

FINAL

**ANNUAL REPORT TO THE LEGISLATURE
FOR YEAR 2009**

**COASTAL ANADROMOUS FISH PASSAGE
ASSESSMENT AND REMEDIATION
PROGRESS REPORT**

Prepared:

September 2010

**Prepared by the California Department of Transportation
Division of Environmental Analysis**

Progress Report January to December 2009 Purpose

This is the fifth annual report prepared in accordance with Article 3.5 of Chapter 1 of Division 1 of the Streets and Highways Code (SB 857, Kuehl) that took effect January 1, 2006. This law directs the California Department of Transportation (Department) to prepare an annual report describing the status of the Department's progress on locating, assessing, and remediating project-related barriers to fish passage. SB 857 also directs the Department to report its progress on developing a programmatic environmental review process to streamline the permitting process for remediating fish passage barrier projects.

This report describes the Department's fish passage activities between January 1 and December 31, 2009. On September __, 2010, Director McKim signed the *Memorandum of Understanding, A coordinated Approach to Restoring Fish Passage for Anadromous Salmonids in Coastal Watersheds through Creation of Fish Passage Forum*, making the Department a full signatory member of the Fish Passage Forum.

The Department issued a policy memorandum on July 7, 2006, from Jay Norvell, Chief, Division of Environmental Analysis (DEA), to District Deputy Directors and others. That memorandum set SB 857 related policy, provided a copy of SB 857 and provided fish passage assessment and reporting protocols. The DEA maintains internal intranet web pages that contain copies of various policy memoranda and guidance, including a page for fish passage assessment, an annual SB 857 reporting page and a permit streamlining page related to developing a programmatic environmental review process. These pages provide easy access to policy and guidance.

The Department issued a policy update memorandum on May 6, 2010, from Richard Land, Chief Engineer, updating program and reporting requirements, plan updates and new reporting schedules. The memorandum formally incorporates the elements of the Kempton/Eng agreement, directs districts to update fish passage plans, and provides direction for the development of district fish passage remediation.

Changes in Annual Reporting and Approach

The Department is making changes to the annual report to address the elements of the agreement between Assemblymember Eng (letter attached), Chair of the Assembly Transportation Committee, and Director Kempton dated May 26, 2009. The twelve changes are:

Requested Change: Prepare an annual report that describes fish passage remediation work completed in the prior calendar year, January 1 to December 31. Include schedules and locations for programmed remediations.

Implementation: Tables 1 and 2 below provide locations of remediations and project schedules for the calendar year from January 1, 2009 to December 31, 2009.

Requested Change: Define a fish passage barrier remediation project as a project that uses federal or State funding and is programmed through either the State Transportation Improvement Program (STIP) or through the State Highway Operation and Protection Program (SHOPP). Include new construction, rehabilitations, repairs, retrofits, alterations or maintenance projects.

Implementation: The Department directed that districts use the new project definition in project development.

Requested Change: Identify partial or complete fish passage "barriers" using the definitions in the DFG manual: "Fish Passage Evaluation at Stream Crossings."

Implementation: The Department directed that districts follow existing policy that incorporates DFG guidance into the Department's fish passage assessment and reporting protocols.

Requested Change: Provide fish passage assessment data to project design engineers.

Implementation: The Department directed that districts follow standard practice and policy to assess potential fish passage barriers and assure that new designs do not impede fish passage.

Requested Change: Provide fish passage barrier assessments to DFG so that assessments may be included in their database.

Implementation: The Department directed that assessments are shared with DFG for input into the DFG CalFish database system. This database system includes the Passage Assessment Database (PAD) which was designed in association with the Fish Passage Forum to house and share fish passage assessment data.

Requested Change: Develop remediation plans in consultation with DFG.

Implementation: The Department directed that districts consult with DFG following standard practice during project development.

Requested Change: Design remediation elements during the project design phase.

Implementation: The Department directed that districts remediation design occurs during project design.

Requested Change: Construct remediation elements.

Implementation: The Department directed that construction of remediation elements that are included in the final project design are standard project delivery activities.

Requested Change: Provide notice to DFG when barriers are remediated.

Implementation: The Department verified that notice of project completion is typically a requirement of permits and that the Department continues to notify DFG as required in permits.

Requested Change: Continue assessing culverts that are not part of planned projects, through the use of grant funding to assist long-range planning efforts.

Implementation: The Department continues to seek funding for nonproject remediations.

Requested Change: Work with DFG to jointly identify high-priority, transportation related, fish barriers by July 1, 2010, and annually thereafter.

Implementation: The Department identified current transportation related priorities shown in Table 4 below by July 1, 2010 and continues working with DFG to develop statewide fish passage barrier priorities.

Requested Change: Use available federal funds received pursuant to the American Recovery and Reinvestment Act of 2009 to the extent permitted under federal law.

Implementation: The American Recovery and Reinvestment Act of 2009 required that eligible projects be immediately ready to break ground for construction. The Act requirements did not allow time for the assessment studies, design work, right-of-way acquisition or permitting necessary for new fish passage projects.

Assessment and Remediation of Fish Passage Barriers

Project-level remediations since January 2006

Remediation Summary (15 projects): The location for Table 1 projects are shown on Figure 1.

| Table 1. Completed Salmonid Fish Passage Barrier Remediations Since January 1, 2006 | | | | | |
|---|-----------------|-------------------------|-------------------|-------------------------|--|
| Project # | District | County | Route | Post Mile | Project Name |
| 1 | 1 | Del Norte | 101 | 4.04 | Tributary to Elk Creek |
| 2 | 1 | Humboldt | 101 | 115.3 | Stone Lagoon |
| 3 | 1 | Humboldt | 101 | 40.7 | Chadd Creek |
| <u>4</u> | <u>1</u> | <u>Mendocino</u> | <u>101</u> | <u>81.4</u> | <u>Rattlesnake Creek¹</u> |
| <u>5</u> | <u>1</u> | <u>Del Norte</u> | <u>101</u> | <u>43.6-45.8</u> | <u>Smith River Widening (Lopez Creek)¹</u> |
| 6 | 2 | Siskiyou | 96 | 65.0-65.5 | O'Neil Creek; Tributary to Klamath River |
| 7 | 2 | Tehama | 5 | 16.9 | Elder Creek |
| 8 | 2 | Tehama | 5 | 28.1 | Dibble Creek |
| 9 | 2 | Shasta | 299 | 20.75 | Salt Creek, Sacramento Tributary |
| 10 | 3 | Sierra/ Yuba | 49 | 4.0-9.4 | Sierra 49 Culvert Replacement |
| 11 | 5 | Santa Barbara | 101 | 33.9 | El Capitan Creek |
| 12 | 5 | Santa Barbara | 101 | 41 | Arroyo Hondo |
| 13 | 5 | Santa Barbara | 101 | 47.19 | Gaviota Creek |
| 14 | 3 | Santa Cruz | 1 | 10 | Valencia Creek; Tributary to Aptos Creek |
| 15 | 5 | Santa Cruz | 1 and 17 | 17.4-17.42 | Branciforte Creek and Carbonera Creek |

¹Projects completed in 2009 are shown in bold underlined text.

Active Projects Summary (32 projects): The location for Table 2 projects are shown on Figure 2.

Three new projects were added to this table (project numbers 10, 18, and 19). Three projects have projected completion dates (CCA dates) that have been extended one year (project numbers 3, 9, and 20). Three District 7 (Ventura County) projects were removed from the list ("San Antonio Creek Bridge Replacement," "Lion Creek" and "Sisar Creek and Santa Paula Creek"). These sites were originally added due to potential temporary construction issues that have been resolved.

| Table 2. Active Projects with Fish Passage | | | | | | |
|---|-----------------|----------------------|-------------------|----------------------------|-------------------------------|--|
| Project # | District | County | Route | Post Mile | Date¹ | Project Name |
| Colvert Projects | | | | | | |
| 1 | 1 | Mendocino | 1 | 62.5 | DNS | Culvert Rehabilitation, Tributary to Pudding Creek |
| 2 | 1 | Mendocino | 1 | 92.83 | CCA 1/1/2014 | Dunn Creek Fish Passage |
| 3 | 1 | Mendocino | 101 | 8.0- 17.8 | CCA 1/1/2018 | Hopland Bypass³ |
| 4 | 1 | Mendocino | 101 | Multiple | CCA 11/1/2012 | 36 Culverts |
| 5 | 1 | Mendocino | 101 | 84 | DNS | Rattlesnake Creek |
| 6 | 1 | Mendocino | 128 | 39.88 | DNS | Beebe Storm Damage |
| 7 | 1 | Mendocino | 128 and 253 | 0.0- 50.1 | CCA 11/1/2012 | 264 Culverts |
| 8 | 1 | Mendocino | 101 | 14.4- 14.8 | DNS | McBrindle Creek⁴ |
| 9 | 1 | Humboldt | 101 | 98.5- 100.9 | CCA 10/01/2011 | Red Mountain Creek Fish Passage³ |
| 10 | 2 | Shasta | 299 | 322.5 | CCA 7/14/2014 | Bella Diddy (Lemm Creek)² |
| 11 | 4 | Marin | 1 | 22.7 | CCA 12/1/2014 | Giacomini Creek |
| 12 | 4 | Sonoma | 1 | 32.4 | CCA 12/1/2014 | Fott Ross Creek |
| 13 | 4 | Sonoma | 1 | 15.1- 15.8 | CCA 12/1/2013 | Gleason Beach |
| 14 | 5 | Santa Barbara | 1 | 15.6 | CCA 4/1/2014 | Salsipuedes Creek |
| 15 | 5 | Santa Barbara | 101 | 0 | CCA 9/1/2014 | Rincon Creek |
| 16 | 7 | Los Angeles | 1 | 50.3 | DNS | Solstice Creek ⁴ |

Table 2. Active Projects with Fish Passage continued

| Project # | District | County | Route | Post Mile | Date ¹ | Project Name |
|------------------------------------|----------|----------------------------|--------------|------------------|---------------------------------|---|
| Bridge Projects | | | | | | |
| 17 | 2 | Tehama | 99 | 13.9-14.2 | CCA 7/15/2013 | Craig Creek and Sunset Canal Bridges |
| <u>18</u> | <u>2</u> | <u>Tehama</u> | <u>36</u> | <u>91.46</u> | <u>CCA</u> <u>1/4/2013</u> | <u>Mill Creek</u> ² |
| <u>19</u> | <u>2</u> | <u>Tehama</u> | <u>99</u> | <u>13.9-14.3</u> | <u>CCA</u> <u>2/17/2014</u> | <u>North Fork Mill Creek</u> ² |
| <u>20</u> | <u>2</u> | <u>Trinity</u> | <u>299</u> | <u>68.0-68.2</u> | <u>CCA</u> <u>10/14/2011</u> | <u>Trinity Dam Boulevard, Fish Ladder, Little Grass Valley Creek</u> ³ |
| 21 | 4 | Alameda | 84 | 12.1-13.3 | CCA 10/1/2013 | Niles Canyon Safety Improvement Project (Stonybrook Creek) |
| 22 | 5 | Santa Barbara | 101 | 2.2 | DNS | Carpinteria Creek |
| 23 | 5 | Santa Barbara | 101 | 55 | CCA 2/1/2011 | Nojouqi Creek, Santa Ynez |
| 24 | 5 | Santa Barbara | 192 | 15.5 | CCA 6/1/2013 | Arroyo Parida Creek |
| 25 | 5 | Santa Cruz | 1 | 31.55 | DNS | Scott Creek |
| 26 | 5 | Santa Cruz | 1 | 36.3 | DNS | Waddell Creek |
| 27 | 7 | Ventura | 150 | 28.7 | CCA 8/1/2012 | Santa Paula Creek |
| Culvert and Bridge Projects | | | | | | |
| 28 | 4 | Napa | 121 | 0.3-2.0 | CCA 10/1/2014 | Duhig Road Realign Curves and Widen Shoulders |
| 29 | 4 | Santa Clara/ San Benito | 101 | 5.0-0.0-4.9 | CCA 10/1/2013 | Widening of U.S. Highway 101 from Monterey Road (Santa Clara) to State Route 129 (San Benito) |
| Partnership Projects | | | | | | |
| 30 | 12 | Orange | 5 | 11.3 | CalTrout Lead | Trabuco Creek |
| 31 | 12 | Orange | 5 and 241 | 0 | CCA 5/1/2018 | San Mateo Creek |

Changes from 2009 data are indicated in bold and underlined text. ¹ CCA "Construction Contract Completion." DNS "Date Not Scheduled." Dates are estimated pending funding, permitting, and regulatory negotiations. ² New projects added in 2009. ³ Projects have revised CCA dates. ⁴ Projects formerly had CCA dates but are under revision and currently have no published schedule (DNS)

Project-Level Surveys (Capital-funded work)

The Department's District 4 (San Francisco Bay area) completed six Fish passage assessments in 2009 that indicated potential barrier issues.

Table 3. 2009 Caltrans District 4 fish passage assessment locations

| Date | PAD ID ¹ | County | Route | Post Mile | Project Name | Stream | Tributary to: |
|----------|--------------------------|-----------|-------|-------------|---|---------------|-------------------|
| 9/1/09 | 732813 | Sonoma | 128 | 17.3 | Maacama Creek and Redwood Creek Bridges Replacement Project | Maacama Creek | Russian River |
| 9/1/09 | 732816 | Sonoma | 128 | 21.8 | Maacama Creek and Redwood Creek Bridges Replacement Project | Redwood Creek | Maacama Creek |
| 11/16/09 | PAD ID requested 7/29/09 | Napa | 121 | 6.4-6.5 | Tulucay Creek Bridge Replacement | Tulucay Creek | Napa River |
| 9/18/09 | PAD ID requested 7/29/09 | Solano | 80 | 24.8 | Alamo Drive Onramp Lengthening | Alamo Creek | Ulatis Creek |
| 8/25/09 | 733789 | San Mateo | 101 | 16.30-17.06 | 101 Broadway Interchange | Easton Creek | San Francisco Bay |
| 4/30/09 | 700007 | Alameda | 84 | 13.1-13.6 | Alameda Creek Bridge Replacement Project | Alameda Creek | San Francisco Bay |

¹ PAD ID is a number used to identify assessments entered into the DFG CALFISH Passage Assessment Database (PAD).

Planning-level assessments

The Department has completed Reconnaissance Surveys on more than 5200 anadromous fish-bearing, coastal, road-stream crossings, and completed Detailed Surveys on more than 775 of these crossings. Current estimates suggest that an additional 4400 Reconnaissance Surveys and an additional 2400 Detailed Surveys will be needed. Priorities for planning-level fish passage assessment were identified according to the planning document, *Prioritization of Fish Passage Surveys on State Highway System Road-Stream Crossings in California's Coastal Watersheds, March 2007*.

No Grants awarded

The Department continues to seek funding to complete Detailed Surveys where needed. Detailed Surveys will determine the species and life stages that may be inhibited from passage and provide data that will be used to determine remediation priorities.

The Department submitted a 2009-10 grant proposal to the DFG Fisheries Restoration Grant Program. The proposal requested funding to obtain rights-of-entry and conduct detailed surveys at high-priority crossings to be selected from the Department-DFG fish passage priority list that is under development. The proposal was not funded. The Department will submit a 2010-11 grant application with additional information based on the final priority list.

The Department requested State Planning and Research (SPR) grant funds to continue fish passage assessment surveys. The SPR program has two grant objectives related to planning (SPR1) and research (SPR2) activities. The ongoing and long term fish passage assessment project no longer fits the goals and objectives of the SPR funding requirements.

Annual Barrier Priorities

Priority List (21 crossings): The location for Table 4 projects are shown on Figure 3.

Table 4 contains road-stream crossings that the Department considers high priority for remediation. All listed crossings have equal priority at this time; however, the Department and DFG continue working towards a combined transportation-related fish passage remediation priority list. The Department and DFG are working with the Fish Passage Forum to develop a statewide, technical, fish passage barrier priority ranking system.

| District | County | Route | Post Mile | Site Name | Stream | Tributary |
|----------|---------------|-------|-----------|---|---------------------------|-----------------------------------|
| 1 | Mendocino | 101 | 52.25 | S. Fork Ryan Creek | Ryan Creek | Outlet Creek |
| 1 | Mendocino | 101 | 48.14 | Upp Creek | Upp Creek | Mill Creek |
| 1 | Del Norte | 197 | 5.00 | Sultan Creek. | Sultan Creek | Smith River |
| 1 | Humboldt | 254 | 4.18 | Fish Creek Ave. of the Giants | Fish Creek | S. Fork Eel River |
| 2 | Tehama | 5 | 28.10 | Dibble Creek | Dibble Creek | Sacramento River |
| 2 | Siskiyou | 96 | 65.0-65.5 | O'Neil Creek | O'Neil Creek | Klamath River |
| 2 | Shasta | 299 | 32.20 | Yank Creek (Lemon Creek Bridge) | Yank Creek | Cow Creek/ Sacramento River |
| 2 | Trinity | 299 | 68.0-68.2 | Little Grass Valley Creek | Little Grass Valley Creek | Grass Valley Creek/ Trinity River |
| 4 | Alameda | 84 | 12.1-13.3 | Niles Cyn Safety Improvement (Stonybrook Creek) | Stonybrook Creek | Alameda Creek |
| 4 | Napa | 121 | 6.4-6.5 | Tulucay Creek Bridge Replacement | Tulucay Creek | Napa River |
| 6 | Santa Barbara | 1 | 15.61 | Salsipuedes Creek | Salsipuedes Creek | Santa Ynez River |
| 5 | Santa Barbara | 101 | 2.20 | Carpinteria Creek | Carpinteria Creek | Pacific Ocean |

Table 4. 2010 Caltrans Transportation-Related Fish Passage Barrier Remediation Priorities, continued

| District | County | Route | Post Mile | Site Name | Stream | Tributary |
|----------|---------------|-------|-----------|-------------------|-------------------|--------------------|
| 5 | Santa Barbara | 101 | 22.3-23.0 | San Pedro Creek | San Pedro Creek | Goleta Slough |
| 5 | Santa Barbara | 192 | 15.5 | Arroyo Parida | Arroyo Parida | Pacific Ocean |
| 7 | Los Angeles | 1 | 50.30 | Solstice Creek | Solstice Creek | Pacific Ocean |
| 7 | Ventura | 126 | 26.48 | Hopper Creek | Hopper Creek | Santa Clara River |
| 7 | Ventura | 126 | 28.81 | Piru Creek | Piru Creek | Santa Clara River |
| 7 | Ventura | 150 | 28.70 | Santa Paula Creek | Santa Paula Creek | Santa Clara River |
| 11 | San Diego | 78 | 29.48 | SR-76 Pauma Creek | Pauma Creek | San Luis Rey River |

Programmatic Environmental Review Process

Agency Agreements

The Department continues working with DFG, the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS), and the U.S. Fish and Wildlife Service (USFWS) to negotiate streamlined environmental review and permitting procedures to improve fish passage remediation. The agencies met to develop programmatic environmental authorizations for activities that can be characterized as routine maintenance and for small projects that improve or provide fish passage. Routine maintenance includes culvert repair, culvert cleaning, and vegetation management. Small-impact projects that typically include fish passage remediation efforts include culvert installation, weir and baffle installation, and small bridge construction.

The geographic scope of this programmatic agreement includes coastal drainages from the Oregon border to Santa Cruz County. The agreement requires consultation on approximately 58 plant species and 33 fish and wildlife species that may be affected. Federal agencies prepared biological assessments to provide supporting documentation for their proposed actions. The administrative draft of the biological assessment for NMFS was reviewed. Final modifications and an analysis of the projected extent of incidental take have been incorporated into the document. After reproduction is complete, the biological assessments will be transmitted to the federal trustee agencies for review.

**Figure 1: Completed
Fish Passage Barrier
Remediations Since
January 1, 2006**

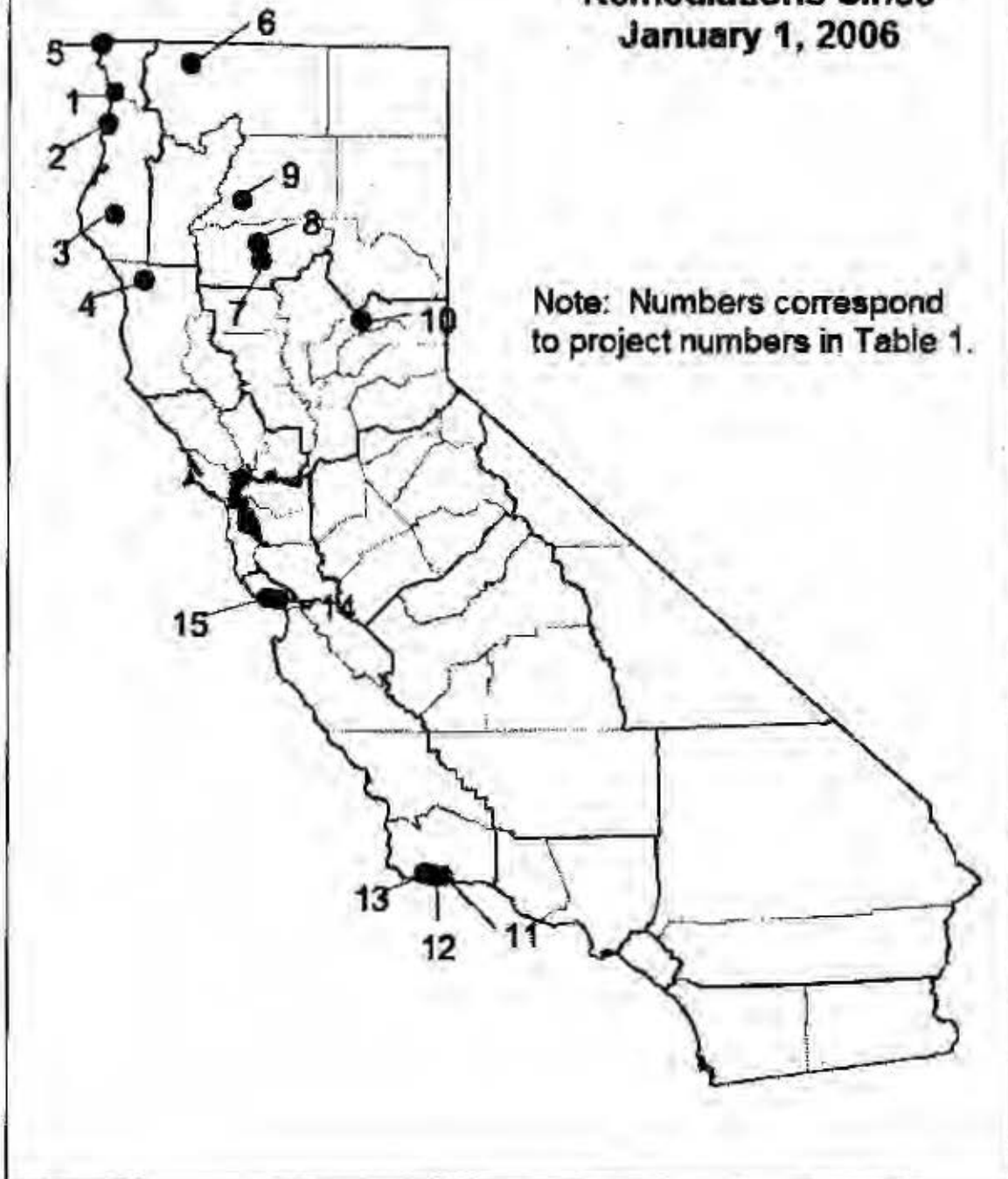
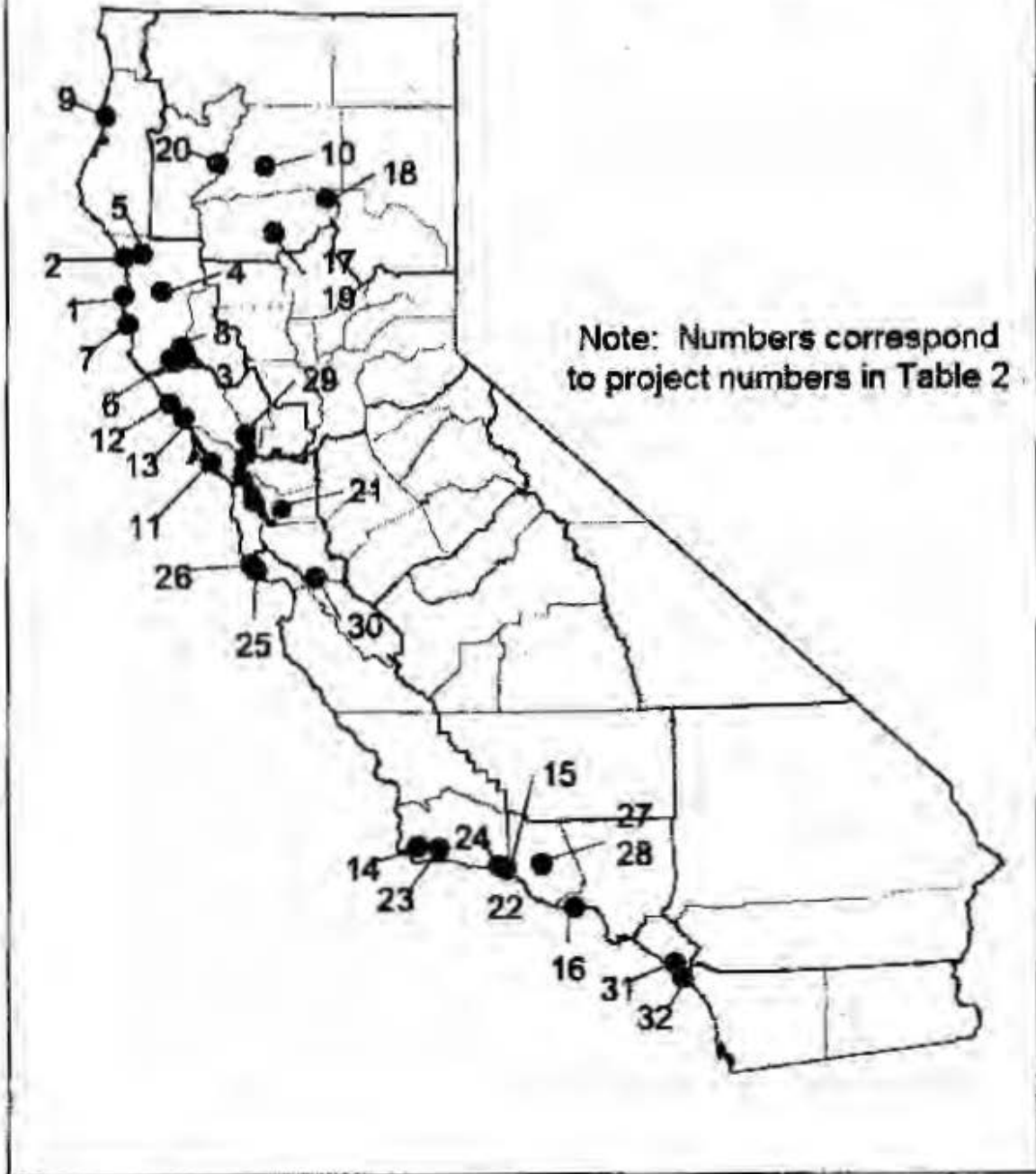


Figure 2: Active Fish Passage Projects



**Figure 3: Caltrans 2010
Transportation Related Fish
Passage Barrier
Remediation Priority**



**Note: Numbers correspond
to project numbers in Table 4.**