Quarantined under Fish and Game Code Section 2301**

**California Department of Food and Agriculture (CDFA):**

Contact the [CDFW Regional Scientist](#) responsible for the county in which the watercraft was intercepted.

Issued to watercraft infested with quagga/zebra mussels intercepted at a CDFA Border Protection Stations and placed under quarantine. Watercraft is prohibited from launching in California until released from quarantine by CDFW.

**Quarantined under Fish and Game Code Section 2301**

**California Department of Food and Agriculture (CDFA):**

Contact the [CDFW Regional Scientist](#) responsible for the county in which the watercraft was intercepted.

Issued to watercraft infested with quagga/zebra mussels intercepted at a CDFA Border Protection Stations and placed under quarantine. Watercraft is prohibited from launching in California until released from quarantine by CDFW.

**Quarantined under Fish and Game Code Section 2301**

**Humboldt Bay Municipal Water District:**

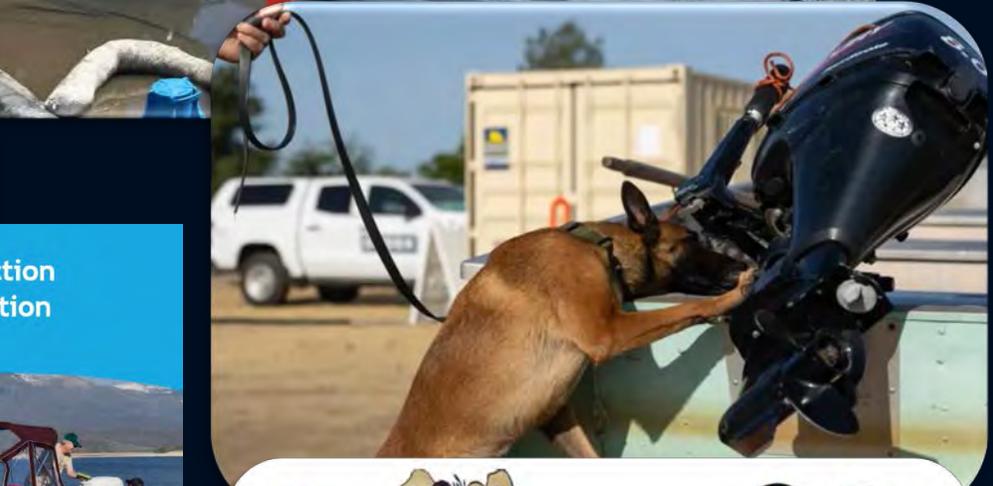
[Ruth Lake](http://www.ruthlakecsd.org)

<http://www.ruthlakecsd.org>

707-574-6332

**Exit Band**

# Inspection & Decontamination



- Conducted by Level I (Inspection)/Level II (Decontamination) trained Watercraft Inspectors
- Protocol includes visual inspection and high pressure + high temperature flushing of boat ballasts, motor, and surfaces
- Time varies on size of boat, often 5-15 minutes
- Data is entered in national WID database, and often boats are banded with a waterbody seal
- Some waterbodies are charging fees for those that want decontaminations to avoid quarantine wait times
- K-9 Units are being utilized for extra security on Holiday Weekends

## Watercraft Inspection and Decontamination (WID) Manual



WID Training Curriculum for Level I and Level II Inspectors and Decontaminators

Revised on December 1, 2021

westernais.org



# Local Restrictions

- Ruth Lake enforcing quarantines and banding
- Whiskeytown-Shasta-Trinity National Recreation Area Self Certifications
  - Whiskeytown is working on procuring self-service stations and decontamination contractors in 2026
- December 4<sup>th</sup>, 2025 Forest Order to prevent spread of golden mussels

*Redding, CA Dec. 4, 2025— The Shasta-Trinity National Forest has issued a forest order prohibiting the possession and transportation of golden mussels, zebra mussels and quagga mussels to five lakes within the forest.*

*The order is in effect from Thursday, Dec. 4, 2025, through Dec. 4, 2027. Specifically, the order affects these areas: Below the high-water mark of Shasta Lake, Lewiston Lake, Trinity Lake, Iron Canyon Reservoir or McCloud Reservoir; and On any boat ramp that provides access to Shasta Lake, Lewiston Lake, Trinity Lake, Iron Canyon Reservoir or McCloud Reservoir.*

*A violation of this prohibition is punishable by a fine of not more than \$5,000 for an individual or \$10,000 for an organization, or imprisonment for not more than six months, or both.*

**Forest Service News Release**

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[Shasta-Trinity National Forest](https://www.fs.usda.gov/whis/shasta-trinity-national-forest)

**Shasta-Trinity National Forest enacts order to prevent spread of golden mussels**

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In October 2024, the California Department of Water Resources discovered non-native, highly invasive golden mussels in the Bay-Delta near Stockton, California. Once established, golden mussels can spread rapidly, significantly damaging natural ecosystems, water infrastructure, agriculture, and economies. The Shasta-Trinity National Forest reminds visitors to clean, drain and dry watercraft before and after launch, and to contact the waterbody they plan to visit before heading out.

Zebra and quagga mussels are also invasive species that can create similar problems as golden mussels.

To prevent unintentionally moving invasive mussels between bodies of water, we ask all do the following:

- **Clean, drain and dry** all equipment and watercraft before and after entering a waterbody.
- **Clean off** all aquatic material from your boat, trailer and equipment before leaving the boat ramp or parking lot.
- **Drain** ballast, bilge, live-wells, and anything containing water. Never drain back into the waterway.

**Invasive Mussel-Free Certification**  
Help Us Protect Recreation and Fishing!

Has your vessel been used in Sacramento, San Joaquin, Solano, Alameda, Contra Costa, Stanislaus, Merced, Fresno, Kings, Kern, or Los Angeles Counties?

**YES**

Was your vessel and trailer thoroughly washed, drained, flushed, and allowed to **completely dry for at least 30 days** since you last launched OR been professionally decontaminated?  
*You must have removed all dirt, plants and animal material, or grit from the boat and drained and flushed all live wells and bilge areas.*

**NO**

If your vessel has been in any other waterbody outside of WSTNRA, was your vessel and trailer thoroughly washed, drained, flushed, and allowed to **completely dry for at least 5 days**?  
*You must have removed all dirt, plants, and animal material, or grit from the boat and drained and flushed all live wells and bilge areas.*

**YES** **NO** **NO** **YES**

**You are ready to launch!** Please sign the certificate on the back of this form and display it through your windshield at all times while your vehicle and boat trailer are at Whiskeytown, Shasta, Trinity, and Lewiston lakes.

**Please get a professional decontamination at an approved Mussel Decontamination Station before launching.**

**You are ready to launch!** Please sign the certificate on the back of this form and display it through your windshield at all times while your vehicle and boat trailer are at Whiskeytown, Shasta, Trinity, and Lewiston lakes.

*You should perform this simple screening every time you use your boat to protect all your favorite waters!*

Version updated 7/11/2025

**Invasive Mussel Prevention Program**

*Please Ensure this Certificate is Visible Through Your Windshield While Parked with An Empty Boat Trailer*

**MUSSEL FREE**

*Golden, Quagga, and Zebra Mussels Pose a Major Threat to the Whiskeytown-Shasta-Trinity National Recreation Area (WSTNRA)!*

**Mussels in the WSTNRA could:**

- Disrupt the food chain and fishing.
- Foul facilities like docks and ramps.
- Encrust boats and clog engines.
- Litter beaches with sharp smelly shells.

Invasive mussels can be spread by water in your boat. Simply washing boats and equipment and allowing them to drain and fully dry is an effective way to reduce the risk of spreading these aquatic hitchhikers.

**I affirm that my vessel and trailer does not threaten Whiskeytown, Shasta, Trinity, and Lewiston lakes with invasive mussels by attesting to one of the following:**

**PLEASE CHECK ONE BOX:**

Vessel not used in counties or waterbodies with known Golden Mussel infestations. If vessel has been used in any other waterbody outside of WSTNRA, the vessel and trailer has been washed, drained, flushed, and allowed to completely dry for at least 5 days.

If vessel has been used in a county or waterbody with Golden Mussel infestations, the vessel and trailer has been washed, drained, flushed, and allowed to completely dry for at least 30 days.

Vessel and trailer professionally decontaminated at an approved Mussel Decontamination Station.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Thank you for protecting Whiskeytown-Shasta-Trinity National Recreation Area!**

For more information: [QR Code]

For official use only:

**NOTICE TO ALL BOATERS:**

**WATERCRAFT WITH BALLAST TANKS OR OTHER COMPONENTS THAT CANNOT BE DRAINED WILL AUTOMATICALLY FAIL AN INSPECTION. Boaters may obtain the MANDATORY 30-day RED quarantine band from Ruth Lake Marina or Ruth Rec Campground.**

# Questions?



**PROTECT THE  
LAKES YOU LOVE.**

**CLEAN, DRAIN AND DRY TO STOP INVASIVE SPECIES.**



Annyssa Interrante  
[ainterrante@tcrd.net](mailto:ainterrante@tcrd.net)



Trinity County  
Resource Conservation District



# Water Quality Protocol Recommendations

## *Dreissenid Early Detection Monitoring*

### Surface Surveys

Feeling under boat ramps and floating restrooms

Current Guidelines as of 11/2025:

- Check monthly



*Snorkeling not required, but can be helpful to confirm extent of population*

### Artificial Substrate Surveys

Removing deployed substrates and inspecting

Current Guidelines as of 11/2025:

- Check monthly



### Plankton Tows

Pulling tow nets through the water column and collecting subsample for analysis

Current Guidelines as of 11/2025:

- Twice a month when water is 61-75°F
- Once a month when water is 54-61°F or 75-82°F



# CLEAN DRAIN DRY

Invasive mussels are a threat to our waters, recreational opportunities, and the health of the environment.

You could unknowingly be carrying them on your watercraft and gear. Take action to protect California waters.

**CLEAN** your gear, boat, and trailer before leaving the area. Remove plants, animals, and mud. Dispose of unwanted bait and debris in the trash.

**DRAIN** bilge, ballast, wells, and buckets before you leave the parking area, and never drain back into the waterway.

**DRY** equipment before launching into another body of water. Waiting periods can vary - check with your local waterbody.

Display your DMV Registration and Mussel Fee Stickers on the hull.

To learn more about invasive mussels and other species, visit [www.wildlife.ca.gov/Invasives](http://www.wildlife.ca.gov/Invasives)

# Don't Move A Mussel!



**STOP AQUATIC HITCHHIKERS!**  
Be A Good Steward.  
Clean. Drain. Dry.  
[StopAquaticHitchhikers.org](http://StopAquaticHitchhikers.org)

Stop the Transport of Invasive Species:  
 • **CLEAN** boats, gear, truck, trailer & vehicle of plants, fish, animals & mud  
 • **DRAIN** bilge, ballast, wells & live wells before you leave the area  
 • **DRY** equipment before launching watercraft into another body of water

# Education Campaigns

**DON'T MOVE A MUSSEL!**

**Quagga/zebra mussels**

**ruin boats and destroy waters**

**DON'T LET THEM RIDE WITH YOU!**

**DON'T MOVE A MUSSEL**

Invasive mussels could cost the Okanagan over **\$40 million** each year.

Our fish    Our lake's ecology    Our beaches    Our water  
 Our tourism    Our economy    Our property values    Our boats

Know what is **at risk**



Coming to a waterway near you...

**INVASION OF THE GOLDEN MUSSEL**  
...unless you stop the spread

# DON'T MOVE A MUSSEL

Clean, Drain, and Dry to Protect California Waters

**GOLDEN MUSSEL**  
**QUAGGA MUSSEL**  
**ZEBRA MUSSEL**

[www.wildlife.ca.gov/Invasives](http://www.wildlife.ca.gov/Invasives) | 866-440-9530

**LOOK FOR MUSSELS HERE**  
YOU CAN PREVENT THE SPREAD OF QUAGGA AND ZEBRA MUSSELS. CHECK YOUR WATERCRAFT BEFORE ENTERING A WATERWAY!

**CLEAN - DRAIN - DRY**

# Current Efforts

- TCRCO Acquired funding through CDFW to purchase a decontamination trailer, set up a public station, and train staff in Spring of 2026 (*seeking staff funding*)
  - Working with USFS staff on Environmental Compliance
    - Potential Site: Osprey Parking Area near Stuart Fork
- Regional CDFW staff Kristin Hubbard is open and eager to have assistance with water quality monitoring, WID trainings, and general prevention efforts

[Kristin.Hubbard@wildlife.ca.gov](mailto:Kristin.Hubbard@wildlife.ca.gov)



## Funding Asks Submitted

(Notice by early 2026)

- Watercraft Inspection and Decontamination Technicians during boating season May – October
- Water Quality Monitoring Technicians and Equipment
- Increased Education and Outreach
- Establishment of a Regional Workgroup
- Self Service Stations – CD3 to increase boating stewardship habits

