

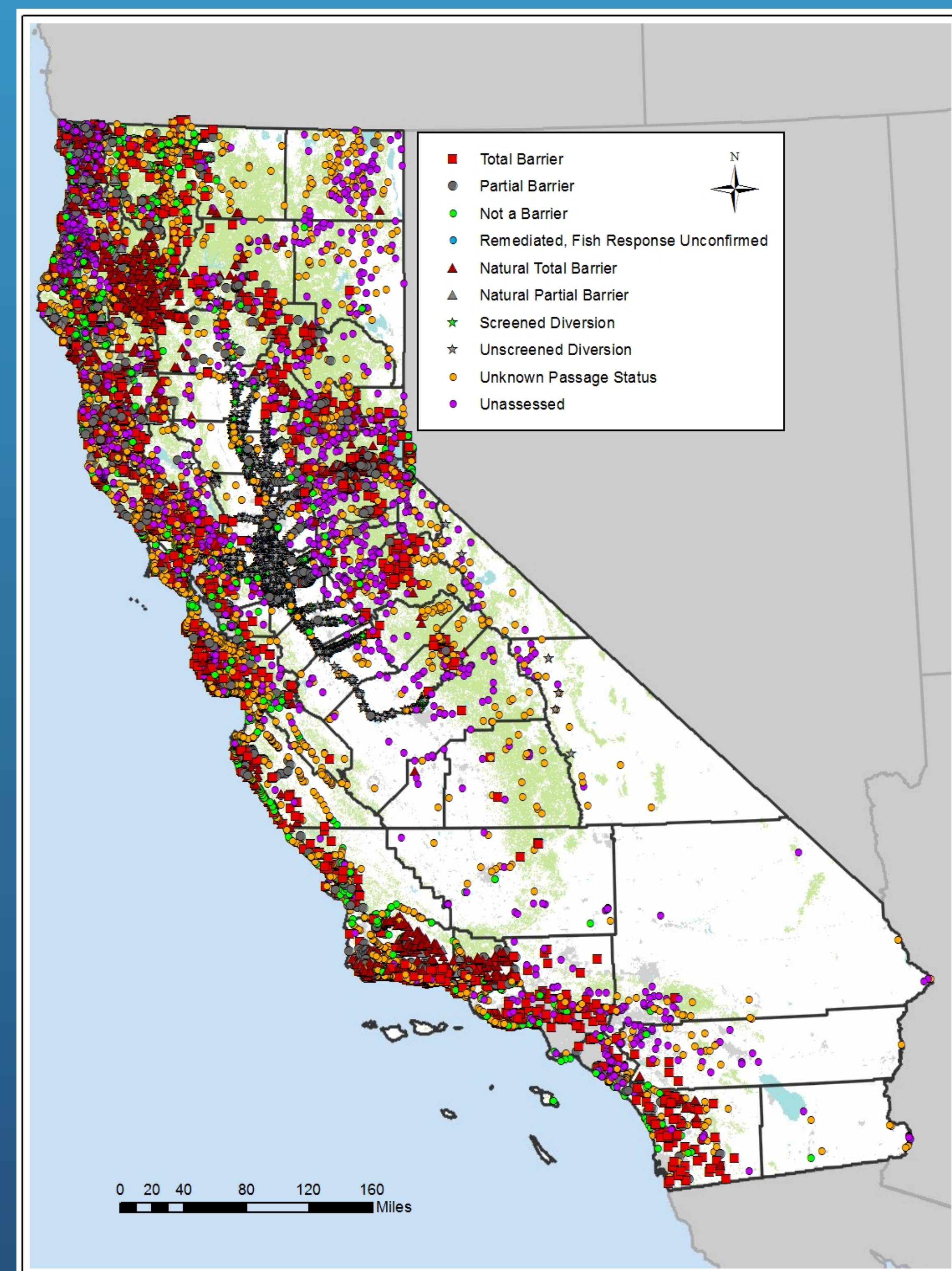
# California Fish Passage Forum

## Anadromous Fish Passage Optimization Tool (APASS)

The Anadromous Fish Passage Optimization Tool (APASS) is a newly developing, user-friendly software that allows optimization of fish barriers based on analysis of potential fish passage barrier removal scenarios. The California Fish Passage Forum is collaborating with Drs. Jesse R. O’Hanley and Paul S. Kemp to develop and refine APASS, which will help strategically prioritize and efficiently implement fish passage barrier remediation throughout the anadromous waters of California.

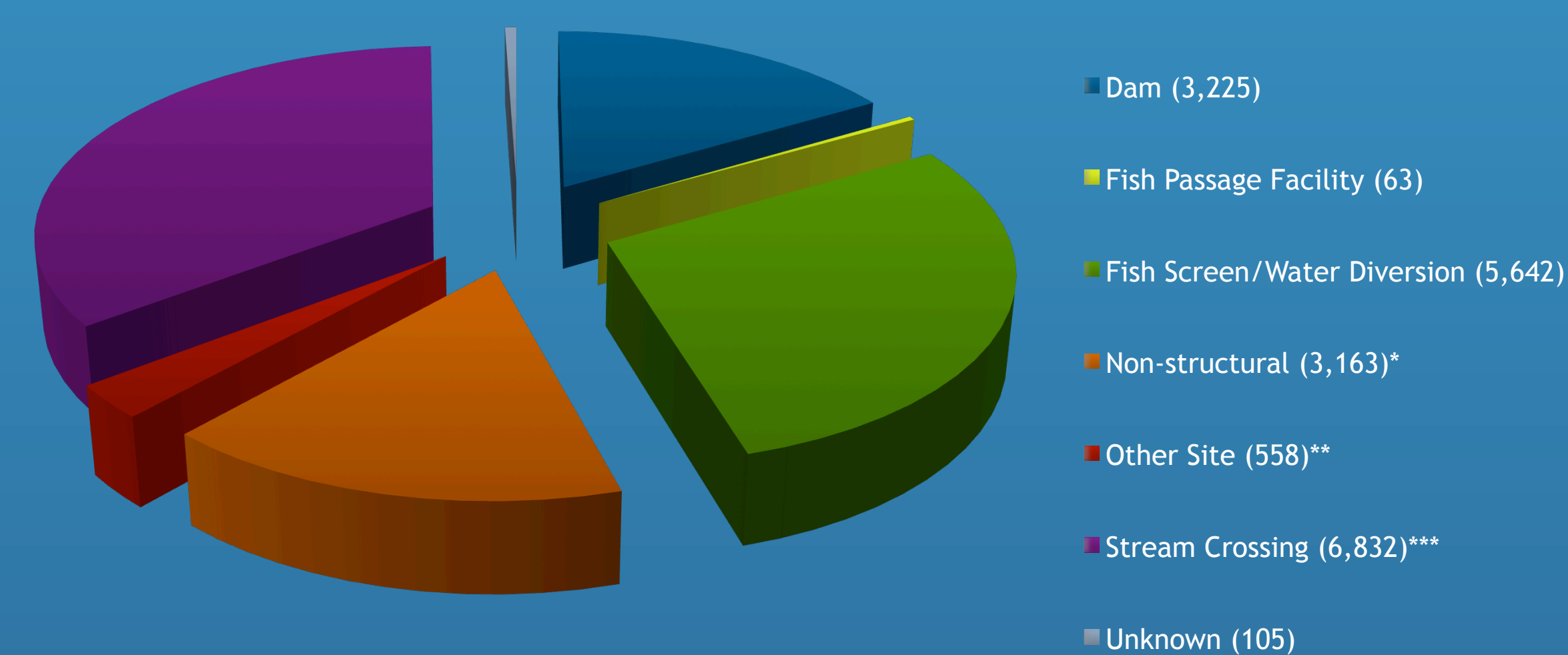
By incorporating existing barrier data (e.g., California Fish Passage Assessment Database), APASS allows users to develop optimal barrier remediation solutions (versus ranking and scoring) based on a wide variety of desired outcomes and potential constraints. The Forum is currently working on strengthening the ability to estimate and balance factors, such as quality of habitat gained, cost constraints, differential species preferences and regionally unique priorities to attain the most efficient fish passage remediation at the local, watershed, regional, and state scale.

As the tool is further refined, it has potential for utility throughout the United States.



California fish passage barriers as identified in the Passage Assessment Database (PAD) as of April 1, 2013.

Fish Passage Barrier Types Common in Anadromous Watersheds in California



Fish Passage Improvement Projects Completed 2006-2012

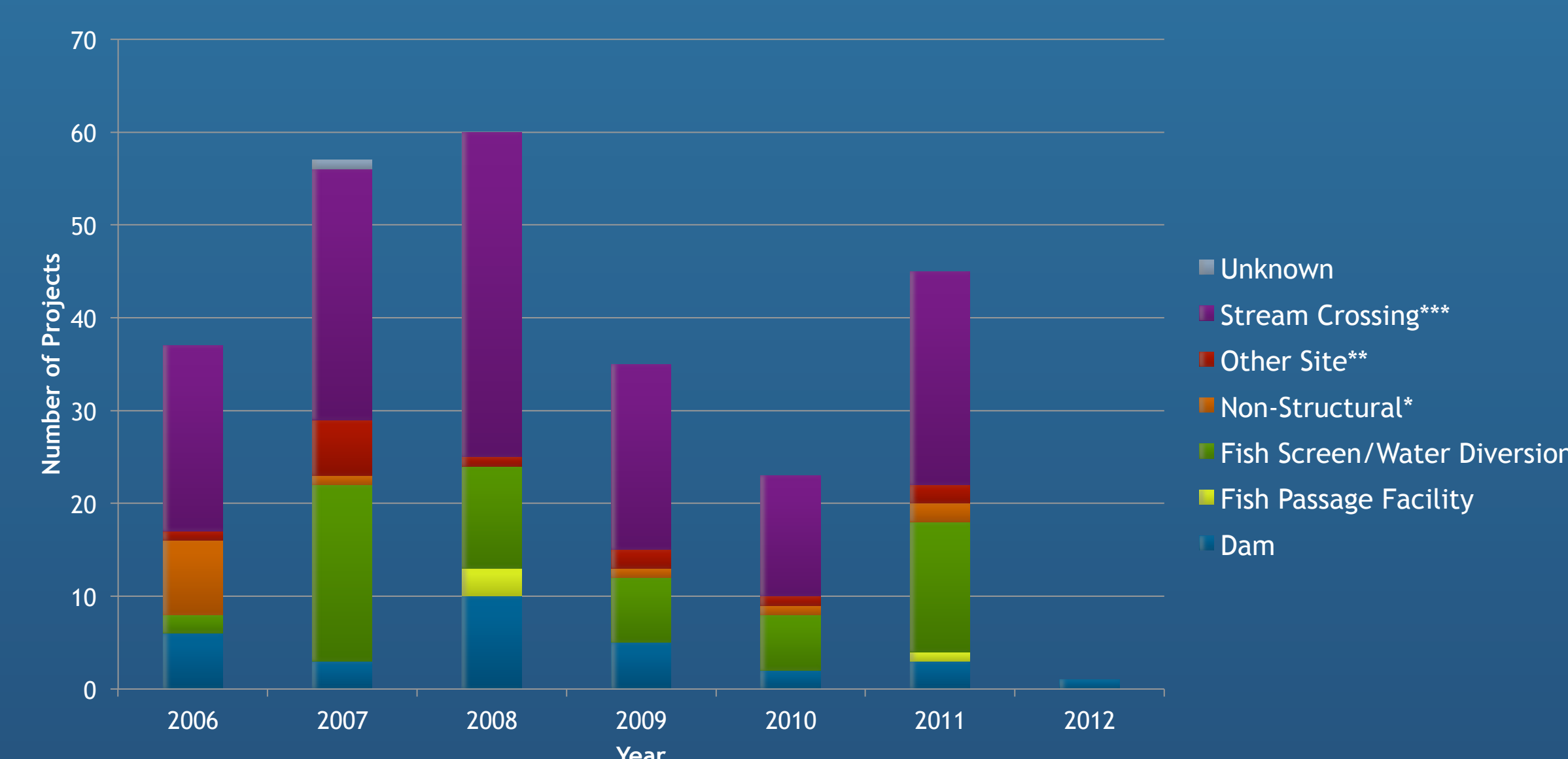


Photo credits: “Before” view of Conner Creek at Conner Creek Road prior to the removal of two culverts (upper left); California steelhead trout (upper right). The Conner Creek project will provide full passage for all life stages of coho salmon and steelhead as a result of removing two culverts. Photos by Caltrout.org.

### Forum Members:

- Pacific States Marine Fisheries Commission
- Caltrans
- California Coastal Conservancy
- California Department of Water Resources
- US Fish and Wildlife Service
- Marin County
- US Army Corps of Engineers – San Francisco
- National Oceanic and Atmospheric Administration – National Marine Fisheries Service
- US Forest Service
- California Department of Fish and Wildlife
- Cal Trout

