Napa River Watershed Update

Napa County Resource Conservation District
for
NBWA Watershed Council, June 13, 2012

Napa River Watershed

- 426 square miles
- 176 anadromous stream miles
- 31 tributaries
- No dams on mainstem
- Adopted TMDLs for sediment and pathogen
- Draft TMDL for nutrients
- Beneficial use driving the sediment TMDL is cold water fisheries

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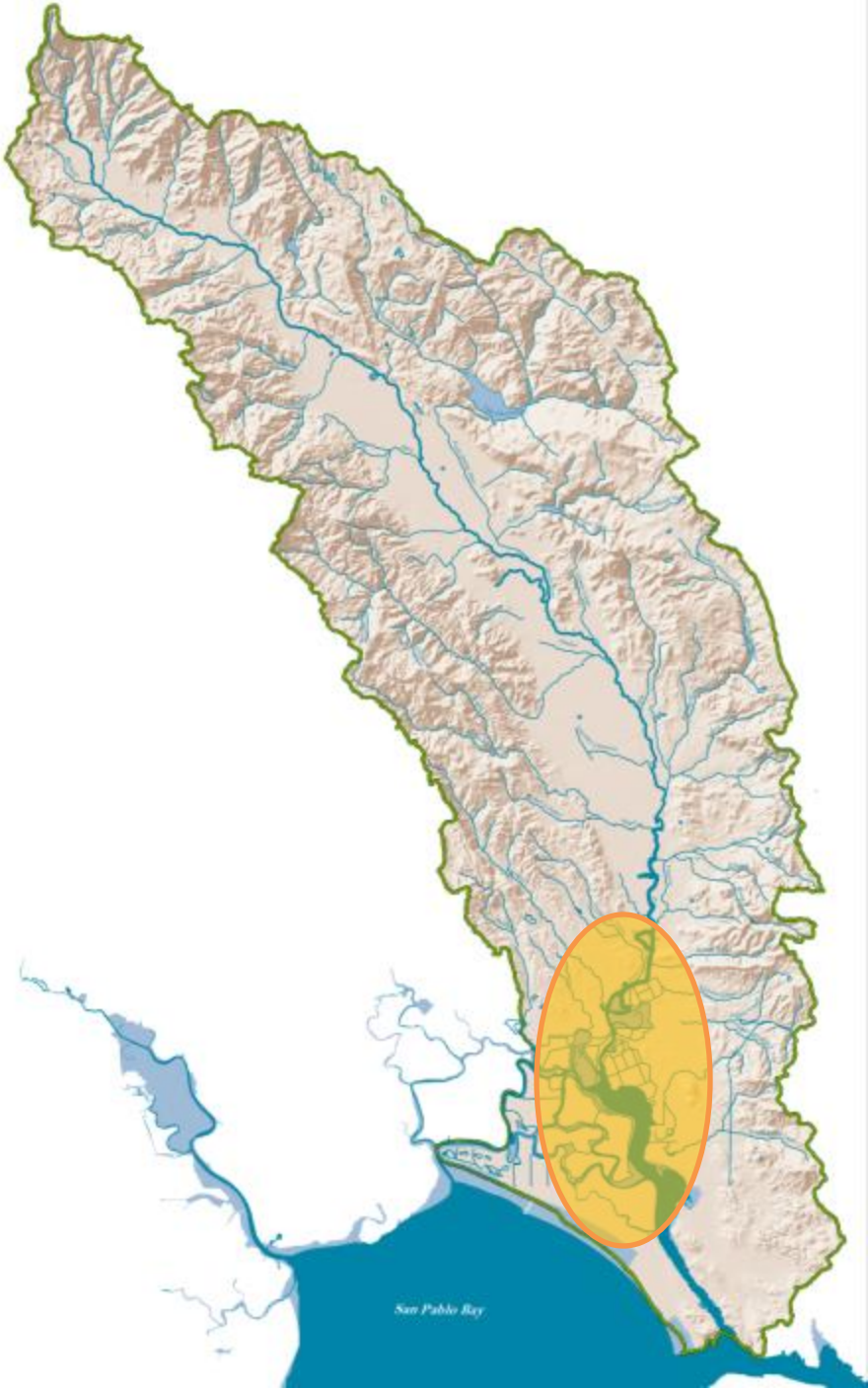
Resource Conservation District

Major Projects

- Napa/Sonoma Marsh Restoration



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Napa Sonoma Marsh Restoration

South Unit, SRB open to tidal action from a distance on August 25, 2010.
Photo Courtesy K. Taylor.

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Napa Sonoma Marsh Restoration

South Unit, SRB opened to tidal action for the first time in over 100 years on August 25, 2010. Photo Courtesy K. Taylor.

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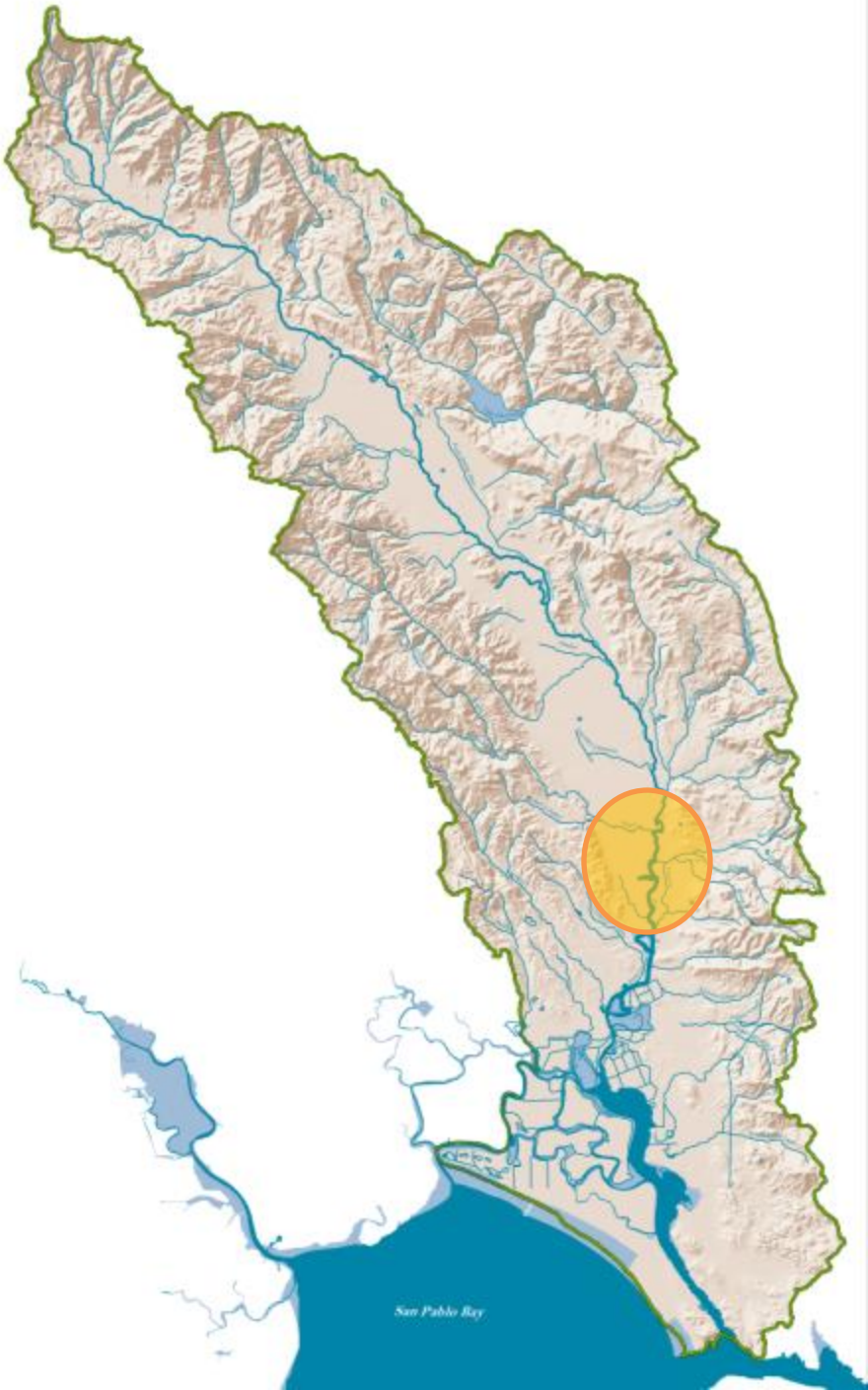
Major Projects

- Napa/Sonoma Marsh Restoration
- Napa Flood Project



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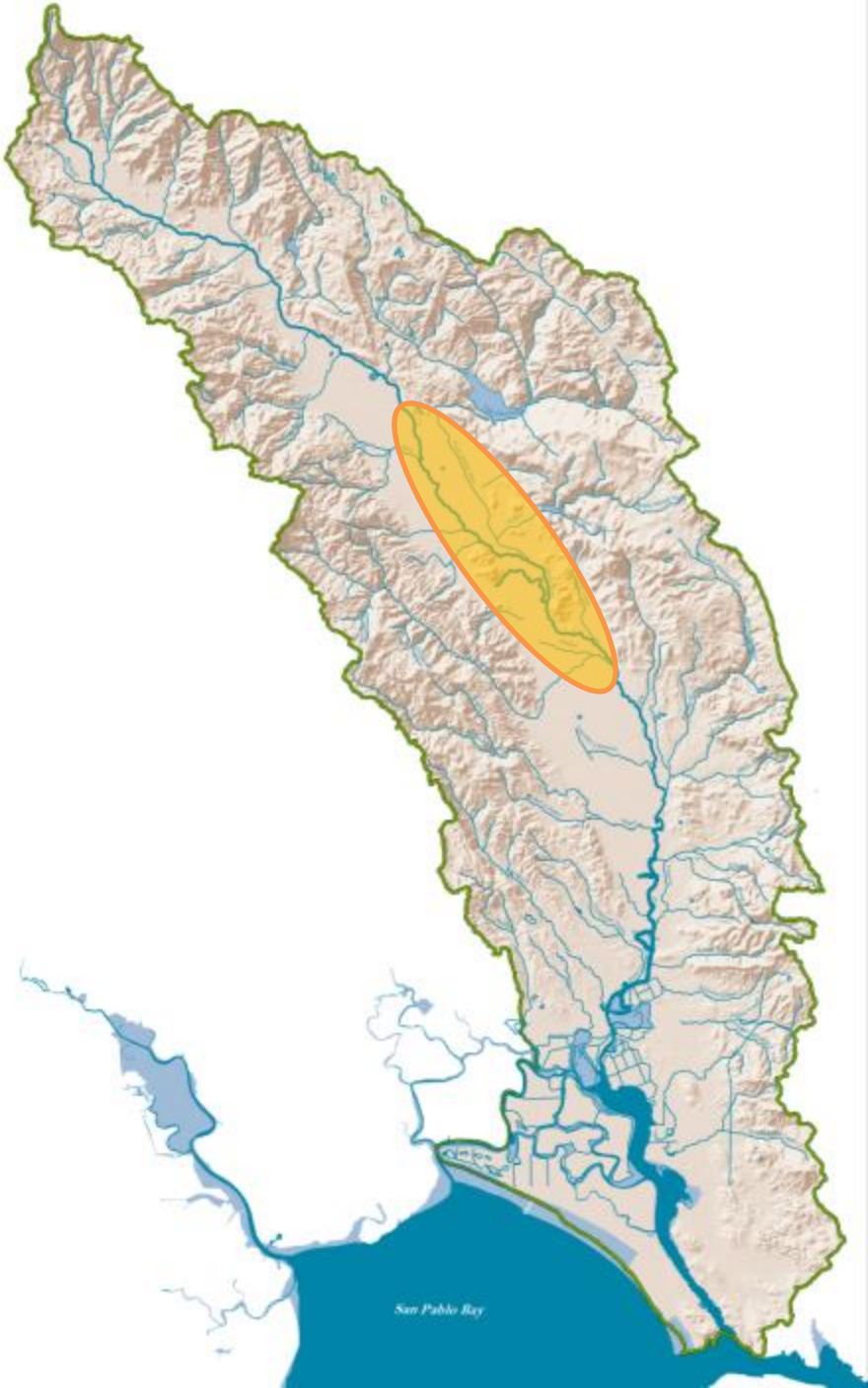
Major Projects

- Napa/Sonoma Marsh Restoration
- Napa Flood Project
- Rutherford and Oakville Restoration Projects
  - 15 miles of mainstem



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Rutherford and Oakville Restoration

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Rutherford and Oakville Restoration

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Major Projects

- Napa/Sonoma Marsh Restoration
- Napa Flood Project
- Rutherford and Oakville Restoration Projects
  - 15 miles of mainstem
- Zinfandel Lane Bridge Fish Passage Project
  - 60 miles upstream habitat

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Zinfandel Lane Fish Passage Improvement

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Zinfandel Lane Fish Passage Improvement

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Zinfandel Lane Fish Passage Improvement

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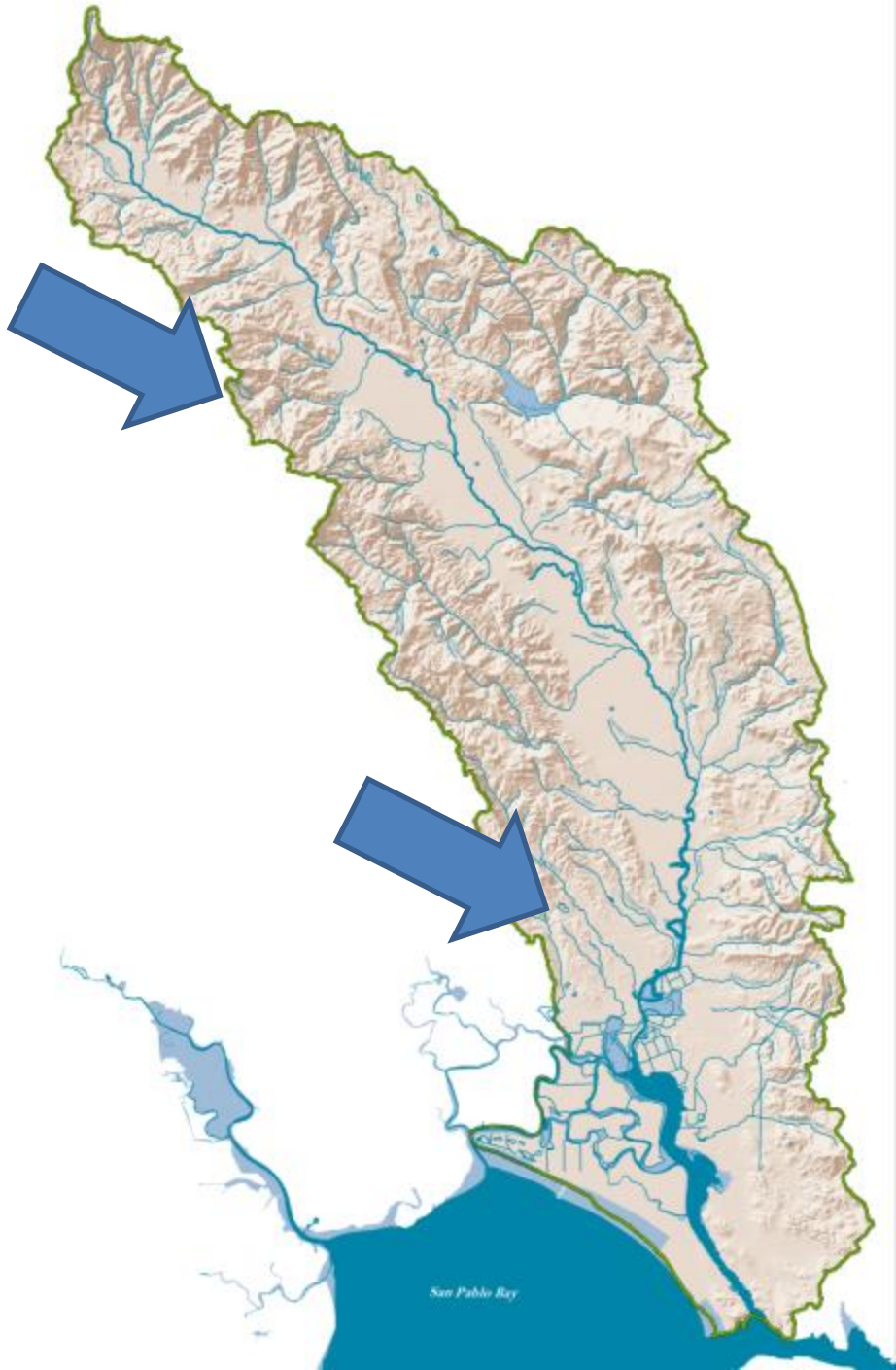
Major Projects

- Napa/Sonoma Marsh Restoration
- Napa Flood Project
- Rutherford and Oakville Restoration Projects
  - 15 miles of mainstem
- Zinfandel Lane Bridge Fish Passage Project
- Sediment Reduction Projects
  - 18 miles of rural road stormproofed
  - ~23,000 yrd^3 of sediment prevented from entering Napa River



Storm Proofing Rural Roads

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Storm Proofing Rural Roads

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Fisheries Monitoring: What are we looking to learn?

- What is the condition of outmigrating steelhead and salmon?
- What is the diversity of the fish assemblage?
- Does the Napa River support a self-sustaining run of steelhead?

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Fisheries Monitoring

- Seven years of salmon spawner surveys
- Five years of salmon genetics sampling
- Three years of rotary screw trap monitoring

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Fisheries Monitoring

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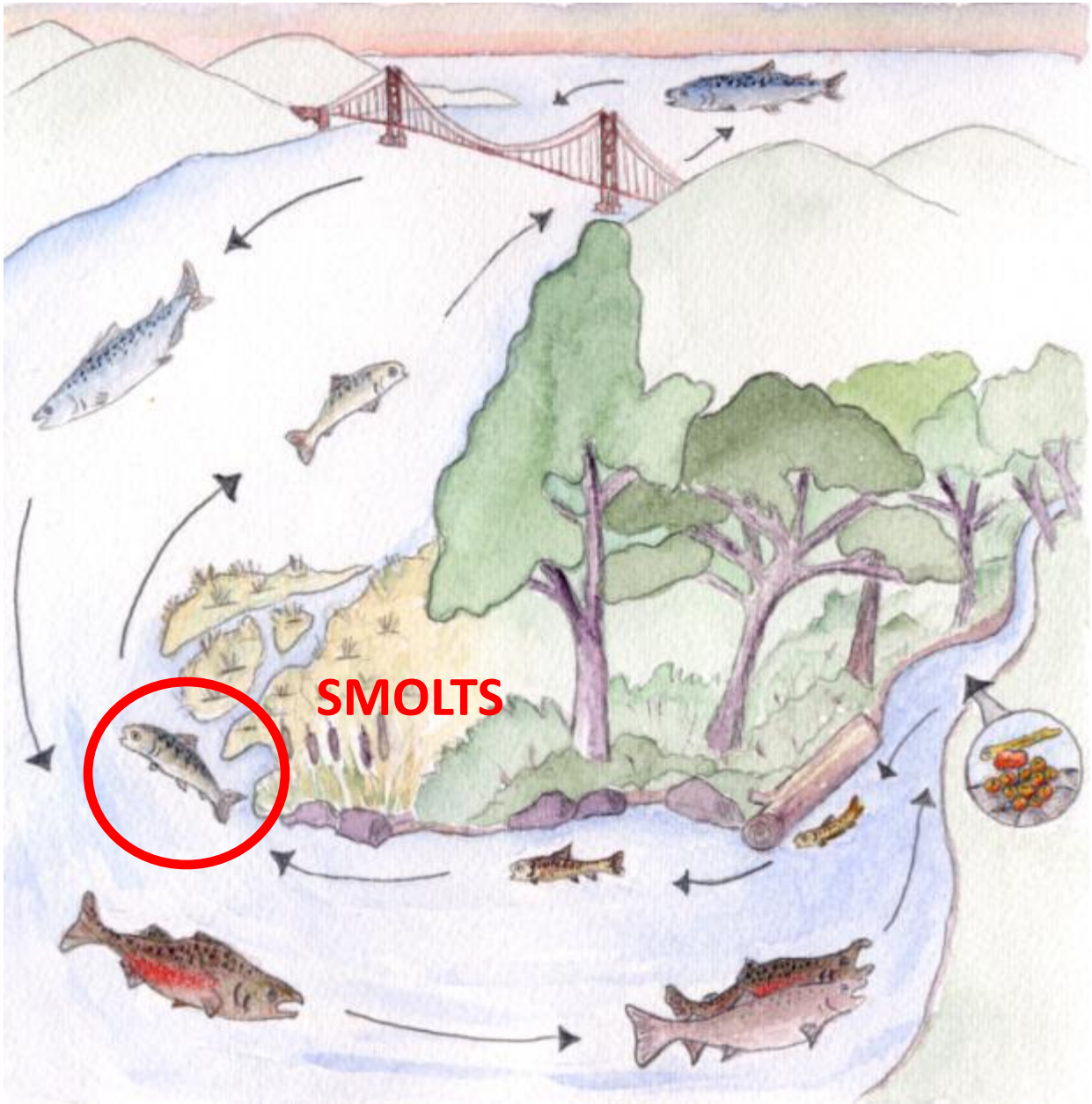
Fisheries Monitoring



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Rotary Screw Trap

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RST captures 67% of total habitat in Napa River watershed

What have we learned about the Napa River ?

- Native fish assemblage is almost entirely intact
- Very few exotic fish species in the freshwater reaches
- High fish species diversity relative to other streams in the region

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What have we learned about steelhead?

- Steelhead smolt production is fairly consistent
- Steelhead smolts tend to be large (> 150mm)
- Steelhead smolt survival to the ocean is relatively high (>50%)

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What have we learned about Chinook?

- Adult Chinook salmon returns are highly variable from year to year
- Chinook salmon are successfully spawning in most years
- The Napa River is producing Chinook salmon smolts in most years

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What are we still looking to learn?

- Population trends for steelhead and salmon
- Does the Napa River support a self-sustaining run of steelhead and Chinook salmon?
- Are restoration efforts working?

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Reports available at:

www.naparcd.org

www.napawatersheds.org

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