





Update on Golden Mussel Prevention Activities at Nacimiento and San Antonio Reservoirs



Golden Mussel – An Introduction

- Golden mussel was detected in the Sacramento-San Joaquin Delta in October 2024 – first recorded detection in North America
 - Native to China and Southeast Asia



Photo: Elizabeth Wells, Ph.D. (DWR)

Golden Mussel Biology

- Three life stages
 - **Veliger** – in water column, microscopic
 - **Settlers** – settle on surfaces, sandpapery feel
 - **Adults** – reach 1-2 inches in size

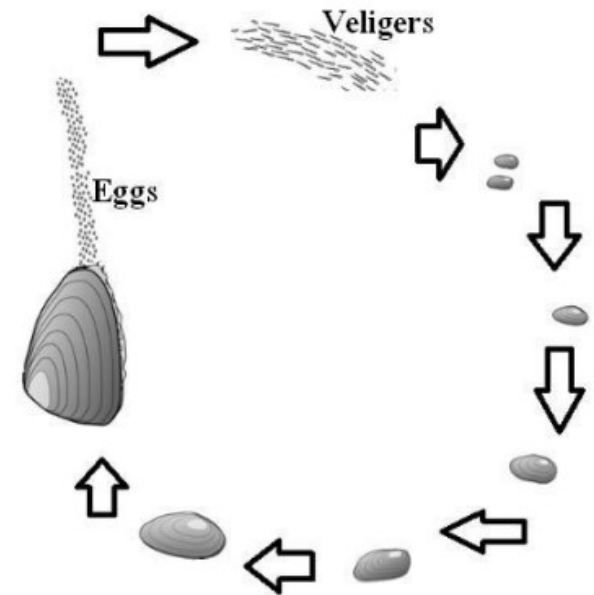


Image: Nevada Irrigation District

Golden Mussel Biology

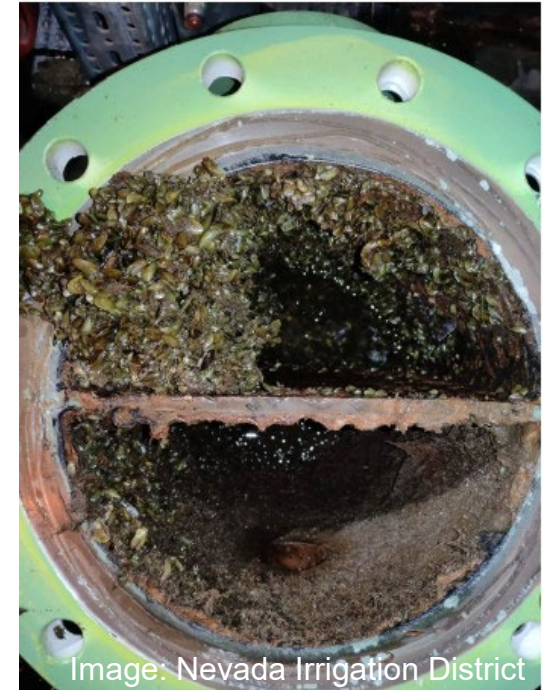
- Reproduces rapidly
 - 6,000 to 20,000 larvae per cubic meter of water
- Can tolerate a wider range of temperature and salinity compared to quagga and zebra mussels.
- Grows in dense clumps containing 80,000-200,000 mussels per square meter.



Image: California Dept. of Fish and Wildlife

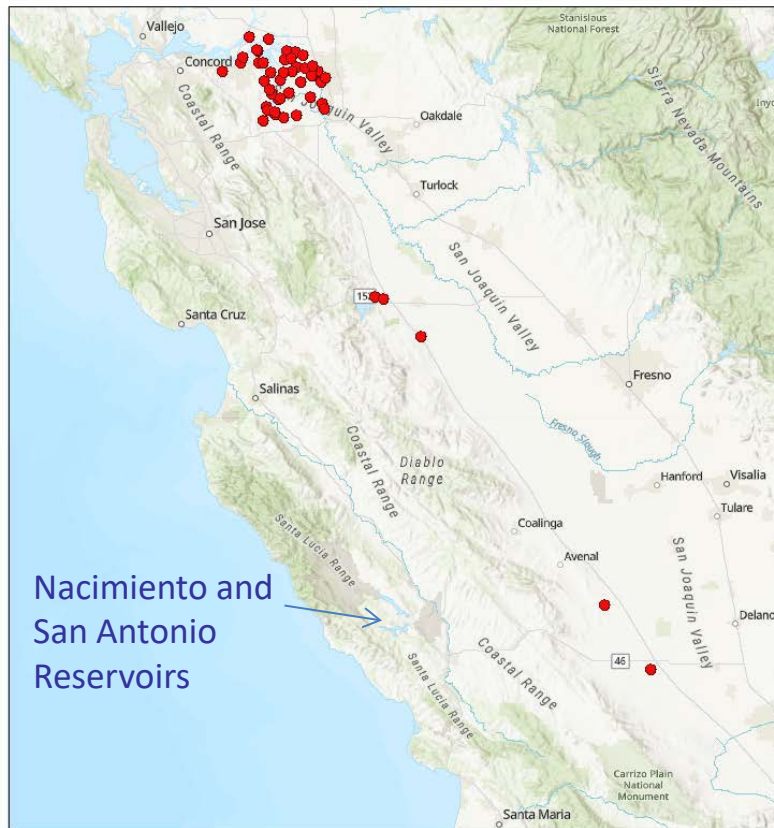
Environmental and Economic Impacts

- Mussels can clog water intakes, dam operations infrastructure, power plant equipment.
- Golden mussels are filter feeders that can consume large amounts of material that native species and sport fish depend on.
- Colonies can foul watercraft motors, docks, and boat launches.
- Increase harmful algal blooms.



Golden Mussel Detections

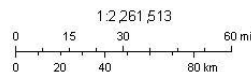
Golden Mussel Presence and Absence in California



6/18/2025

• Sightings of Golden Mussels in California

World_Hillshade



Source: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community; Esri, USGS

California Department of Fish and Wildlife maintains a map with data from surveys for golden mussels conducted by state, federal, and local agencies.

A range of responses around the State

CDFW developed
interagency Golden
Mussel Task Force

Some reservoirs
closed to boating
for 2025

30-day quarantine
requirements

Quarantine bands
or seals for boats
that have been
inspected

Prohibition on
certain vessel types

Require inspections
before launching

Local Actions

- Mandatory vessel inspections before launching at Nacimiento and San Antonio Reservoirs.
 - Inspection procedures used historically for quagga and zebra mussels are effective for golden mussel.
- Coordination between the Agency and
 - County of Monterey - Parks Division
 - County of SLO - Public Works
 - Private communities around Nacimiento Reservoir

Local Actions

- Increased Agency involvement and frequency of communication with Park rangers and program staff.
- May 2025 - Agency applied for a grant from CDFW to fund equipment purchases, facility enhancements, and training to support invasive mussel prevention efforts at both reservoirs. Award notification is anticipated in July 2025.

Local Actions

clean
drain
dry



STOP INVASIVE MUSSELS
SLOCountyWater.org



