#### DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 SACRAMENTO, CA 94273-0001 PHONE (916) 654-5266 FAX (916) 654-6608 TTY 711 www.dot.ca.gov



Serious drought .Help save water!

October 28, 2016

Ms. Diane Boyer-Vine Legislative Counsel State Capitol, Room 3021 Sacramento, CA 95814

Mr. Daniel Alvarez Secretary of the Senate State Capitol, Room 3044 Sacramento, CA 95814

Mr. E. Dotson Wilson Chief Clerk of the Assembly State Capitol, Room 3196 Sacramento, CA 95814

Dear Ms. Boyer-Vine, Messers. Alvarez and Wilson:

I am pleased to transmit the California Department of Transportation's (Caltrans) report entitled "2015 Fish Passage Annual Report to the California State Legislature" prepared pursuant to California Streets and Highway Code section 156, (Senate Bill 857, Kuehl Chapter 589, Statutes of 2005).

This report shows seven completed projects for last year, and outlines major ongoing efforts. Caltrans continues to partner with resource agencies to prioritize barriers, to find efficiencies in the design and permitting process, and to fund and deliver these projects.

Distribution of this report to the Legislature has been made by Caltrans pursuant to California Government Code section 9795. This report can be found at <a href="http://www.dot.ca.gov/reports-legislature.htm">http://www.dot.ca.gov/reports-legislature.htm</a>.

Sincerely,

MALCOLM DOUGHERTY

Director

Enclosure

# 2015 FISH PASSAGE ANNUAL REPORT



\*Little Grass Valley Creek (District 2, Redding), Fish Passage Retrofit Project

# Report to the Legislature

Prepared: October 2016

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

# **TABLE OF CONTENTS**

Executive Summary Page	: 3
Background Page	<u>.</u> 5
2015 Completed Fish Passage Remediation Locations Page	: 6
Figure 1 - 2015 Completed Fish Passage Remediation Locations Page	: 7
2015 Completed Fish Passage Assessment Locations Page	8 :
Figure 2 - 2015 Completed Fish Passage Assessment Locations Page :	10
Active Fish Passage Remediation Locations Page :	11
Figure 3 – Active Fish Passage Remediation Locations Page :	14
Priority Fish Passage Locations for Remediation Page :	15
Figure 4 - Priority Fish Passage Locations for Remediation Page :	18
Appendix A – Fish Passage Locations Completed Page :	19
Figure 5 – Fish Passage Locations Completed Page 2	22

#### **Executive Summary**

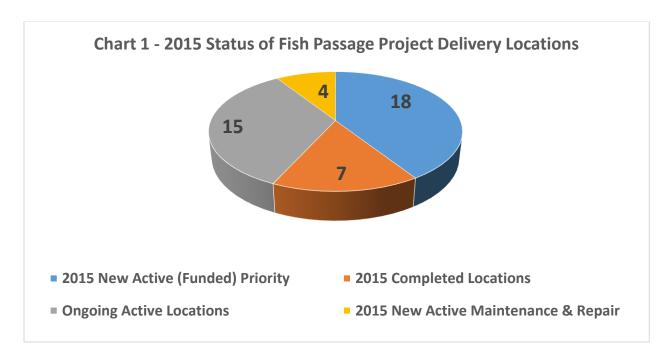
#### 2015 Fish Passage Program Accomplishments

- Completed Fish Passage Remediation Locations = 7 Locations
- Completed Fish Passage Assessment Locations = 455 assessments
- Active Fish Passage Remediation Locations (programmed) = 37 locations
- Priority Fish Passage Barrier Locations (future program) = 50 locations

### **New Project Initiation**

In 2015 twenty-two new fish barrier locations were funded for project delivery, on the State Highway System; eighteen of those locations are high priority locations for both Caltrans and the California Department of Fish and Wildlife (CDFW), and four of the locations are lower priority barriers that have been funded due to identified maintenance repair needs or as designated project mitigation.

The chart below (Chart 1) demonstrates the distribution of current Project Delivery locations.



# **Internal Partnering**

Toward the goal of identifying internal opportunities to fund and deliver an increased number of fish passage remediation locations, internal experts from Districts and Headquarters Divisions met in November 2015 to identify partnering efforts and process efficiencies. Staff and managers from throughout the state and each division identified roles, responsibilities, increased communication, internal and external partnering, as well as process improvements. Caltrans staff and managers from Environmental, Project Management, Maintenance,

Hydraulics, Planning and Right of Way continue to meet to address the status of fish passage locations, priorities and overall progress.

The Caltrans Division of Engineering Services (DES) and Division of Environmental Analysis have partnered to consider efficiencies and assistance towards standardized design solutions for small bridge locations and have renewed a commitment towards innovative solutions such as Accelerated Bridge Construction (ABC), which consists of pre-caste bridge elements built offsite and assembled at the site, thus reducing construction duration and associated on-site, environmental impacts.

#### **External Partnering**

In February 2016, Caltrans invited agency partners to a Fish Passage Summit Meeting that was held in Sacramento, California. State and Federal agencies met to discuss the status of fish barrier locations on the State Highway System. Caltrans staff from Environmental, Project Management, Structures, Design, and Planning attended the meeting to hear feedback from expert fish passage agency staff and managers. Internal and external partnerships and communication continue to improve between Caltrans and fish passage external partners. Efficiencies such as standardized designs for small bridge solutions are in progress.

In May of 2016, the California Department of Fish and Wildlife was able to fill the Caltrans funded Fish Passage Engineering Position. The National Marine Fisheries Service (NMFS), is actively working towards filling the position that was funded at NMFS.

#### AB 95 - Funding

After Oct 31, 2016, AB 95 (SEC. 8. Section 156.1 of the Streets and Highways Code), requires Caltrans to provide funding information respective of the appropriated \$5,000,000. The October 31, 2017 Fish Passage Annual Report and annual reports thereafter will include respective funding information.

# **Background**

This report provides fish passage assessment and remediation information for locations which Caltrans is responsible. This is in accordance with Streets and Highways Code, Section 156.1. This report updates progress and describes assessment and remediation activities between January 1 and December 31, 2015.

In the decade since legislation was passed, by far this report demonstrates the greatest improvements in both internal and external execution. All four of the current reporting requirements; Completed Remediations, New Assessments, Active Projects (funded) and Priority Locations have all demonstrated improvements.

Caltrans and our partners continue to develop additional Design, Environmental and Maintenance expertise, support and guidance to improve fish passage remediation efforts.

Overview of Fisl	h Passage Pr	ogress on the S	tate Highway Sy	stem (fron	n 2006 to 201	L5)
	Existing	Locations	2015	Active I	ocations <sup>1</sup>	2015 Priority
District	Barrier Locations	Remediated (Since 2006)	Locations Remediated	2015	Ongoing	Locations <sup>2</sup>
District 1	286	15	5	11	5	10
(Eureka)	280	13	3	11	5	10
District 2	47	10	2	5	0	10
(Redding)						
District 3	O <sup>3</sup>	0	0	0	0	0
(Marysville)						
District 4	70	1	0	2	3	10
(Oakland)						
District 5 (San	84	8	0	0	7	10
Luis Obispo)						
District 6	0	0	0	0	0	0
(Fresno)						
District 7	21	1	0	1	0	10
(Los Angeles)						
District 10	0	0	0	0	0	0
(Stockton)						
District 11	2	0	0	2	0	0
(San Diego)						
District 12	1	0	0	1	0	0
(Orange)						
Totals	519	37	7		37	50

<sup>&</sup>lt;sup>1</sup> Active locations are partially or fully funded. The 2015 locations are new to the report.

<sup>&</sup>lt;sup>2</sup> Priority Locations have the highest biological value, per Caltrans and CDFW, and are not yet funded.

<sup>&</sup>lt;sup>3</sup> Districts 3, 6 and 10 have no identified barriers or priorities. Passage Assessments are ongoing in Districts 3 & 10 and will be included in the next report to the Legislature.

# **2015 Completed Fish Passage Remediation Locations**

Seven fish passage locations were completed in 2015. Table 1, 2015 <u>Completed Fish Passage</u>
<u>Remediations</u>, contains information on the locations. Figure 2 (page 7) is a map of the locations listed in Table 1.

Table	Table 1 – 2015 Completed Fish Passage Remediation Locations								
Мар	Caltrans	County	Route	Post	PAD ID#	Stream Name	Project Name		
#	District			Mile					
1	1	Del Norte	197	5.0	707143	Sultan Creek	Sultan Creek		
							Bridge		
2	1	Mendocino	128 <sup>4</sup>	21.8	707199	Clow Creek	Culvert upgrade		
3	1	Mendocino	128	27.54	707205	Graveyard	Culvert upgrade		
						Creek			
4	1	Mendocino	128	36.63	707208	Lost Creek	Culvert upgrade		
5	1	Mendocino	128	39.88	707210	Beebe Creek	Culvert upgrade		
6	2	Trinity	299	68.0	735688	Little Grass	Little Grass		
						Valley Creek	Valley Creek Fish		
							Passage		
7	2	Trinity	299	68.2	720511	Little Grass	Little Grass		
						Valley Creek	Valley Creek Fish		
							Passage		

<sup>&</sup>lt;sup>4</sup> The retrofit improvement locations that were addressed on Mendocino 128 creeks (Clow, Graveyard, Lost and Beebe) are in steep mountain streams and have already experienced sediment and scour issues that will be monitored during the 2016/2017 winter. It is likely that a maintenance project will be initiated to address the excavation of sediment, rock weir repair and any other identified improvements for fish passage.

Figure 1 - 2015 Completed Fish Passage Remediation Locations



# **2015 Completed Fish Passage Assessment Locations**

In 2015, 455 fish passage assessments were completed of which Table 2 shows the below 30 locations, designated as: new barriers, barriers due to existing sediment (temporary barriers), or as updated surveys for existing barrier locations<sup>5</sup>. The remaining 425 assessment locations are not barriers to fish passage. Assessment information has been submitted to the CDFW Passage Assessment Database. Figure 2 (page 10) shows locations listed in Table 2.

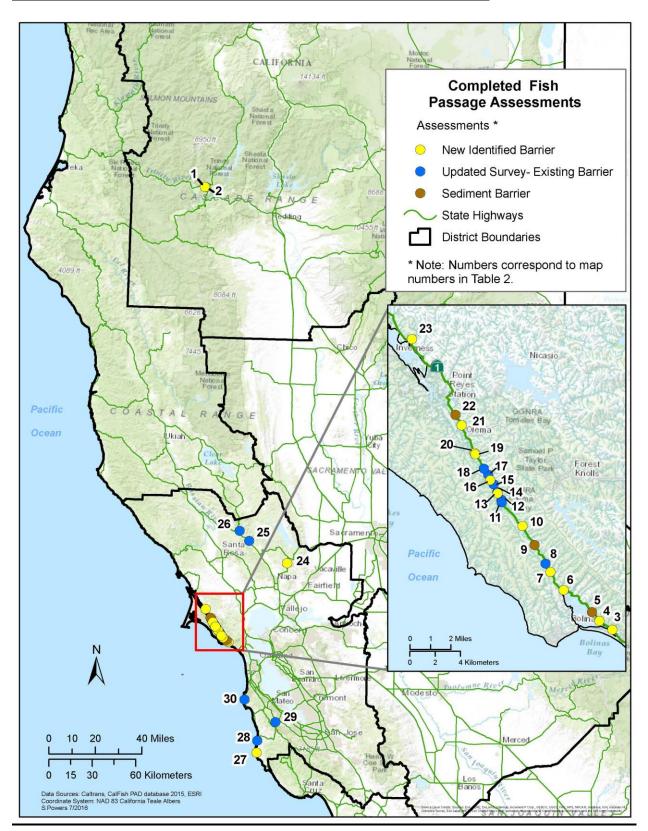
Table	e 2 – 2015	Completed F	ish Passag	e Assessment	Locations	
Map	Caltrans	County –	PAD ID#	Stream Name	Tributary to	Assessment
#	District	Route – Post				Status
		Mile				
1	2	Trinity – 299	737674	Sidney Gulch	West Weaver	New Identified
		– PM 51.2			Creek	Barrier
2	2	Trinity – 299	735941	Garden Gulch	Munger Gulch	New Identified
		– PM 51.41				Barrier
3	4	Marin – 1 –	732450	Stinson Gulch	Pacific Ocean	New Identified
		PM 13.49				Barrier
4	4	Marin – 1 –	732461	Unnamed	Pacific Ocean	New Identified
		PM 14.31				Barrier
5	4	Marin – 1 –	732468	Morses Gulch	Pacific Ocean	Sediment
		PM 14.86				Barrier <sup>6</sup>
6	4	Marin – 1 –	732659	Wilkins Gulch	Pacific Ocean	New Identified
		PM 16.95				Barrier
7	4	Marin – 1 –	759015	Cronin Gulch	Pacific Ocean	New Identified
		PM 18.17				barrier
8	4	Marin – 1 –	706078	McCurdy &	Pine Gulch	Updated Survey
		18.69		North Fork	Creek	Existing Barrier
				McCurdy		
9	4	Marin – 1 –	732501	Headwaters	Olema Creek	Sediment
		PM 19.94		Tributary		barrier
10	4	Marin – 1 –	732665	Unnamed	Olema Creek	New Identified
		PM 21.06				Barrier
11	4	Marin – 1 –	706059	John West	Olema Creek	Updated Survey
		PM 22.67		Fork		Existing Barrier
12	4	Marin – 1 –	706058	Giacomini	Olema Creek	Updated Survey
		PM 22.78		Gulch		Existing Barrier

<sup>&</sup>lt;sup>5</sup> Updated Surveys for Existing Barrier locations either verified or improved upon existing information for consideration of location prioritization.

<sup>&</sup>lt;sup>6</sup> Maintenance is investigating the potential to expeditiously resolve the 3 identified temporary sediment barriers.

Мар	Caltrans	County –	PAD ID#	Stream Name	Tributary to	Assessment
#	District	Route – Post Mile				Status
13	4	Marin – 1 –	759019	Unnamed	Olema Creek	New Identified
		PM 23.20				Barrier
14	4	Marin – 1 –	706057	Horse Camp	Olema Creek	Updated Survey
		PM 23.26		Creek		Existing Barrier
15	4	Marin – 1 –	706056	Unnamed	Olema Creek	Updated Survey
		PM 23.68				Existing Barrier
16	4	Marin – 1 –	759016	Unnamed	Olema Creek	New Identified
		PM 24.00				Barrier
17	4	Marin – 1 –	706055	Boundary	Olema Creek	Updated Survey
		PM 24.30		Gulch		Existing Barrier
18	4	Marin – 1 –	732502	Unnamed	Olema Creek	Updated Survey
		PM 24.67				Existing Barrier
19	4	Marin – 1 –	759018	Unnamed	Olema Creek	New Identified
		PM 25.55				barrier
20	4	Marin – 1 –	706054	Quarry Gulch	Olema Creek	New Identified
		PM				barrier
		25.63/25.67				
21	4	Marin – 1 –	732670	Unnamed	Olema Creek	New Identified
		PM 27.21				Barrier
22	4	Marin – 1 –	759017	Unnamed	Olema Creek	Sediment
		PM 27.92				barrier
23	4	Marin – 1 –	732518	Millerton	Tomales Bay	New Identified
		PM 33.40		Gulch		Barrier
24	4	Napa – 121 –	733347	Capell Creek	Putah Creek	New Identified
		PM 19.18				Barrier
25	4	Napa – 29 –	705448	Mill Creek	Napa River	Updated Survey
		PM 32.07				Existing Barrier
26	4	Napa – 29 –	705526	Horns Creek	Garnett Creek	Updated Survey
		PM 38.96				Existing Barrier
27	4	San Mateo –	733824	Arroyo de los	Pacific Ocean	New Identified
		1 – PM 11.07		Frijoles		Barrier
28	4	San Mateo –	733837	Pomponio	Pacific Ocean	Updated Survey
		1 – PM 16.49		Creek		Existing Barrier
29	4	San Mateo –	705766	Bear Creek	San	Updated Survey
		84 – PM			Francisquito	Existing Barrier
		19.25				
30	4	San Mateo –	733897	Martini Creek	Pacific Ocean	Updated Survey
		1 – PM 37.09				Existing Barrier

Figure 2 - 2015 Completed Fish Passage Assessment Locations



# **Active Fish Passage Remediation Locations**

Caltrans is currently developing projects to remediate 37 fish passage barrier locations. Twenty-two new locations have been funded on the State Highway System; eighteen of those locations are high priority locations for both Caltrans and CDFW, and four of the locations have been initiated for identified repair or maintenance needs or as designated mitigation.

Table 3 below, <u>Active Fish Passage Remediation Locations</u>, lists the current remediation locations that are either funded through construction, or partially funded for planning, design and permitting. Figure 3 (page 14), is a map of the locations that are listed in Table 3. The locations that are <u>bold and underlined</u> show the 22 new locations.

Table	Table 3 – Active Fish Passage Remediation Locations							
Map #	Caltrans District	County – Route – Post Mile	PAD ID#	Stream Name	Project Name	Estimated Year of Completion		
1	<u>1</u>	<u>Del Norte – 101 –</u> <u>PM 39.78</u>	<u>707134</u>	Dominie Creek	Dr. Fine Bridge Mitigaiton	<u>2020</u>		
<u>2</u>	<u>1</u>	<u>Del Norte – 197 –</u> <u>PM 6.15</u>	707142	Little Mill Creek	Little Mill Creek Emergency Bridge	2016		
<u>3</u>	1	<u>Del Norte – 199 –</u> <u>PM 2.56</u>	707139	Clarks Creek	Clarks Creek	2020		
<u>4</u>	<u>1</u>	<u>Del Norte – 199 –</u> <u>PM 31.31</u>	<u>707137</u>	Griffin Creek	Griffin Creek	2020		
<u>5</u>	<u>1</u>	<u>Humboldt – 101 –</u> <u>PM 124.49</u>	713025	<u>Little Lost Man</u> <u>Creek</u>	<u>Little Lost Man</u> <u>Creek</u>	2020		
<u>6</u>	<u>1</u>	<u>Humboldt – 96 –</u> <u>PM 8.83</u>	<u>707141</u>	Campbell Creek	Campbell Creek	2017		
7	<u>1</u>	<u>Humboldt – 254 –</u> <u>PM 4.18</u>	707157	Fish Creek	Fish Creek Fish Passage	2017		
8	<u>1</u>	<u>Mendocino – 1 –</u> <u>PM 4.64</u>	713068	Fish Rock Gulch	Fish Rock Gulch	2020		
<u>9</u>	1	<u>Mendocino – 1 –</u> <u>PM 57.81</u>	<u>707071</u>	Mitchell Creek	Mitchell Creek	<u>2020</u>		
<u>10</u>	<u>1</u>	<u>Mendocino – 1 –</u> <u>PM 58.78</u>	<u>707072</u>	Digger Creek	<u>Digger Creek</u>	<u>2020</u>		
11	1	Mendocino – 101 – 48.14	705136	Upp Creek	Willits Bypass	2017		
12	1	Mendocino – 101 – PM 52.36	707085	South Fork Ryan Creek	Willits Bypass Mitigation	2017		

Map #	Caltrans District	County – Route – Post Mile	PAD ID#	Stream Name	Project Name	Estimated Year of Completion
13	1	Mendocino – 101 – PM 52.25	707086	North Fork Ryan Creek	Willits Bypass Mitigation	2017
14	1	Mendocino – 101 – PM 66.5	707096	Ten Mile Creek	36 Culverts	2016
15	1	Mendocino – 101 – PM 89.24	706954	Cedar Creek	Cedar Creek	2018
<u>16</u>	<u>1</u>	<u>Mendocino – 128 –</u> <u>PM 14.04</u>	<u>707192</u>	Soda Creek	Soda Creek	<u>2017</u>
<u>17</u>	<u>2</u>	<u>Siskiyou – 5 – PM</u> <u>27.2</u>	720504	Parks Creek	Parks Creek	
<u>18</u>	<u>2</u>	<u>Siskiyou – 96 – PM</u> <u>8.0</u>	<u>707149</u>	Stanshaw Creek	Stanshaw and Sandy Bar Creek	<u>2028</u>
<u>19</u>	<u>2</u>	<u>Siskiyou – 96 – PM</u> <u>9.1</u>	720537	Sandy Bar Creek	Stanshaw and Sandy Bar Creek	<u>2028</u>
<u>20</u>	<u>2</u>	<u>Siskiyou – 96 – PM</u> <u>43.5</u>	<u>720541</u>	<u>Cade Creek</u>	Cade Creek	<u>2028</u>
<u>21</u>	<u>2</u>	<u>Siskiyou – 96 – PM</u> <u>57.0</u>	<u>707169</u>	Portuguese Creek	Portuguese Creek	<u>2028</u>
22	4	Contra Costa – 80 – PM 8.4	723716	Pinole Creek	Pinole Creek <sup>7</sup> (RCD, by Encroachment)	2016
23	4	Marin – 1 – PM 24.77	732502	Tributary to Olema Creek	Olema Creek Culvert Replacement	2018
<u>24</u>	<u>4</u>	Napa – 121 – PM 0.75	714975	<u>Huichica Creek</u>	Napa Slough	<u>2019</u>
<u>25</u>	<u>4</u>	<u>Napa – 121 – PM</u> <u>9.30</u>	<u>758605</u>	Sarco Creek	Miliken Creek	<u>2021</u>
26	4	Sonoma – 1 – PM 15.1	733223	Scotty Creek	Gleason Beach Highway Realignment	2019
27	5	Santa Barbara – 1 – PM 15.6	700085	Salsipuedes Creek	Salsipuedes Bridge Replacement	2019

<sup>&</sup>lt;sup>7</sup> The Contra Costa Resource Conservation District is the sponsor of this location and has worked with Caltrans through the Encroachment Permit process.

Map #	Caltrans District	County – Route – Post Mile	PAD ID#	Stream Name	Project Name	Estimated Year of Completion
28	5	Santa Barbara – 101 – PM 5.6	734310	Arroyo Parida Creek	South Coast HOV	2023
29	5	Santa Barbara – 101 – PM 9.4	705161	Romero Creek	South Coast HOV	2023
30	5	Santa Barbara – 101 – PM 9.6	734342	San Ysidro Creek	South Coast HOV	2020
31	5	Santa Barbara – 101 – PM 0.0	707368	Rincon Creek	Highway Rehab Project	2023
32	5	Santa Barbara – 101 – PM 2.2	707182	Carpinteria Creek	Highway 101 Linden/ Casitas Pass	2020
33	5	Santa Barbara – 192 – PM 15.5	706239	Arroyo Parida Creek	Arroyo Parida Creek	2018
<u>34</u>	7	<u>Los Angeles – 1 – PM 50.3</u>	<u>705781</u>	Solstice Creek	Pacific Ocean	<u>2022</u>
<u>35</u>	<u>11</u>	<u>San Diego – 76 –</u> <u>PM 29.5</u>	712680	Pauma Creek	SR-76 Culvert Replacement/Fish Passage	<u>2020</u>
<u>36</u>	<u>11</u>	<u>San Diego – 76 –</u> <u>PM 45.5</u>	<u>735076</u>	Wigham Creek	SR-76 Culvert Replacement/Fish Passage	<u>2020</u>
<u>37</u>	<u>12</u>	<u>Orange – 5 – PM</u> <u>11.30</u>	706807	Trabuco Creek	<u>I-5/Trabuco</u>	<u>2018</u>

Figure 3 - Active Fish Passage Remediation Locations



# **Priority Fish Passage Locations for Remediation**

Table 4, <u>Priority Fish Passage Locations for Remediation</u>, is below. All listed locations are equal in priority for funding and implementation. The 22 locations that are <u>bold and underlined</u> are new to the 2015 Report. There are 50 priority locations identified on the priority list. Figure 4 (page 18), is a map of the locations that are listed in Table 4.

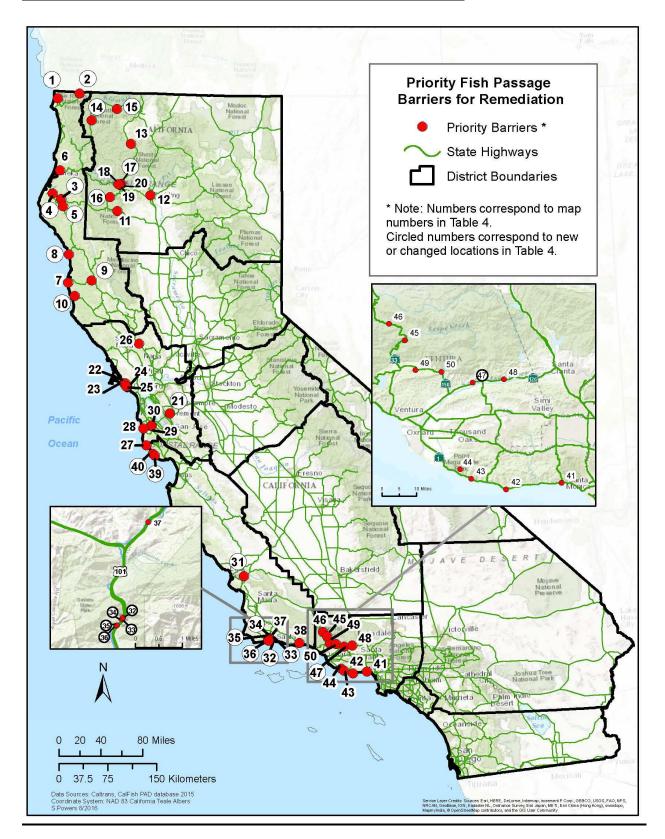
Table	4 – Priori	ty Fish Passage Loca	tions for Re	mediation	
Map #	Caltrans District	County – Route – Post Mile	PAD ID#	Stream Name	Tributary to
1	<u>1</u>	<u>Del Norte – 101 –</u> <u>PM 37.46</u>	<u>712951</u>	Unnamed Trib to Morrison Creek	Morrison Creek
<u>2</u>	<u>1</u>	<u>Del Norte – 199 –</u> <u>PM 34.04</u>	<u>712954</u>	Broken Kettle Creek	Elk Creek
<u>3</u>	<u>1</u>	<u>Humboldt – 36 –</u> <u>PM 9.17</u>	<u>707129</u>	<u>Fox Creek</u>	Van Duzen River
<u>4</u>	<u>1</u>	<u>Humboldt – 101 –</u> <u>PM 54.94</u>	<u>715460</u>	Strongs Creek	<u>Eel River</u>
<u>5</u>	<u>1</u>	<u>Humboldt – 254 –</u> <u>PM 40.83</u>	722439	Chadd Creek	<u>Eel River</u>
6	1	Humboldt – 299 – PM 2.97	713051	Essex Gulch	Mad River
7	1	Mendocino – 1 – PM 54.62	707070	Doyle Creek	Pacific Ocean
<u>8</u>	<u>1</u>	<u>Mendocino – 1 –</u> <u>PM 88.71</u>	<u>713078</u>	<u>Powderhouse</u> <u>Gulch</u>	Cottaneva Creek
<u>9</u>	<u>1</u>	<u>Mendocino – 20 –</u> <u>PM 30.87</u>	<u>713093</u>	Unnamed Trib to Broaddus Creek	Broaddus Creek
<u>10</u>	<u>1</u>	<u>Mendocino – 128 –</u> <u>PM 4.30</u>	<u>707185</u>	Barton Gulch	<u>Navarro River</u>
11	2	Shasta – 36 – PM 3.6	737281	Harrison Gulch	Middle Fork Cottonwood Creek
12	2	Shasta – 273 – PM 18.0	707132	Sulphur Creek	Sacramento River
13	2	Siskiyou – 3 – PM 6.5	707148	Big Mill Creek	Scott River
<u>14</u>	<u>2</u>	<u>Siskiyou – 96 – PM</u> <u>23.7</u>	707162	Coon Creek	Klamath River
<u>15</u>	2	<u>Siskiyou – 96 – PM</u> <u>70.7</u>	<u>735752</u>	Tom Martin Creek	<u>Klamath River</u>
<u>16</u>	<u>2</u>	<u>Trinity – 3 – PM</u> <u>10.9</u>	<u>707231</u>	Barker Creek	<u>Trinity River</u>

Map #	Caltrans District	County – Route – Post Mile	PAD ID#	Stream Name	Tributary to
<u>17</u>	<u>2</u>	<u>Trinity – 3 – PM</u> <u>32.6</u>	707178	East Weaver Creek	Trinity River
18	2	Trinity – 299 – PM 49.6	720522	West Weaver Creek	Trinity River
19	2	Trinity – 299 – PM 51.2	737674	Sydney Gulch	Trinity River
20	2	Trinity – 299 – PM 51.4	735941	Garden Gulch	Trinity River
<u>21</u>	<u>4</u>	<u>Alameda – 84 – PM</u> <u>12.1</u>	713729	Stonybrook Creek	<u>Alameda Creek</u>
22	4	Marin – 1 – PM 22.67	706059	John West Fork	Olema Creek
23	4	Marin – 1 – PM 22.78	706058	Giacomini Gulch	Olema Creek
24	4	Marin -1 – PM 18.69	706078	McCurdy Creek	Pine Gulch Creek (Bolinas Lagoon)
25	4	Marin – 1 – PM 18.69	706079	North Fork McCurdy Creek	McCurdy Creek/ Pine Gulch Creek
26	4	Napa – 29 – PM 33.17	705459	Ritchie Creek	Napa River
27	4	San Mateo – 1 – PM 4.32	705302	Whitehouse Creek	Pacific Ocean
28	4	San Mateo – 1 – PM 22.75	716835	Lobitos Creek	Pacific Ocean
29	4	San Mateo – 84 – PM 19.25	705766	Bear Creek	San Francisquito
30	4	San Mateo – 84 – PM 19.98	705768	West Union Creek	Bear Creek/San Francisquito Creek
<u>31</u>	<u>5</u>	<u>San Luis Obispo –</u> <u>101 – PM 36.59</u>	<u>707246</u>	Santa Margarita Creek	<u>Salinas River</u>
<u>32</u>	<u>5</u>	<u>Santa Barbara – 101</u> <u>– PM 47.19</u>	<u>706659</u>	Gaviota Creek	<u>Pacific Ocean</u>
<u>33</u>	<u>5</u>	Santa Barbara – 101 – PM 47.15	<u>706658</u>	Gaviota Creek	Pacific Ocean
<u>34</u>	<u>5</u>	Santa Barbara – 101 – PM 47.12	<u>706657</u>	Gaviota Creek	Pacific Ocean

Map #	Caltrans District	County – Route – Post Mile	PAD ID#	Stream Name	Tributary to
<u>35</u>	<u>5</u>	Santa Barbara – 101	<u>706655</u>	Gaviota Creek	Pacific Ocean
		<u>– PM 46.92</u>			
<u>36</u>	<u>5</u>	Santa Barbara – 101	<u>706656</u>	Gaviota Creek	Pacific Ocean
		<u>– PM 46.95</u>			
37	5	Santa Barbara – 101	706388	Gaviota Creek	Pacific Ocean
		– PM 49.6			
38	5	Santa Barbara – 192	706538	Mission Creek	Pacific Ocean
		– PM 3.39			
39	<u>5</u>	Santa Cruz – 1 – PM	706003	San Vicente	Pacific Ocean
		<u>28.59</u>		<u>Creek</u>	
<u>40</u>	<u>5</u> 8	Santa Cruz – 1 – PM	<u>705994</u>	Molino Creek	Pacific Ocean
		<u>31.25</u>			
41	7	Los Angeles 1 – PM 40.99	716891	Topanga Creek	Pacific Ocean
42	7	Los Angeles 1 – PM 54.97	716906	Zuma Creek	Pacific Ocean
43	7	Ventura – 1 – PM	723563	Little Sycamore	Pacific Ocean
		1.23	, 20000	Creek	
44	7	Ventura – 1 – PM	723529	Big Sycamore	Pacific Ocean
		4.5		Creek	
45	7	Ventura – 33 – PM	713767	North Fork	Ventura River
		24.17		Matilija Creek	
46	7	Ventura – 33 – PM	723804	Burro Creek	Sespe Creek
47	-	34.5	722760	Davidan Grade	Canta Clava Birran
<u>47</u>	<u>7</u>	<u>Ventura – 126 – PM</u> <u>18.6</u>	<u>723760</u>	Boulder Creek	Santa Clara River
48	7	Ventura – 126 – PM	713878	Hopper Canyon	Santa Clara Creek
40	,	26.48	713070	Creek	Santa Clara Creek
49	7	Ventura – 150 – PM	700083	Lion Creek	Sespe Creek
		22.8			•
50	7	Ventura – 150 – PM 28.48	705162	Sissar Creek	Santa Paula Creek

<sup>8</sup> District 5 and CDFW staff in the Central and South Coast Region have updated priority locations to reflect recent studies and assessments. Scott Creek (PAD ID# 732371) and Waddell Creek (PAD ID# 731839) are not barriers to anadromous fish. Pennington Creek (PAD ID# 700040) is a barrier but due to updated information it is no longer a top 10 Priority location.

Figure 4 - Priority Fish Passage Locations for Remediation



#### <u>Appendix A – Fish Passage Locations Completed</u>

Senate Bill 857 (Kuehl, Chapter 589, Statues of 2005), was enacted into law effective January 1, 2006. Appendix A, <u>Fish Passage Locations Completed</u>, is a list of all fish passage barriers that have been either fully or partially remediated on the State Highway System, since that time. The below table lists all treated barriers from January 1, 2006 to December 31, 2015. <u>Bold and underlined</u> locations are new to this report and constructed in 2015. Figure 5 (page 22), is a map of the locations that are listed in Appendix A.

Appe	ndix A –	Fish Passage Loc	cations Co	ompleted			
Map #	District	County- Route- Post mile	PAD ID #	Stream Name	Project Name	Year Completed	Treatment Status
1	1	Del Norte - 101 - PM 43.7	715563	Lopez Creek	Smith River Widening	2009	Partial <sup>9</sup>
2	1	Del Norte- 197 - PM 2.12	720982	Peacock Creek	Peacock Creek Emergency	2013	Partial
<u>3</u>	1	<u>Del Norte – 197</u> <u>– PM 5.0</u>	<u>707143</u>	Sultan Creek	Sultan Creek Bridge	2015	Full <sup>10</sup>
4	1	Humboldt - 101 - PM 40.12	722460	Chadd Creek	Chadd Creek Fish Passage	2006	Partial
5	1	Humboldt - 101 - PM 115.3	737005	Unnamed Tributary	Stone Lagoon	2007	Partial
6	1	Humboldt – 169 - PM 22.37	706198	Cappell Creek	Four Bridges Project	2011	Partial
7	1	Humboldt-299- PM 4.2	716742	Hall Creek	Mitigation Mad River Bridge	2013	Partial
8	1	Mendocino-1- PM 92.8	706958	Dunn Creek Bridge	10 Mile Bridge Mitigation	2013	Full
9	1	Mendocino- 101 – PM 81.4	706986	Rattlesnake Creek	Rattlesnake Creek	2009	Partial
10	1	Mendocino - 101 – PM 83.99	706987	Rattlesnake Creek	Rattlesnake Creek Fish Passage	2013	Partial

<sup>&</sup>lt;sup>9</sup> **Partial Treatment** – hydraulic treatments intended to improve fish passage, while not fully spanning the natural channel width. This can be accomplished by incorporating weirs, baffles, ladders and any other water velocity or grade control device. These facilities need to be annually inspected and maintained to ensure that sediment deposition and/or scour pools do not impact continued access to upstream habitat.

<sup>&</sup>lt;sup>10</sup> **Full Treatment** – locations where the natural channel width is fully spanned. Post-project monitoring needs to occur to ensure that sediments in the channel does not impact passage for fish after the first few winter seasons.

Map #	District	County- Route- Post mile	PAD ID #	Stream Name	Project Name	Year Completed	Treatment Status
11	1	Mendocino - 101 – PM 99.0	707115	Red Mountain Creek	Confusion Hill Mitigation	2010	Partial
<u>12</u>	<u>1</u>	<u>Mendocino –</u> <u>128 – PM 21.8</u>	<u>707199</u>	Clow Creek	<u>Culvert</u> <u>Upgrade</u>	<u>2015</u>	<u>Partial</u>
<u>13</u>	<u>1</u>	<u>Mendocino –</u> <u>128 – PM 27.54</u>	<u>707205</u>	<u>Graveyard</u> <u>Creek</u>	<u>Culvert</u> <u>Upgrade</u>	<u>2015</u>	<u>Partial</u>
<u>14</u>	<u>1</u>	<u>Mendocino –</u> <u>128 – PM 36.63</u>	<u>707208</u>	<u>Lost Creek</u>	<u>Culvert</u> <u>Upgrade</u>	<u>2015</u>	<u>Partial</u>
<u>15</u>	<u>1</u>	<u>Mendocino –</u> <u>128 – PM 39.88</u>	<u>707210</u>	Beebe Creek	<u>Culvert</u> <u>Upgrade</u>	<u>2015</u>	<u>Partial</u>
16	1	Mendocino - 128 – PM 39.95	713145	John Hatt Creek	Beebe Storm Damage	2011	Partial
17	1	Mendocino - 128 – PM 49.66	707220	Edwards Creek	Edwards Creek Fish Passage	2011	Partial
18	2	Shasta - 299 – PM 20.7	737289	Salt Creek	Salt Creek Fish Passage Project	2006	Partial
19	2	Shasta – 299 – PM 32.2	737295	Yank /Lemm Creek Bridge	Yank Creek/Lemm Creek Bridge	2014	Full
20	2	Siskiyou - 96 – PM 56.0	707168	Fort Goff Creek	Fort Goff Creek Fish Passage	2014	Full
21	2	Siskiyou - 96 – PM 65.4	707147	O'Neil Creek	O'Neil Creek Fish Passage	2008	Full
22	2	Tehama - 5 — PM 16.9	737006	Elder Creek	Elder Creek Scour Mitigation	2008	Partial
23	2	Tehama - 5 – PM 28.1	737007	Dibble Creek	Dibble Creek Scour Mitigation	2008	Partial
24	2	Tehama - 99 – PM 21.1	737012	Craig Creek	Craig Creek & Sunset Canal Bridges Project	2011	Full
25	2	Tehama - 99 – PM 15.6	737013	Sunset Canal	Sunset Canal Bridge	2010	Partial
<u>26</u>	<u>2</u>	<u>Trinity – 299 –</u> <u>PM 68.0</u>	<u>720511</u>	<u>Little Grass</u> <u>Valley Creek</u>	<u>Little Grass</u> <u>Valley Creek</u> <u>Fish Passage</u>	2015	<u>Partial</u>
<u>27</u>	<u>2</u>	<u>Trinity – 299 –</u> <u>PM 68.2</u>	<u>720511</u>	<u>Little Grass</u> <u>Valley Creek</u>	Little Grass Valley Creek Fish Passage	<u>2015</u>	<u>Partial</u>

Map #	District	County- Route- Post	PAD ID #	Stream Name	Project Name	Year Completed	Treatment Status
		mile	"			Completed	Status
28	4	Napa - 121 – PM 1	733333	Huichica Creek	Duhig Road Project	2010	Full
29	5	Santa Barbara - 101 – PM 33.9	707398	El Capitan Creek	El Capitan Creek	2007	Partial
30	5	Santa Barbara – 101 – PM 38.3	707403	Tajiguas Creek	Tajiguas Creek	2014	Partial
31	5	Santa Barbara - 101 – PM 41.0	707405	Arroyo Hondo Creek	Arroyo Hondo	2008	Partial
32	5	Santa Barbara - 101 – PM 47.2	706669	Gaviota Creek	Gaviota Creek	2008	Partial
33	5	Santa Cruz -1 – PM 10.0	706703	Valencia Creek	Tributary to Aptos Creek (culvert 1)	2007	Partial
34	5	Santa Cruz – 1 – PM 10.0	706704	Valencia Creek	Tributary to Aptos Creek (culvert 2)	2007	Partial
35	5	Santa Cruz - 1 – PM 17.4	735367	Branciforte Creek	Hwy 1 Remediation	2007	Partial
36	5	Santa Cruz - 1 – PM 17.42	735366	Carbonera Creek	Hwy 1 Remediation	2008	Partial
37	7	Ventura - 150 – PM 28.7	723744	Santa Paula Creek	Santa Paula Creek	2012	Full

Figure 5 - Fish Passage Locations Completed

