



**Kenny Creek Fish Passage  
Improvement Project  
Mendocino County, California**

**Final Report**

**FRGP Grant Number: P1510535**

**January 2019**



*Prepared by:*  
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## **Final Report**

**PROJECT TITLE:** Kenny Creek Fish Passage Improvement Project

**FRGP GRANT #:** P1510535

### **GRANTEE NAME AND CONTACT INFORMATION:**

Eel River Watershed Improvement Group  
Isaac Mikus, Project Manager  
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### **Overview of Project:**

**Description:** A culverted fish passage barrier was removed and replaced with a single span bridge.

Design plans were finalized by MLA and a building permit was acquired from Mendocino County. On the ground work was completed by Glissman Excavating with oversight by MLA. This work began with the construction of footings for the bridge, followed by placement of the bridge by crane. The culverted crossing was kept open to vehicle traffic during bridge construction and traffic control was only necessary for two hours while the crane was obstructing the roadway. After the bridge was placed and secured, the new roadway was paved, siderails were installed, and the bridge was opened to traffic. All special inspections were completed by SHN; all necessary building inspections were completed by Mendocino County. Next, the stream was electro-fished by CDFW staff with assistance from ERWIG and the stream was de-watered in the project reach. Upon de-watering, the culvert was removed, the upstream and downstream weirs were adjusted, and a new weir was constructed at the approximate location where the culvert outlet used to exist. Existing water and electrical lines that were buried along the culvert were re-routed under the new bridge. Electrical and water installation followed current building code requirements. The stream banks were sloped to design, and erosion control measures were installed. Erosion control materials included: rock, wattles, native grass seed, and rice straw. In the winter following construction completion, native plants and trees were planted in areas disturbed by the project. A post-construction as-built survey and fish passage monitoring survey were completed by MLA.

**Location:** Kenny Creek, tributary to South Fork Eel River, tributary to the Eel River, tributary to the Pacific Ocean. Project site located at coordinates: 39.66036, -123.36700

**Grant Term:** June 1, 2016 – January 31, 2019

**Implementation Start and End Dates:** Construction for this project began on August 7<sup>th</sup>, 2017 and ended on October 27<sup>th</sup>, 2017. Fish removal occurred on October 5<sup>th</sup>, 2017. The project reach was de-watered from October 5<sup>th</sup>, 2017 to October 20<sup>th</sup>, 2017. Tree planting was completed on December 12, 2017.

### **Assessment Plans Identifying Project**

Shea, C. (2011). Kenny Creek Riparian Habitat Enhancement Project – Culvert Replacement Discussion. US Fish & Wildlife Service, Arcata, CA.

### **Fish Relocation and De-watering**

Electrofishing was conducted by CDFW Environmental Scientist Beatrijs deWaard on October 5<sup>th</sup>, 2017. Fish and amphibians were removed from the 300' long project reach. A total of 142 steelhead, 6 lamprey and 17 Pacific giant salamanders were relocated to suitable habitat upstream and downstream of the project reach. After fish removal, Kenny Creek was de-watered for 110' within the 300' project reach.

Table 1. Species captured during fish relocation.

<b>Species</b>	<b>Age Class</b>	<b>Total</b>	<b>Mortalities</b>	<b>Injuries</b>
Steelhead	YOY	115	0	1
Steelhead	1+	20	0	0
Steelhead	2+	7	0	0
Pacific Giant Salamander	N/A	17	0	0
Lamprey	Adult	1	0	0
Lamprey	Juvenile	5	0	0
Coho	N/A	0	0	0

### **Deliverables**

As-built survey, including longitudinal profile and fish passage monitoring, is included in the attached Memorandum. As-built plans are included as Attachment 1 to the Memorandum. Photos are included as Attachment A to this report.

**Project Budget**

In support of the *Kenny Creek Fish Passage Improvement Project* an amount of \$708,957 was awarded by CDFW through FRGP. A total of \$671,393.22 of FRGP funds were expended during completion of this project.

**Final Budget**

Description	FRGP Funds	Approved Adjustments	Cost Share	FRGP Funds Expended	Total Project Cost
<b>Personnel Services</b>					
<i>Project Manager</i>	\$ 7,200.00	\$17,245.00	\$0.00	\$17,245.00	\$17,245.00
<i>Staff Benefits @ 30%</i>	\$ 2,160.00	\$5,173.50	\$0.00	\$5,173.50	\$5,173.50
<b>Total Personnel Services</b>	<b>\$ 9,360.00</b>	<b>\$22,418.50</b>	<b>\$0.00</b>	<b>\$22,418.50</b>	<b>\$22,418.50</b>
<b>Operating Expenses</b>					
<i>Subcontractor Costs (Michael Love &amp; Associates)</i>	\$ 51,396.00	\$51,396.00	\$0.00	\$48,707.87	\$48,707.87
<i>Subcontractor Costs (SHN)</i>	\$ 19,120.00	\$19,120.00	\$0.00	\$10,513.70	\$10,513.70
<i>Subcontractor Costs (Construction )</i>	\$ 466,516.00	\$467,252.53	\$0.00	\$467,252.53	\$467,252.53
<b>Grantee Sub Costs Total</b>	<b>\$537,032.00</b>	<b>\$537,768.53</b>	<b>\$0.00</b>	<b>\$526,474.10</b>	<b>\$526,474.10</b>
Bridge and Guardrails	\$ 137,452.00	\$119,807.07	\$0.00	\$95,993.25	\$95,993.25
Mendocino County Building Permit	\$ 5,000.00	\$8,332.90	\$0.00	\$8,332.90	\$8,332.90
1600 Permit Fees	\$ 4,483.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00
<b>Grantee Other Costs Total</b>	<b>\$146,935.00</b>	<b>\$133,139.97</b>	<b>\$0.00</b>	<b>\$109,326.15</b>	<b>\$109,326.15</b>
<b>Total Operating Expenses</b>	<b>\$683,967.00</b>	<b>\$670,908.50</b>	<b>\$0.00</b>	<b>\$635,800.25</b>	<b>\$635,800.25</b>
<b>Subtotals and Indirect Charges</b>					
Subtotal Contractors	\$537,032.00	\$537,768.53	\$0.00	\$526,474.10	\$526,474.10
<i>Subtotal A + B (Personnel + Operating)</i>	\$156,295.00	\$155,558.47	\$0.00	\$131,744.65	\$131,744.65
<i>Administrative Overhead @10%</i>	\$15,630.00	\$15,630.00	\$0.00	\$13,174.47	\$13,174.47
<b>Grand Total</b>	<b>\$708,957.00</b>	<b>\$708,957.00</b>	<b>\$0.00</b>	<b>\$671,393.22</b>	<b>\$671,393.22</b>

**Performance Measures**

<b>Salmon Habitat Restoration and Acquisition Projects</b>	
Overall stream length treated	300 feet
Length of aquatic habitat disturbed	270 feet
Area of instream features installed	1500 square feet
<b>Fish Passage Improvement</b>	
Fish Passage Funding (expended)	\$671,393.22
Total blockages/impediments/barriers removed/altered	3
Total length of stream made accessible by removing blockages	2.6 miles
Barriers/impediments/barriers impeding passage	0
<b>Culvert Installed or Improved at Road Stream Crossing</b>	
Site name	N/A
Culverts installed or improved	N/A
Length of stream made accessible upstream	N/A
<b>Bridge Installed or Improved at Road Stream Crossing</b>	
Site name	Kenny
Bridges installed or improved	1
Length of stream made accessible upstream	2.6 miles
<b>Rocked Ford - Road Stream Crossing</b>	
Site name	N/A
Rocked fords placed	N/A
Length of stream made accessible upstream	N/A
<b>Road Stream Crossing Removal</b>	
Site name	Kenny
Road crossings removed	1
Length of stream made accessible upstream	2.6 miles

Figure 1 - Map

