

## CFPF Funding Projects - Progress Reporting

<b>Submission Date</b>	2020-04-13 14:33:55
<b>Project/Program Title:</b>	Iron Horse Vineyards Dam Removal Project
<b>USFWS Grant Number:</b>	F20AC00007
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<b>Name of individual submitting this report:</b>	Noelle Johnson
<b>Dates covered by this report:</b>	Start Date: 01/01/2020 End Date: 03/31/2020 Difference: 90 days
<b>Expected Completion Date for Forum-funded Activities</b>	06-30-2020
<b>Briefly summarize (2-3 sentences) overall progress and accomplishments applicable to this time period.</b>	<p>The obsolete concrete dam on lower Green Valley Creek, identified as a partial barrier to fish passage, was fully removed, and several large wood structures placed in the reach to enhance pool habitat and instream complexity. GRRCD staff have begun additional surveys in the reach to identify other potential barriers, both physical and biotic, and better characterize the habitat value of lower Green Valley.</p>
<b>Task specific/deliverable updates (for each task in the cooperative agreement, provide a brief update on progress; provide brief update on significant work toward, or completion of any deliverables from the cooperative agreement):</b>	<p>Task 1: Post-implementation monitoring. Monitoring of the dam removal site has been performed by both the Project Engineer and GRRCD staff, to verify site stability and evaluate functioning of the large wood structures. Photo-monitoring and the engineer's report have been attached.</p> <p>Task 2: Lower Green Valley barrier assessment. GRRCD sent access requests to approximately 30 riparian landowners along lower Green Valley Creek, and have begun stream assessments where access has been granted, with assistance from the Project Engineer. This has led to the identification of several additional potential stranding sites along the floodplain upstream of the dam removal site. Existing design funds were used to develop a design to selectively remove sections of an artificial berm along the banks of lower Green Valley created during channel clearing activities through the 1980s. The re-connection of these low-lying areas in the floodplain would both reduce stranding risks and create off-channel high flow refugia.</p> <p>Task 3: Water quality monitoring. Staff continue to collect and analyze data from two sondes: one mid-reach, the other at the top of the lower Green Valley at its confluence with Atascadero Creek. Additionally, storm sampling has been performed, and monthly dissolved oxygen measurements have been taken at numerous sites throughout the reach. These data are being correlated with coho migration data being collected through the CA Sea Grant monitoring program. An analysis will be included in the final report.</p>

**Any significant developments beyond those reported for specific tasks/deliverables:**

Post-implementation monitoring work in the reach has identified manmade excavated areas within the forested floodplain, but are now disconnected from the stream by channel incision and berms built up during channel clearing practices conducted decades earlier. This led to design work to remove parts of the berm and reconnect these remnant ponds to serve as accessible off-channel habitat for migrating salmonids.

Additionally, water quality monitoring in Green Valley Creek have highlighted some patterns of fluctuating dissolved oxygen levels around storm pulses, and fatalities of outmigrating smolts likely attributable to these areas of low DO. GRRCD have used these observations to apply for additional funding to address the water quality issues, which was awarded through DFW Prop 1 funding.

**Any delays/issues that are impacting or may impact progress of the project:**

COVID-19 is resulting in some delays to continued stream surveys, although multiple landowners have granted written access permission. We hope to continue these surveys shortly, using social distancing protocols. The shelter-in-place orders are also affecting data collection on coho movement by CA Sea Grant, as their staff is unable to operate their outmigration traps. So the data we present in our final report may not fully capture the spring 2020 coho outmigration season. Water quality monitoring has also been disrupted, but is expected to resume over the next quarter.

**Summary of invoices/charges to the agreement (include amount and date of any invoices submitted for payment under the agreement that occurred during the reporting period. Optionally, include a summary of charges incurred during the reporting period that will be invoiced during the next reporting period):**

An invoice for \$4,126 for the period of 12/01/2019 - 03/31/2020 is being prepared for submittal to PSMFC. This includes \$2,882 in staff expenses, and \$220 for sonde maintenance, plus \$1,024 in indirect. Much of the stream inventory and water quality monitoring work completed thus far as part of this scope has been invoiced to an expiring cost share source, hence the low charges.

**Anticipated work in the next six months (if this timeframe includes Oct 1, please describe any accomplishments that will occur before this date):**

We plan to complete the remaining stream surveys, and compile data on water quality and coho monitoring for lower Green Valley Creek for the final report.

**Summary and number of any outreach activities or significant meetings related to the project:**

Staff mailed access requests to approximately 30 riparian landowners in lower Green Valley, requesting access for stream assessments. We have also included updates about the dam removal and lower Green Valley Creek assessment work on our website, on the RCD Project Tracker ([www.rcdprojects.org](http://www.rcdprojects.org)), and in e-blasts.

**Summary and number of any monitoring activities conducted as part of this project:**

Staff have installed sondes at the confluence of lower Green Valley with its primary tributary Atascadero Creek (the upstream end of the lower Green Valley Reach), and downstream mid-reach, and continue to download and analyze data. Staff have also collected water quality data through two storm sampling outings and monthly dissolved oxygen readings at multiple sites, as low DO has emerged as the presumed primary limiting factor for outmigration of coho smolts. Staff also conducted barrier assessments for approximately 10% of the lower Green Valley reach, with additional assessments planned for the next quarter.

**Please include any additional information (pictures, documents, presentations, or similar outputs developed during the reporting period related to the project).**

**\*\*PLEASE NOTE: USFWS requires before and after photos for every barrier removed/remediated. Please supply when available AND include in the final report when submitted.\*\***

[19-12-23 Iron Horse Monitoring Summary.pdf](#)

[Iron Horse Dam Removal As-Built.pdf](#)

[Iron Horse Dam Removal Project – PSMFC Photo monitoring.pdf](#)