

# Passage Assessment Database (PAD)

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Pacific States  
Marine Fisheries Commission



California Fish Passage Assessment Database  
Project

METHODOLOGY AND DATA STANDARDS  
DOCUMENTATION

June 2021

	<u>CONTENT</u>	
Introduction		2
Database Structure		4
Passage Locations		7
Data Quality and Limitations		8
Data Standards		10

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# PAD Implementation Plan

Strategy to review and update PAD

Received input from Forum S&D  
Committee AND is dynamic

Steps:

- I. PAD Data Standards & Methodology Update
- II. Implementation:
  1. Desktop Review
  2. Expert Review

# Desktop Review

“Other” and “Unknown” site types for known barriers

Resolved ~85% of ~125 records\*

Identify and Delete Duplicates\*\*

Stream and Downstream Names

Filled in Nulls\*

Review and correct attributes & locations\*\*

Compare with Other Datasets\*\*

Land Ownership

Consistency review (grouping/spelling errors)\*

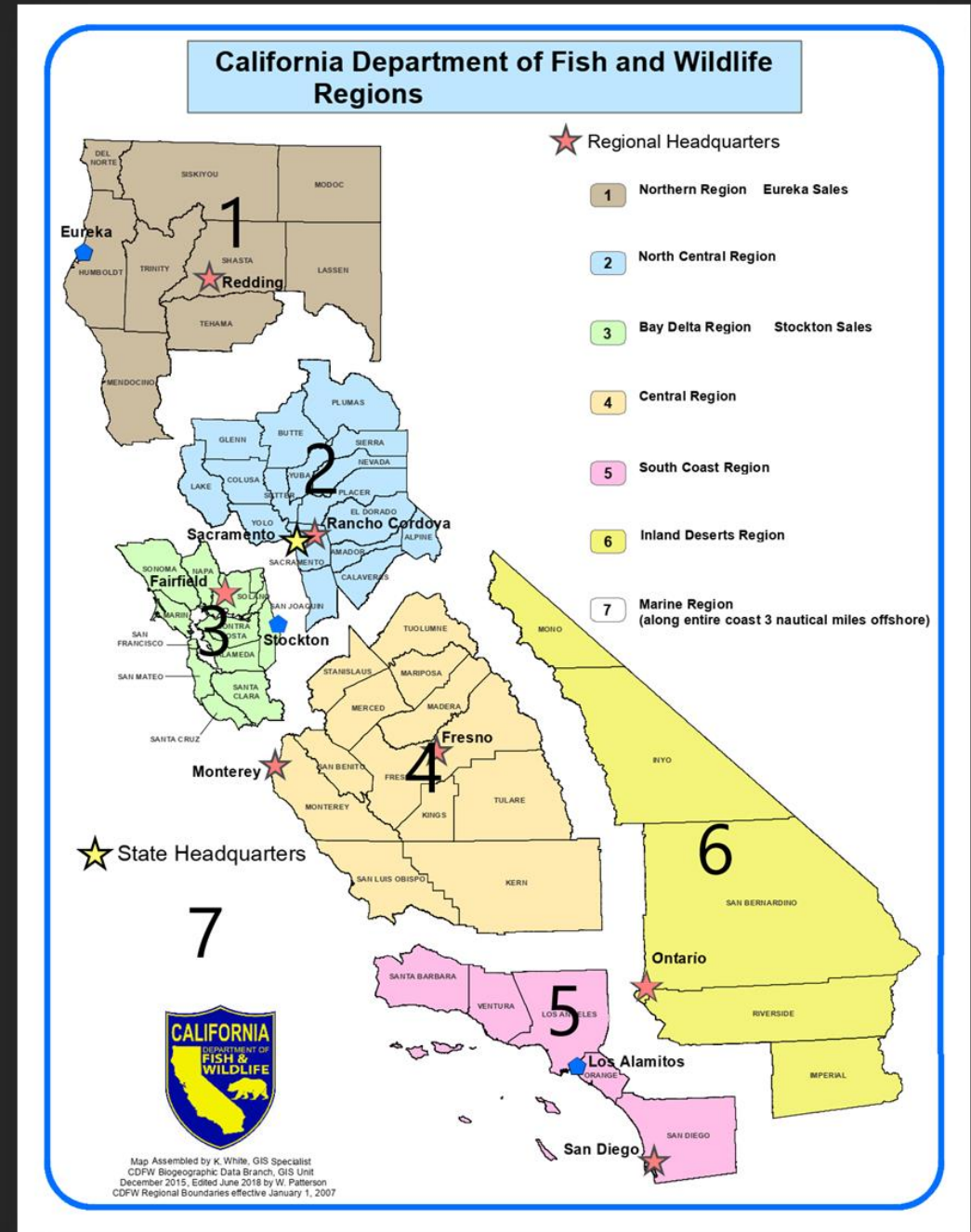
Update to match landownership layers\*\*\*

\* - Completed  
\*\* - In Progress  
\*\*\* - To be completed

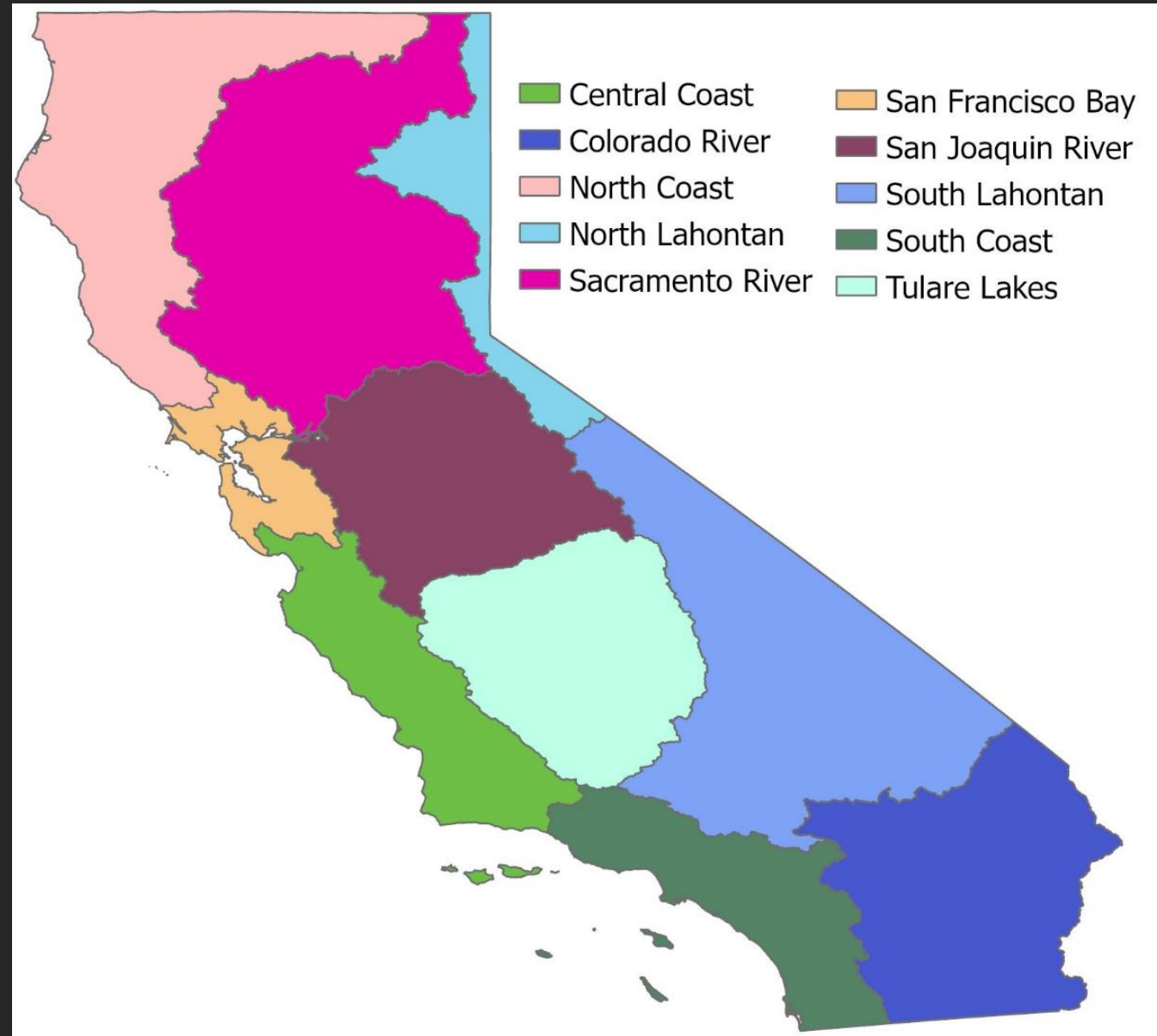
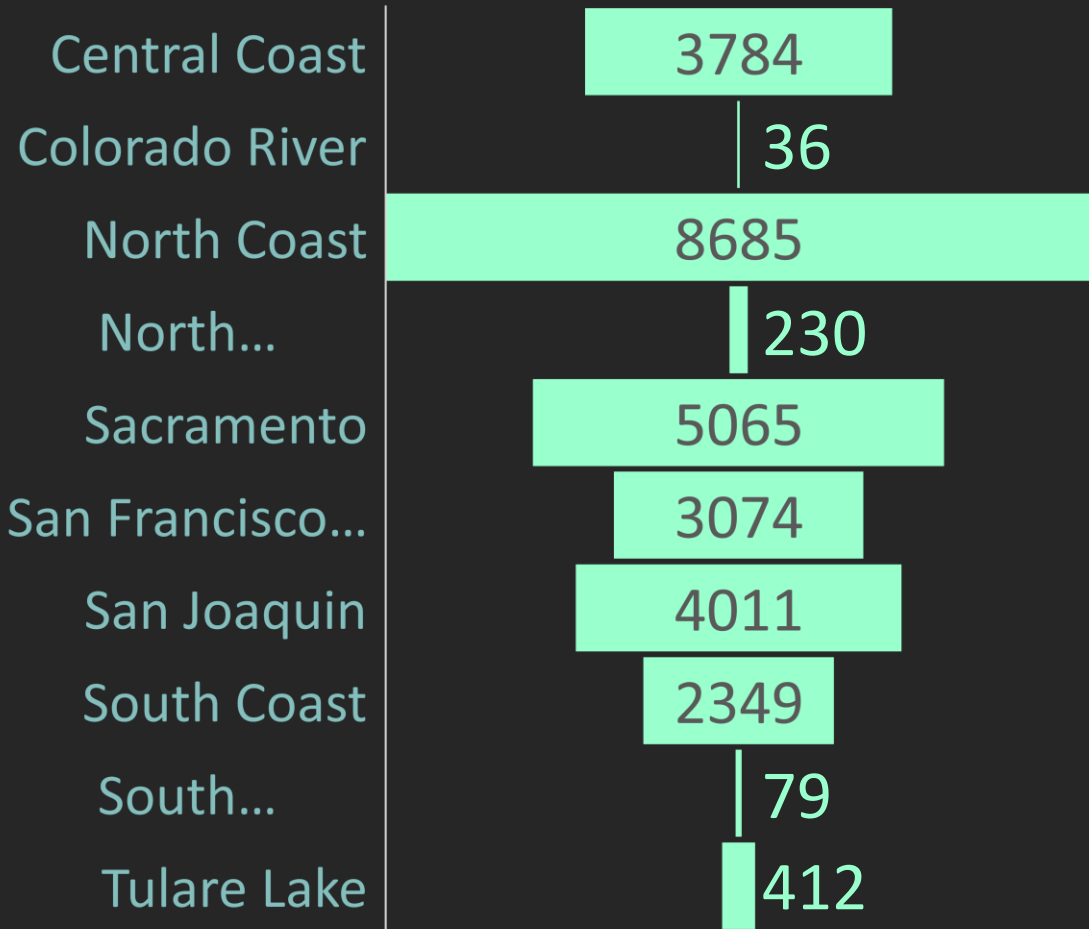
# Expert Review

Starting south and working north, going region by region.

- Focus: Non-Caltrans locations AND within priority (core and candidate) watersheds identified in NOAA Recovery Plans



# PAD Records by CA Hydrologic Region

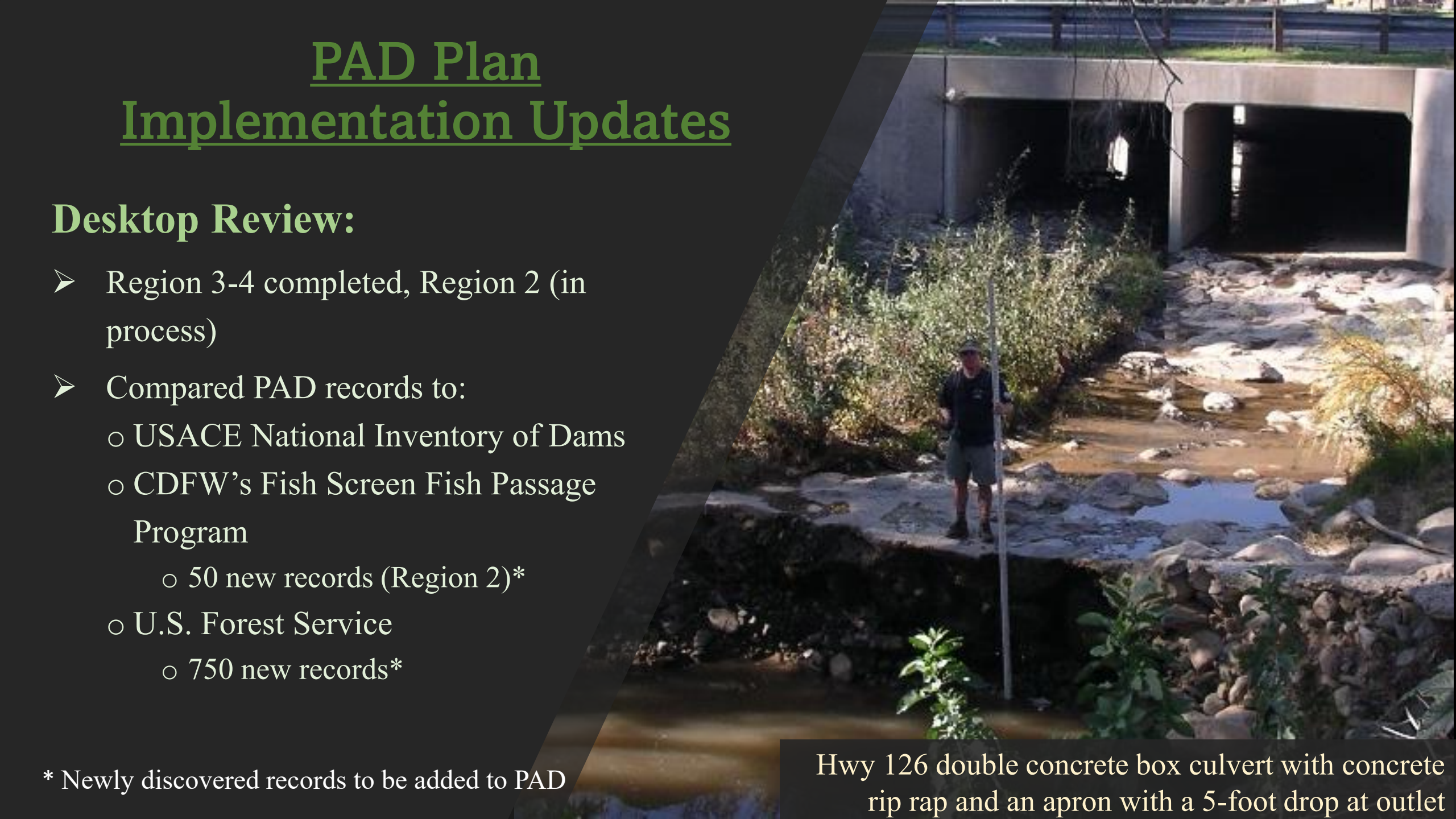


# PAD Plan Implementation Updates

## Desktop Review:

- Region 3-4 completed, Region 2 (in process)
- Compared PAD records to:
  - USACE National Inventory of Dams
  - CDFW's Fish Screen Fish Passage Program
    - 50 new records (Region 2)\*
  - U.S. Forest Service
    - 750 new records\*

\* Newly discovered records to be added to PAD



Hwy 126 double concrete box culvert with concrete rip rap and an apron with a 5-foot drop at outlet

# PAD Plan Implementation Updates (Continued)

## Expert Review:

### Region 4

- Webinar: 36 participants
- Expertise Survey: 18 responses
- Data Review: 29 experts reviewed and/or submitted data

### Region 3

- Webinar: 51 participants
- Expertise Survey: 45 responses
- Data Review:
  - Sent to 1 expert
  - Will reach out to the rest

A photograph of a person in a green shirt and a red and white cap, sitting in a stream and holding a long, yellow measuring tape against a waterfall. The waterfall is cascading over a rocky cliff face, surrounded by lush green vegetation. The scene is brightly lit, suggesting a sunny day.

# Other Updates

- >27,000 Records and counting...
  - 50% Road Crossings
  - 20% Diversions
  - 13% Dams
- Updates & New Barriers
  - >1,650 updated records
  - 175 new records
- PAD updates to CalFish, CDFW BIOS, USFWS
  - September 2023 (BIOS, etc.)
  - November 2023 (PAD Data Portal)



# PAD Outreach

## Presentations:

- Interagency Ecological Program Resident Fishes Fish Passage Subteam
- CDFW's Timberland Conservation and Fire Resiliency Working Group
- CA State Parks
- CDFW Region 3 and 4 Webinars

## Collaborations:

- FishPACs
- Southeast Aquatic Resources Partnership (SARP)
- CA Fish Passage Forum



Unnamed tributary to Mattole River in Humboldt County (PAD ID 765040)  
Photo courtesy of Nicholas Simpson, CDFW

# Utilizing the PAD

- Plan and prioritize barriers for removal
- Enhance coordination among entities
  - Track remediation projects
- Identify where fish passage assessments are lacking and close these data gaps
  - Caltrans has directly funded several hundred assessments because of this





>> Home

## Agency News

- >> [CDFW News Releases](#)
- >> [NOAA Fisheries News](#)
- >> [US Fish & Wildlife](#)
- >> [USFWS Pacific Region](#)



Coastal Conservancy



## Welcome

CalFish has

Species

Habitat and Barriers

Conservation and Management

Reference Layers - Hydrography

Reference Layers - Natural Resources

Reference Layers - Land Ownership

[California Fish Passage Assessment Database](#)

[EPA Surf Your Watershed](#)

[Fire Perimeters](#)

[Impaired Lakes and Rivers 303d - 2002](#)

[Jurisdictional Dams](#)

[\(NFHAP\) Habitat Condition Indices](#)

[National Wetlands Inventory Polygons](#)

[Nonindigenous Vegetation](#)

[Stream Habitat](#)

[Vegetation Classification](#)

## Program Spotlight



## What's New on CalFish

### Passage Assessment Database (PAD) - updated Sept 2023

**PAD** is an ongoing inventory of known and potential barriers to anadromous fish in California.

### MESHR Case Study Reports - updated March 2023

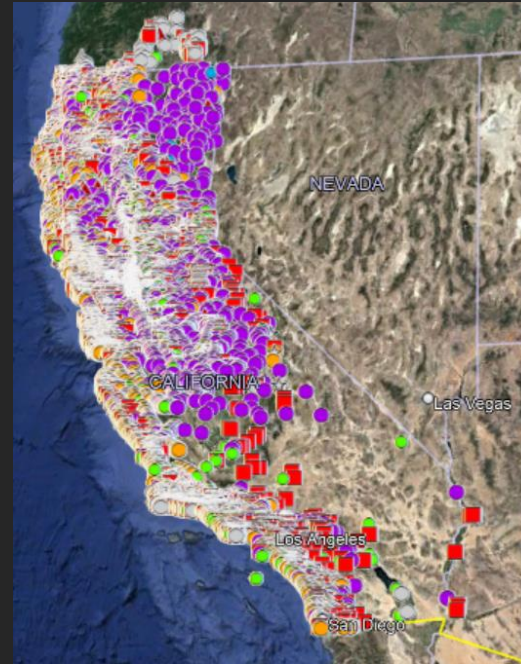
A new [interactive map tool](#) is now available for exploring & downloading Monitoring and Evaluation of Salmonid Habitat Restoration (MESHR) Case Study Reports. Read more about MESHR and the Case Study reports on the [Restoration Projects](#) page.

### Central Valley Juvenile Salmon and Steelhead Monitoring

The CDFW's [Central Valley Juvenile Salmon and Steelhead monitoring programs](#) at Knights Landing and Tisdale Weir now provide **daily** trap catch summaries as [data downloads](#) on CalFish in addition to bi-weekly [summary reports](#).

### California Central Valley Chinook

# PAD in Google Earth



CreatedBy	<Null>
StructOwner	<Null>
LandOwner	<Null>
Notes	Boulder cluster comprised of large and smaller boulders thought to have fallen from canyon walls. This boulder cluster and a downstream one on North Fork Battle are thought to limit passage at all flows and have extensive planning work to design solutions to modify them to allow salmonid passage at low and high flows. There are multiple of other natural barriers on this Creek which are considered to limit passage at low flows.
FishWayType	<Null>
FishWayStatus	<Null>
TriRecom	<Null>
Watershed	Battle Creek
County	Shasta
CalWatHR	Sacramento River
CalWatHU	WHITMORE
CalWatHA	Manton
CalWatHSA	Battle Creek
CalWatNo	550712
NHDCOMID	76957851
NHDCOMMeas	1.538789
LLID	<Null>
BegFt	<Null>
Route	<Null>
PostMile	<Null>
DivOper	<Null>
DivMobile	<Null>
Updated	2/27/2020
Source	<Null>
WebLegend	Natural Total Barrier
Point_X	-121.917151
Point_Y	40.425254
Photo	<Null>

## Hayer Dam Removal (PAD ID: 717225)



2002



2006



Present

Remediated

# Caltrans Priorities

## Priority Fish Passage Remediation Locations

Priority fish passage locations have been determined within the geographies of each FishPAC. FishPAC members nominate barrier locations, and provide science and data related to species diversity, habitat quality, and professional knowledge. This information is used to rank and prioritize Caltrans barriers to advance salmon and Steelhead recovery. The current 88 Priorities, which were reported to the California State Legislature, account for an estimated 670 miles of currently blocked habitat.



1 Broken Kettle Creek



2 Wilson Creek



3 Fox Creek



4 Flannigan Creek



5 Durphy Creek



6 Bear Canyon



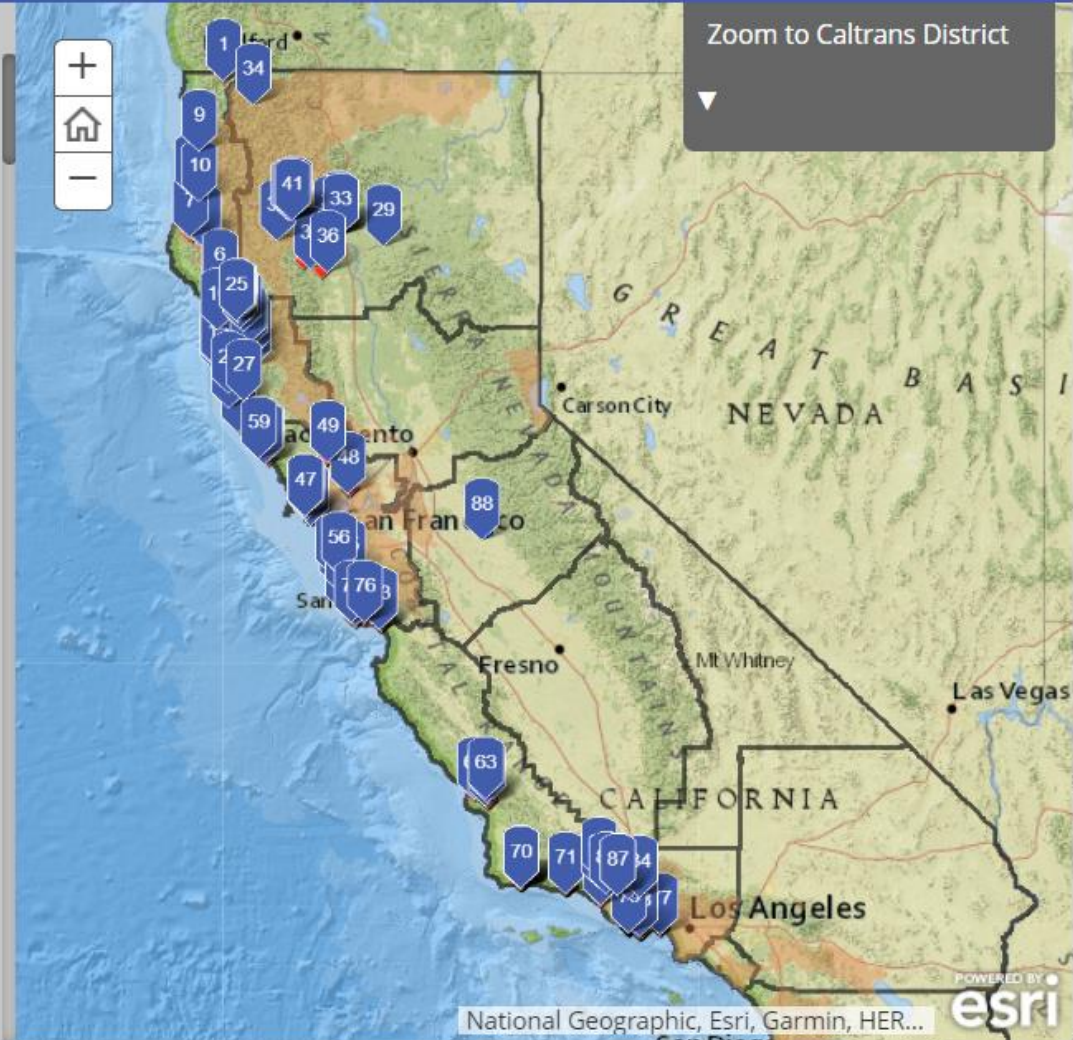
7 Strongs Creek



8 Norton Creek (North Fork Widow White...)



9 May Creek (S PRAIRIE CRK)



# CDFW Priorities

California Department of Fish and Wildlife

## 2023 Fish Passage Priorities (Top Priorities)

9/15/2023

County	Site Name	Water Body	PAD ID
Del Norte	Rowdy Weir	Rowdy Creek	721887
Del Norte	Dominie Weir	Dominie Creek	721903
Mendocino	South Fork Noyo Water Intake Pump	South Fork Noyo River	758253
Siskiyou	Little Springs Creek	Little Springs Creek	759057
Trinity	Hwy 299 Weaverville	West Weaver Creek	720522
Siskiyou	French Creek, Diversion 43	French Creek	736799
Tehama	Deer Creek Stanford Vina Dam Fish Ladders	Deer Creek	704279
Shasta	NF Battle Creek Boulder Cluster Fish Passage	Battle Creek	765178
Del Norte	Morrison Creek Crossing	Morrison Creek	721148
Del Norte	Highway 199	Broken Kettle Creek	712954
Yolo	Fremont Weir	Sacramento River	704343
Sutter	Weir #1 Sutter Bypass	Butte Creek	703959
San Joaquin	Bellota Weir	Mormon Slough	703864
Placer	Hemphill Dam	Auburn Ravine	737315
Sutter	Sunset Pumps Diversion Dam	Feather River	717632
Sutter	Tisdale Weir	Sacramento River	720308
Butte	Iron Canyon Fish Ladder	Big Chico Creek	735085
Butte	One Mile Dam	Big Chico Creek	704198
Marin	Highway 1 Culvert	John West Fork	706059
San Mateo	Adobe Road Crossing	San Pedro Creek	713787
Marin	Larsen Creek Culvert/Ladder	Larsen Creek	707315
Sonoma	Lancel Creek	Lancel Creek	712089
Sonoma	Adobe Road	Adobe Creek	730620
Napa	Caltrans culvert - Highway 29	Ritchie Creek	705459
Napa	Bothe State Park culverts	Ritchie Creek	735060
San Mateo	Bear Creek Barrier #10	Bear Creek	705273
Santa Clara	Old flashboard dam	Los Trancos Creek	705756
San Mateo	West Union Creek Barrier #17	West Union Creek	705768
San Luis Obispo	Marre Weir	San Luis Obispo Creek	700056
San Luis Obispo	San Luis Obispo Creek Hwy 1 above Cuesta Park	San Luis Obispo Creek	700058

California Department of Fish and Wildlife

## 2023 Fish Screen Priorities (Top Priorities)

9/15/2023

County	Site Name	Water Body	PAD ID
Siskiyou	Montague Water Conservation District	Parks Creek	766652
Mendocino	Potter Valley Project	Eel River	766653
Tehama	Los Molinos Mutual Water District	Mill Creek	704274
Tehama	Stanford Vina Ranch Irrigation (SVRIC) Main Diversi	Deer Creek	704277
Tehama	Stanford Vina Ranch Company (SVRIC) Main Diversi	Deer Creek	704280
Shasta	Churn Creek Bottom Diversion at Bonnyview	Sacramento River	703102
Shasta/Tehama	Keswick Dam to Red Bluff	Sacramento River	758946
Shasta/Tehama	Keswick Dam to Red Bluff	Sacramento River	758947
Humboldt	Humboldt Bay Municipal Water District's (HBMWD)	Mad River	717658
Siskiyou	Above IGH Unscreened Diversions - Beswick Diversi	Klamath River	766654
Siskiyou	Above IGH Unscreened Diversions - Owens Island D	Klamath River	766655
Siskiyou	Above IGH Unscreened Diversions - Home Field Div	Klamath River	766656
Siskiyou	Above IGH Unscreened Diversions - Owens Ditch	Klamath River	766657
Siskiyou	Above IGH Unscreened Diversions - KL-5	Klamath River	766658
Siskiyou	Above Iron Gate Hatchery (IGH) Diversion (Relocatic	Klamath River	766660
Siskiyou	Above Iron Gate Hatchery (IGH) Diversion (Relocatic	Klamath River	765702
Siskiyou	Above Iron Gate Hatchery (IGH) Diversion (Relocatic	Klamath River	766661
Tehama	Cone Kimball Dam - Deer Creek	Deer Creek	704281
Sutter	Sunset Pumps Diversion Dam	Feather River	703416
San Joaquin	Stockton East Water District's Bellota Intake Structu	Calaveras River	703855
Sutter	Meridian Farms Meridian/Drexler	Sacramento River	703622
Yuba	Yuba Brophy (South Diversion)	Yuba River	703766
Butte	M&T/Llano Seco Ranches Fish Screen Facility	Sacramento River	704346
Sacramento	Natomas Central Mutual Water Company Elkhorn P	Sacramento River	700269
Sacramento	Natomas Central Mutual Water Company Riverside	Sacramento River	700247
Napa	Napa Sonoma Marsh	Mud/Napa Slough	704150
Napa	Napa Sonoma Marsh	Napa River Unit	704152
Solano	Grizzly Island Wildlife Area	Montezuma Slough	701168
Solano	Pond 1, Napa Sonoma Marsh	Napa River Unit	704129

# Thank you! Any Questions?



Spider excavators remove a dam on San Juan Creek in Cleveland National Forest. Photo: Julie Donnell, USFS

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PAD on CalFish: [www.calfish.org/pad](http://www.calfish.org/pad)