



Fish Passage Senate Hearing November 19th, 2019



SB 857 (Kuehl, 2006)

Sec 3. Article 3.5 (Streets & Highways Code)

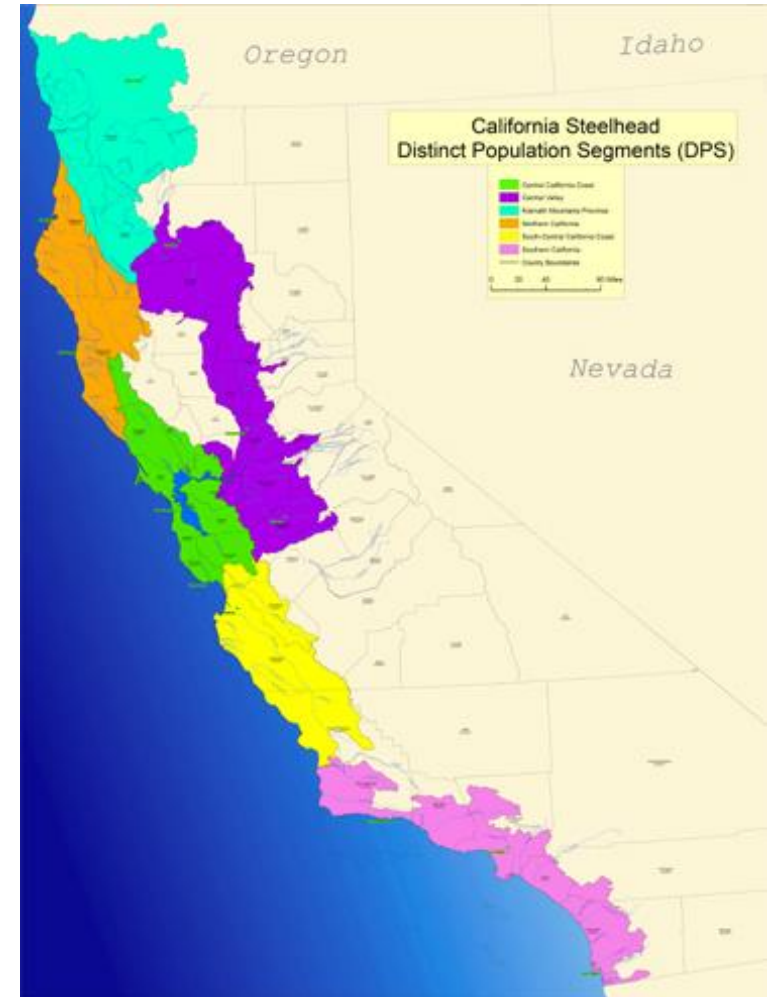
- Prohibits actions which extend the life of a barrier to salmon or Steelhead.
- Projects may not create new barriers.
- Report on annual progress.





Barrier Status (2006 to Present)

- Remediation of **47** provides access to **793 miles** of habitat
- **568** known current barriers
 - **27** Active projects to provide access for **166.47 miles** of habitat
 - **68** Priorities for funding to provide access to **374.13 miles** of habitat.





Assessment Status (2006 to Present)

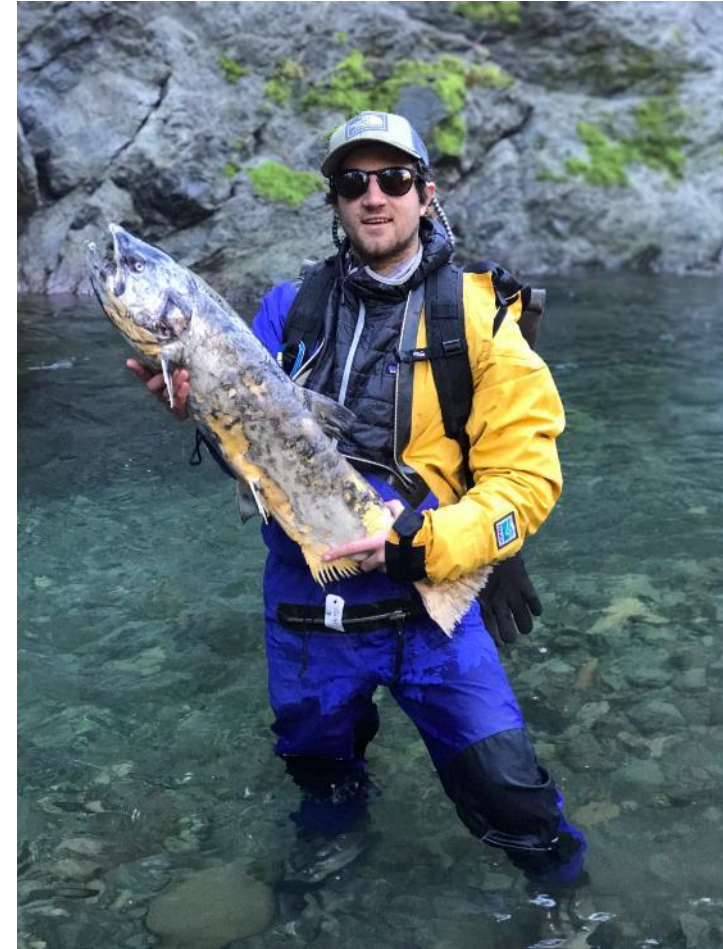
- **8,028** total road/stream crossings identified
 - **1,883 Completed** assessments
 - **1,057 Partially Completed** (second pass) assessments
 - **5,088 Needed** Reconnaissance (first pass) assessments





2018 Report Summary

- **5** Completed remediation locations
 - **~31.39 miles** of improved access for salmon and Steelhead
- **167** Assessments Completed
 - **14** Identified new barriers,
 - **85** Non barriers
 - **68** Need Detailed assessments to determine barrier status
- Establishment of Central Valley Fish Passage Advisory Committee





Innovative Engineering Solutions

- Preferred long-term solutions for small bridges.
- Pre-design small bridges.
- Funding of fish passage engineers at the California Department of Fish and Wildlife and National Marine Fisheries Service.
- Interagency Fish Passage Engineering Meetings



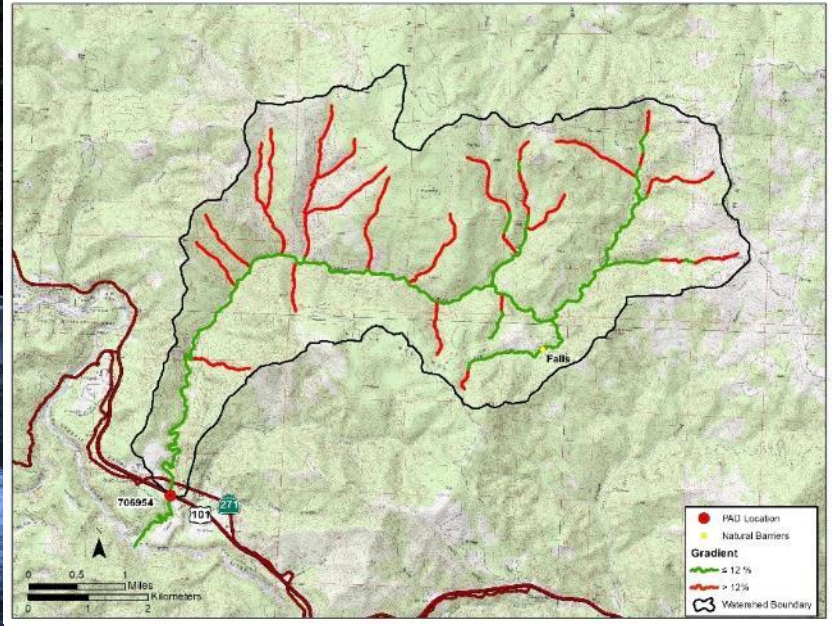
Typical State Highway Fish Barriers



Typical Small Bridge Remediation



Cedar Creek – Mendocino County, U.S. 101



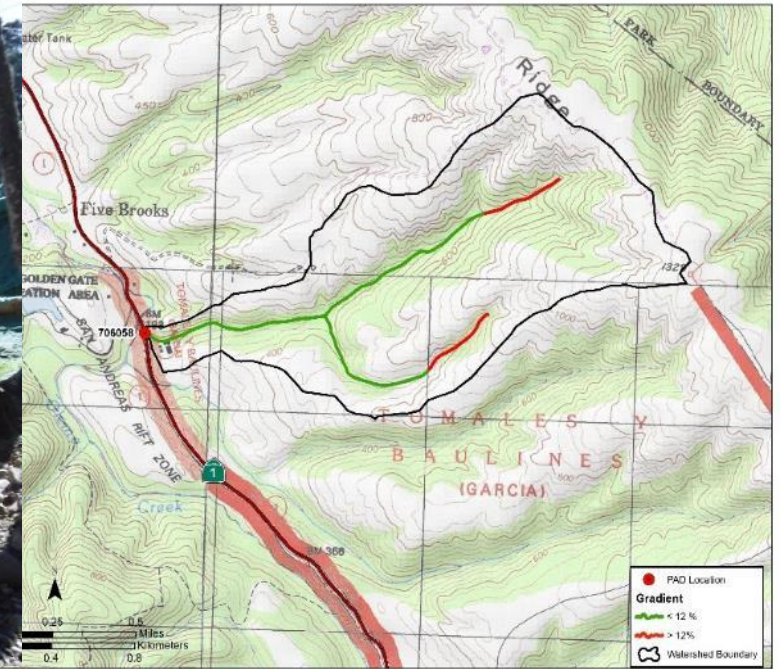
Species Northern CA Steelhead (Threatened), Southern OR/Northern CA Coast Coho (Threatened), and CA Coastal Chinook (Threatened), Pacific Lamprey

Habitat Improved access to an estimated 11.91 miles of upstream habitat





Giacomini Creek – Marin County, SR 1

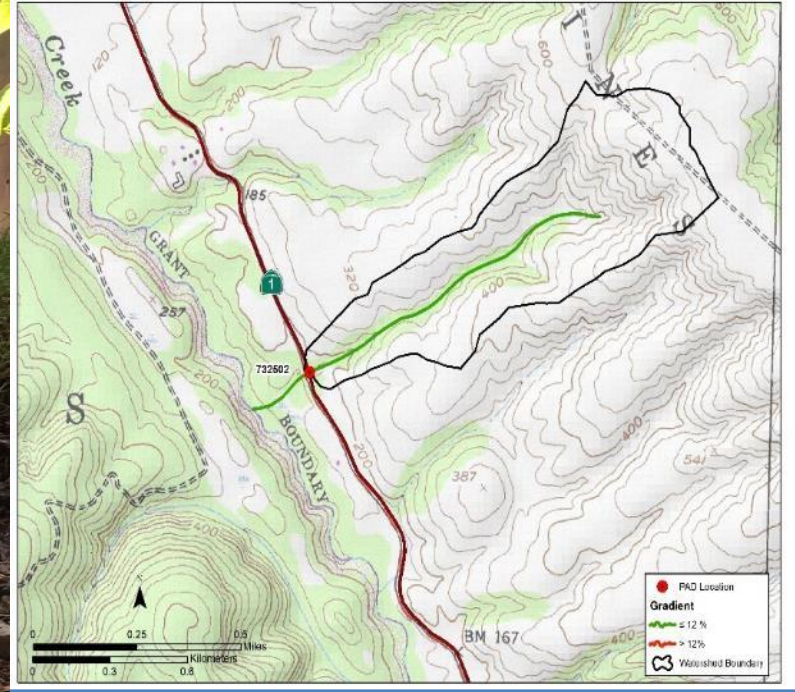


<p>Species</p>	<p>Central California Coast Steelhead (Threatened), Central California Coast Coho (Endangered).</p>
<p>Habitat</p>	<p>Improved access to an estimated <u>1.56 miles</u> of upstream habitat</p>





Tributary to Olema Creek – Marin County, SR 1



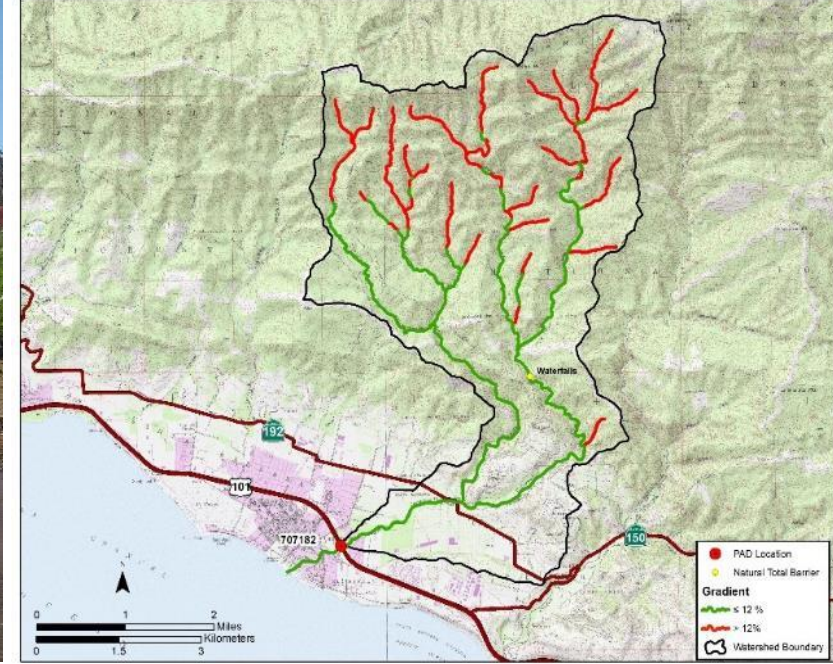
Species Central California Coast Steelhead (Threatened), Central California Coast Coho (Endangered).

Habitat Improved access to an estimated 0.79 miles of upstream habitat





Carpinteria Creek – Santa Barbara County, U.S. 101

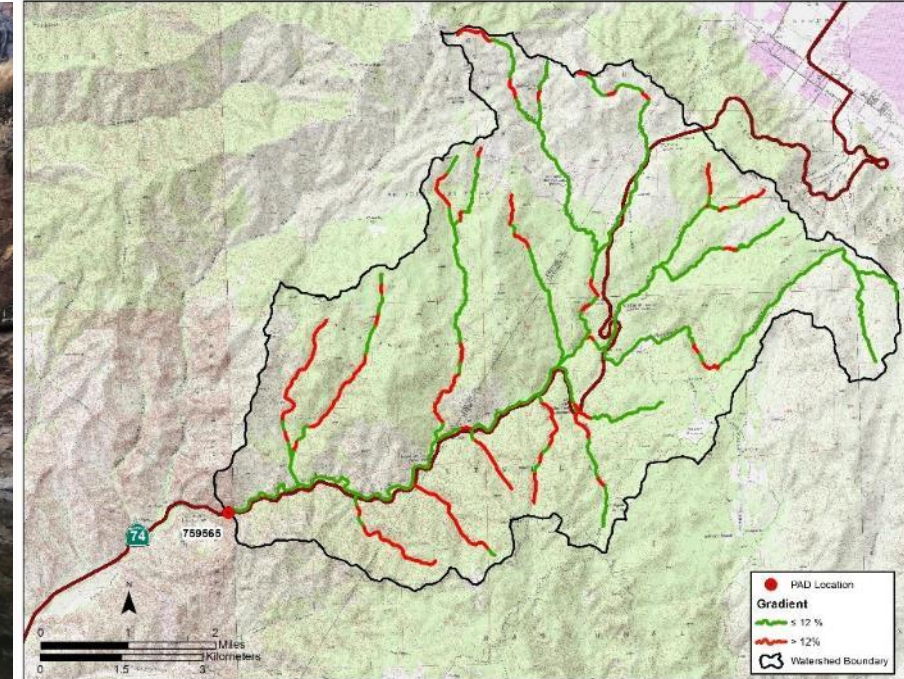


Species	Southern California Coast Steelhead (Endangered).
Habitat	Improved access to an estimated <u>12.22 miles</u> of upstream habitat





San Juan Creek– Orange County, SR 74



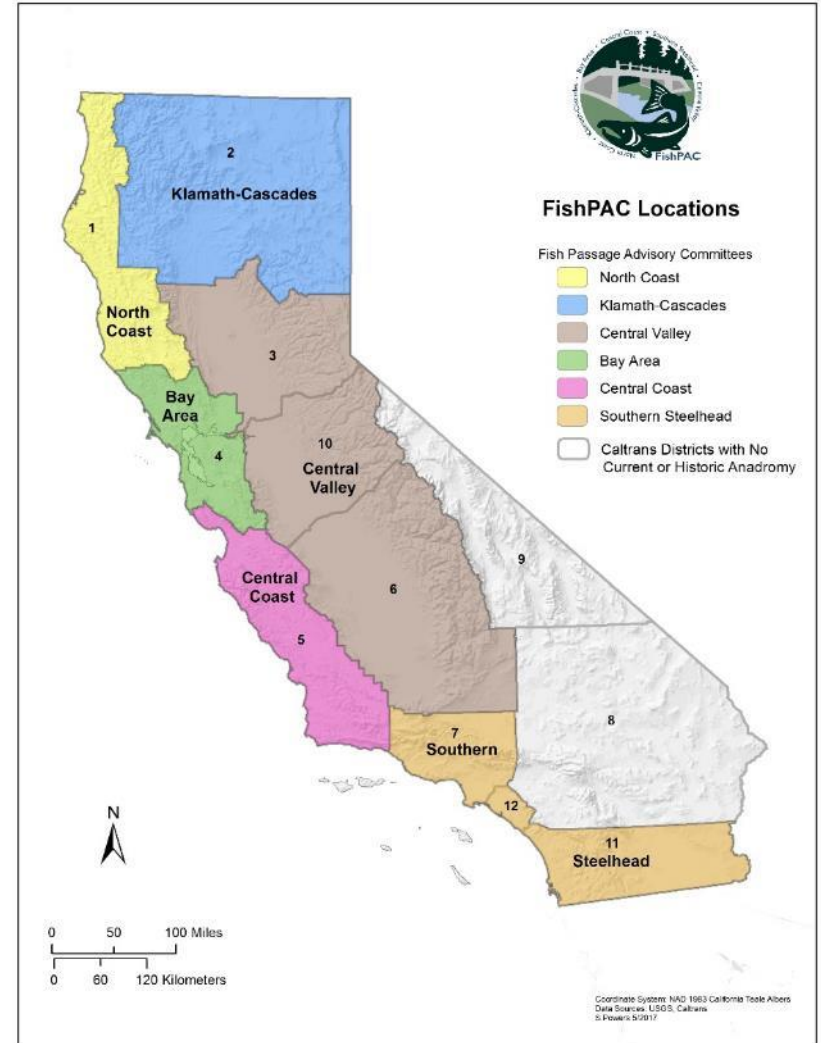
Species	Southern California Coast Steelhead (Endangered).
Habitat	Improved access to an estimated <u>4.91 miles</u> of upstream habitat





External Partnering

- Continue great work with 6 Fish Passage Advisory Committee partners





Funding and Implementation

- Costs of barrier remediation can be high
 - \$8-10 million
 - Can take 5-7 years
- Standard designs to accelerate bridge construction
- Mitigation credits
- State Highway Operation and Protection Program (SHOPP)
- Assessing culverts at priority locations



Looking Forward

- Transportation Asset Management Plan
- State Highway System Management Plan
- Align priority locations with
 - Transportation improvements
 - Mitigation credits
 - Stormwater permit requirements
 - Federal and other funding opportunities



Summary

- Caltrans progress
- Accelerating performance
- Fully integrating Fish Passage into project delivery.

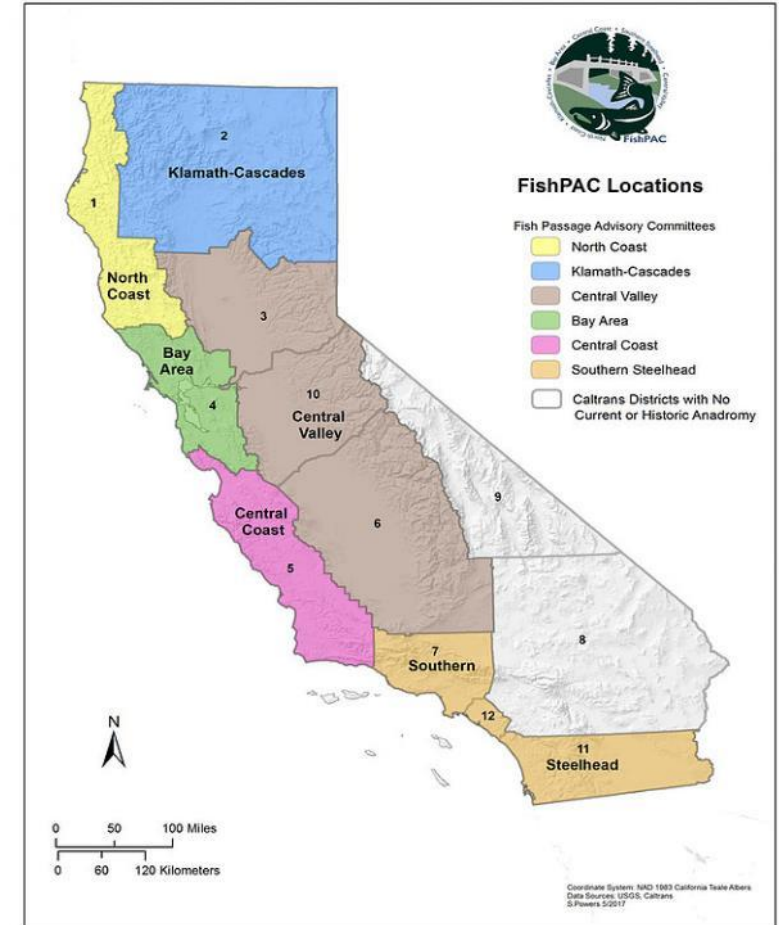


Fish Passage Advisory Committees

External Partnering

Six Fish Passage Advisory Committees

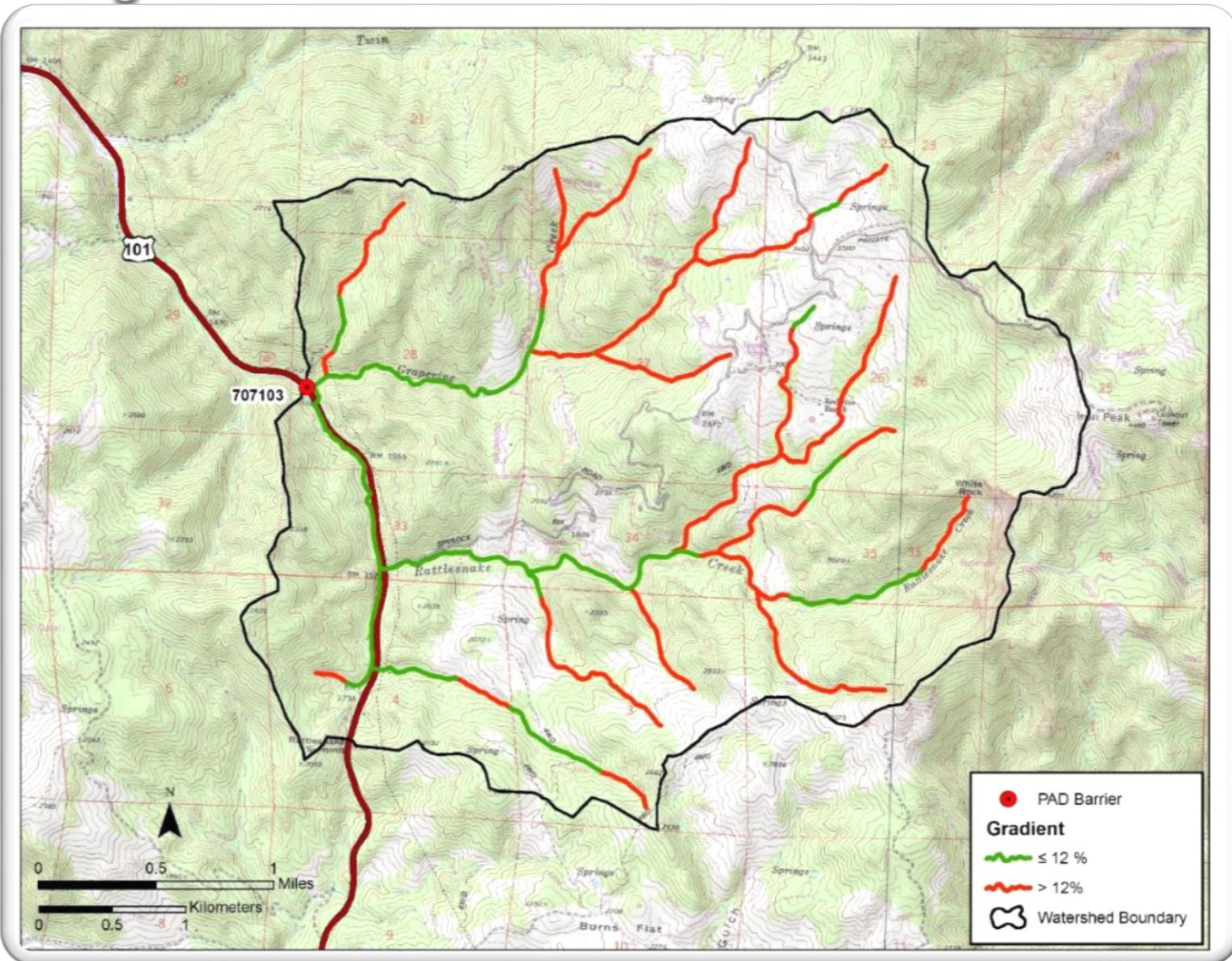
- D1 – North Coast (2003)
- D2 – Klamath-Cascades (2007)
- D4 – Bay Area (2016)
- D7, D11, D12 – Southern Steelhead (2017)
- D5 – Central Coast (2017)
- D3, D6, D10 – Central Valley (2018)





Prioritization

- **Species Diversity**
 - Salmon/Steelhead species
 - Threatened and endangered (T&E) Listing Status
 - Other T&E or common Species
- **Habitat**
 - Quality of Habitat
 - Quantity of Habitat
- **Other Professional Knowledge**





Innovations for Improved Science and Data



FISHPAC



Fish Passage Barrier and Habitat Evaluation Form

This evaluation form is intended for use by Caltrans staff and state and federal Fish Passage Advisory Committees (FishPAC) partners, to evaluate habitat and other information specific to field reviews and information for Caltrans fish passage barriers. This form can be used for evaluating an identified barrier or a location identified for an assessment, in order to evaluate the suitability of habitat in relation to the road/stream crossing or barrier. This form will provide information in consideration of the biological potential of up and downstream habitat in relation to either suitable or unsuitable habitat. Findings will be submitted to the Passage Assessment Database.

Investigator and Location Information			
Evaluator: <i>(name and contact information)</i>	M. Molnar, J. Miller-Schulze	Date:	6/18/19
Project Location: <i>(county-route-post mile)</i>	MEN 101 pm 79.2	PAD ID:	707103
Site/Stream/Tributary Name: <i>(creek or project name)</i>	Rattlesnake Creek	Temperature: <i>(note if C/F)</i>	unknown
Fish Passage Barrier Location Description: <i>(fully describe existing facility)</i>	This is and ~18-20 ft structure that confines the channel and causes sheet flow during low flow and likely high velocities during high flow.		
Watershed Map: <i>(to include run/rise model of entire watershed area to estimate likely accessible habitat)</i>			
1) Is there any visual evidence of damage to the existing culvert or bridge? <i>(if yes, take photos and briefly explain in notes)</i>	Yes	<input type="radio"/>	No <input checked="" type="radio"/>
2) Is there an accumulation of sediment or debris in, or upstream, of the facility? <i>(if yes, take photos)</i>	Yes	<input type="radio"/>	No <input checked="" type="radio"/>
3) If applicable, are there any associated grade, or velocity, control structures? If yes, are any of them damaged, or impaired? <i>(Please provide notes to describe fish facilities, or damage)</i>	Yes	<input type="radio"/>	No <input checked="" type="radio"/>



Partnering

FishPAC Website www.cafishpac.org

Engineering Intranet | cafishpac

https://www.cafishpac.org/engineering-intranet

CALIFORNIA FISH PASSAGE ADVISORY COMMITTEE

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Home The 6 FishPACs Connectivity Engineering Regs/Permitting Science/Data Training Intranet

Interagency Fish Passage Engineering Group Intranet

Interagency Fish Passage Engineering Group

The Interagency Fish Passage Engineering Group is a group of fish passage engineering professionals that coordinate among agencies and engage in training and research activities to advance effective fish passage designs.

[Fish Passage Engineering Roster](#) (12 June 2019)

Robin Amatya, Caltrans	Manuel Morales, Caltrans
Dave Bhalla, Caltrans	Mark Morancy, Caltrans
Chuck Carlson, Caltrans	Kristine Pepper, Caltrans
Sherry Constancio, Caltrans	Alison Plant, Caltrans
David Crowder, NMFS	Kathleen Reilly, Caltrans
Maria Deyoe, Caltrans	Chris Rockey, Caltrans
Phi Dinh, Caltrans	Ryan Stiltz, Caltrans
Ben Erchul, Caltrans	Bruce Swanger, Caltrans
Tom Fisher, Caltrans	Margaret Tauzer, NMFS
Yuanzheng Ge, Caltrans	Steve Thorne, Caltrans
Kristin Inkrott, Caltrans	Craig Tomimatsu, Caltrans
Khai Leong, Caltrans	Rick Wantuck, NMFS
Hongloan Luong, Caltrans	John Wesling, CDFW
Rick Macala, CDFW	Lyn Wickham, Caltrans
Jonathon Mann, CDFW	Melisa Wiedemeier, Caltrans
Jason McOmber, Caltrans	John Wooster, NMFS
Kerry Minz, Caltrans	Prakash Yadav, Caltrans

https://www.cafishpac.org/engineering_intranet/lightbox: dataitem ju5qmqzn

MapsGalaxy

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https://www.cafishpac.org

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Home The 6 FishPACs Successes Fish Wildlife Engineering Permitting Science/Data Training More

CALIFORNIA FISH PASSAGE

MapsGalaxy

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Caltrans Fish Passage Priorities, Active Projects and Remediations

A CalFish Story Map

Priority Locations Active Locations Completed Locations

1 Unrained arto to Morrison Creek	2 Broken Kettle Creek	3 Wilson Creek
4 Fox Creek	5 Durphy Creek	6 May Creek (S PRARIE CROK)
7 Innow Gulch	8 High Rock Gulch	9 Mallo itars Creek

Zoom to Caltrans District

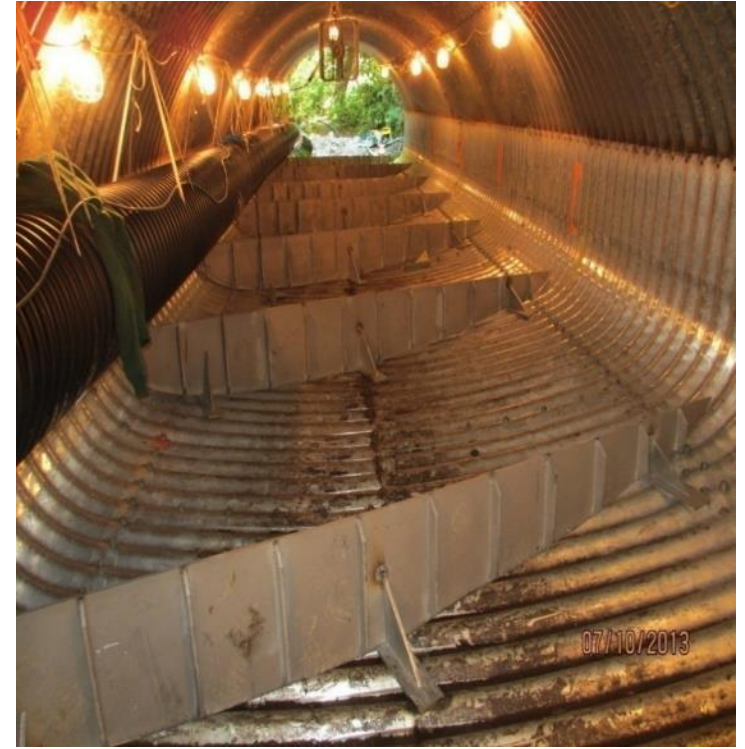
Content may not reflect National Geographic's current...



Working together across disciplines

- Caltrans Multi-Divisional Coordination
- Bridges and Biology Workshops with agency partners
- Standardized Spanning Solution
- Time and cost benefits





Typical Hydraulic (Partial/Temporary) Remediation



Fort Goff Creek – Siskiyou County, SR 96



Species	Northern CA Steelhead (Threatened), Southern OR/Northern CA Coast Coho (Threatened), and CA Coastal Chinook (Threatened), Pacific Lamprey, Klamath River lamprey
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Habitat	Improved access to an estimated <u>4 miles</u> of upstream habitat
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