CFLR Project (Name/Number): Dinkey Landscape Restoration/CFLR007

National Forest(s): Sierra

1. Match and Leveraged Funds:

a. FY19 Matching Funds Documentation

Fund Source – (CFLN/CFLR Funds Expended)	Total Funds Expended in Fiscal Year 2019
CFLN0719	$459,597

This amount should match the amount of CFLR/CFLN dollars obligated in the FMMI CFLRP expenditure report. Include prior year CFLN dollars expended in this Fiscal Year.

Fund Source – (Funds expended from Washington Office funds (in addition to CFLR/CFLN) (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2019
CMRD NFHF NFTM	$865,842 $145,498 $180,454

This value (aka "core funds" "in lieu of funds") should reflect the amount expended of the allocated funds as indicated in the program direction but does not necessarily need to be in the same BLIs or budget fiscal year as indicated in the program direction.

Fund Source – (FS Matching Funds (please include a new row for each BLI)	Total Funds Expended in Fiscal Year 2019
	0

This amount should match the amount of matching funds in the FMMI CFLRP expenditure report, minus the Washington Office funds listed in the box above and any partner funds contributed through agreements (such as NFEX, SPEX, WFEX, CMEX, and CWFS) listed in the box below.

Fund Source – (Funds contributed through agreements)	Total Funds Expended in Fiscal Year 2019
Sierra Resource Conservation District	$9,137

Please document any partner contributions to implementation and monitoring of the CFLR project through an income funds agreement (**this should include partner funds captured through the FMMI CFLRP reports such as NFEX, SPEX, WFEX, CMEX, and CWFS**). Please list the partner organizations involved in the agreement. Partner contributions for Fish, Wildlife, Watershed work can be found in the WIT database.

Fund Source – (Partner In-Kind Contributions)	Total Funds Expended in Fiscal Year 2019
Dinkey Collaborative Members (Time) Birkhoff and Associates (Facilitator)	$60,000 $13,500

Total partner in-kind contributions for implementation and monitoring of a CFLR project on NFS lands. Please list the partner organizations that provided in-kind contributions.

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY19)	**Totals**
Total revised non-monetary credit limit for contracts awarded in FY19	$

Revised non-monetary credit limits should be the amount in contract's "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements" in cell J46, the "Revised Non-Monetary Credit Limit," as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document. Information for contracts awarded prior to FY19 were captured in previous annual reports.

b. Please fill in the table describing leveraged funds in your landscape in FY2019. Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet match qualifications.

Description of item	**Where activity/item is located or impacted area**	**Estimated total amount**	**Forest Service or Partner Funds?**	**Source of funds**
Southern California Edison (SCE) work on SCE lands within DFLRP boundary	**1. Prescribed burning - 250 acres 2. Pile burning – 325 acres 3. Reforestation – 16,000 seedlings on approximately – 60 acres 4. Brushing - approximately 140 acres 5. Hazard tree removal – 150 acres**		**Partner funds**	**Southern California Edison**
Private lands	**Shaver Lake/Blue Canyon Area**	**540,000**	**Partner funds**	**California Department of Forestry and Fire Protection**

(Optional) Additional narrative about leverage on the landscape if needed: N/A

2. Please tell us about the CFLR **project's progress to date in restoring a more fire-adapted ecosystem as described in the project proposal**, and **how it has contributed to the wildland fire goals in the *10-Year Comprehensive Strategy Implementation Plan***.

FY2019 Overview

FY19 Activity Description (Agency performance measures)	**Acres**
Number of acres treated by prescribed fire	602
Number of acres treated by mechanical thinning	161
Number of acres of natural ignitions that are allowed to burn under strategies that result in desired conditions	0
Number of acres treated to restore fire-adapted ecosystems which are maintained in desired condition	0
Number of acres mitigated to reduce fire risk	0

Please provide a narrative overview of treatments completed in FY19, including data on whether your project has expanded the pace and/or scale of treatments over time, and if so, how you've accomplished that – what were the key enabling factors? ***For projects finishing their tenth year***, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

Please see question 7 to address these questions.

- **How was this area prioritized for treatment?** What kinds of information, input, and/or analyses were used to prioritize? Please provide a summary or links to any quantitative analyses completed.
- **Please tell us whether these treatments were in "high or very high wildfire hazard area** from the "wildfire hazard potential map" (https://www.firelab.org/project/wildfire-hazard-potential)
  - Were the treatments in **proximity to a highly valued resource** like a community, a WUI area, communications site, campground, etc.?
- **What have you learned** about the interaction between treatment prioritization, scale, and cost reduction? What didn't work? Please provide data and further context here.

Please provide visuals if available, including maps of the landscape and hazardous fuels treatments completed, before and after photos, and/or graphics from fire regime restoration analysis completed locally. You may copy and paste these below or provide a link to a website with these visuals.

Expenditures

Category	**$**
FY2019 Wildfire Preparedness[1]	
FY2019 Wildfire Suppression[2]	
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	
FY2019 Hazardous Fuels Treatment Costs (CFLN)	
FY2019 Hazardous Fuels Treatment Costs (other BLIs)	

[1] Include base salaries, training, and resource costs borne by the unit(s) that sponsors the CFLRP project. If costs are directly applicable to the project landscape, describe full costs. If costs are borne at the unit level(s), describe what proportions of the costs apply to the project landscape. This may be as simple as Total Costs X (Landscape Acres/Unit Acres).

[2] Include emergency fire suppression and BAER within the project landscape. Describe acres of fires contained and not contained by initial attack. Describe acres of resource benefits achieved by unplanned ignitions within the landscape. Where existing fuel treatments within the landscape are tested by wildfire, summary and reference the fuel treatment effectiveness report.

How may the treatments that were implemented contribute to reducing fire costs? If you have seen a reduction in fire suppression costs over time, please include that here. ***For projects finishing their tenth year***, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

Have there been any assessments or reports conducted within your CFLRP landscape that provide information on cost reduction, cost avoidance, and/or other cost related data as it relates to fuels treatment and fires? If so, please summarize or provide links here:

There were no wildfires in the Dinkey Collaborative boundary in 2019.

When a wildfire interacts with a previously treated area within the CFLR boundary:

If additional assessments have been completed since the FY2018 CFLRP annual report on fires within the CFLRP area, please note that and provide responses to the questions below. ***For projects finishing their tenth year****, if you have any additional insights from your cumulative work over the course of the project please share those here as well.*

Each unit is required to complete and submit a standard fuels treatment effectiveness monitoring (FTEM) entry in the FTEM database (see FSM 5140) when a wildfire occurs within or enters into a fuel treatment area. **For fuel treatment areas within the CFLR boundary, please copy/paste that entry here and respond to the following supplemental questions. Note that the intent of these questions is to understand progress as well as identify challenges and what didn't work as expected to promote learning and adaptation.**

- *Please describe if/how partners or community members engaged in the planning or implementation of the relevant fuels treatment.*
- *Did treatments include coordinated efforts on other federal, tribal, state, private, etc. lands within or adjacent to the CFLR landscape?*
- *What resource values were you and your partners concerned with protecting or enhancing? Did the treatments help to address these value concerns?*
- *Did the treatments do what you expected them to do? Did they have the intended effect on fire behavior or outcomes? Please include a brief description.*
- *What is your key takeaway from this event – what would you have done differently? What elements will you continue to apply in the future?*
- *What didn't work as expected, and why? What was learned?*
- *Please include the costs of the treatments listed in the fuels treatment effectiveness report: how much CFLR/CFLN was spent? How much in other BLI's were spent? If cost estimates are not available, please note and briefly explain.*

When a wildfire occurs within the CFLR landscape on an area planned for treatment but not yet treated:

- Please include:
  - *Acres impacted and severity of impact*
  - *Brief description of the planned treatment for the area*
  - *Summary of next steps – will the project implement treatments elsewhere? Will they complete an assessment?*
  - *Description of collaborative involvement in determining next steps.*

Please include acres of fires contained and not contained by initial attack and acres of resource benefits achieved by unplanned ignitions within the landscape, and costs.

- Include expenses in wildfire preparedness and suppression, where relevant
- Include summary of BAER requests and authorized levels within the project landscape, where relevant

3. **What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool**? Information about Treatment for Restoration Economic Analysis Tool inputs and assumptions available here.

FY 2019 Jobs Supported/Maintained (FY19 CFLR/CFLN/ WO funding):

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part-Time) (Direct)	Jobs (Full and Part-Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	13	20	685,947	842,631
Forest and watershed restoration component	1	1	47,522	65,725
Mill processing component	13	27	769,309	1,587,079
Implementation and monitoring	3	3	96,205	118,743
Other Project Activities	0	0	0	0
TOTALS:	29	52	1,598,983	2,614,177

FY 2019 Jobs Supported/Maintained (FY19 CFLR/CFLN/ WO and matching funding):

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part-Time) (Direct)	Jobs (Full and Part-Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	13	20	685,947	842,631
Forest and watershed restoration component	10	14	372,476	557,005
Mill processing component	13	27	769,309	1,587,079
Implementation and monitoring	6	7	192,410	237,485
Other Project Activities	0	0	0	0
TOTALS:	42	69	2,020,142	3,224,199

4. **Describe other community benefits achieved and the methods used to gather information about these benefits**. **How has CFLR and related activities benefitted your community from a social and/or economic standpoint?** (Please limit answer to two pages).

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Ease of doing business	Having such an established collaborative they are instrumental in helping us seek additional funding to achieve our goals.	
% Locally retained contracts	All jobs were retained and used locally for projects that occurred within the collaborative boundary.	
Tribal connections	Local tribes are involved in the monthly collaborative meetings.	
Job training opportunities/per capita normalize	Hands on the Land is a local program to work with the high school and educate them on working on the National Forest as well as working with SCE and BLM. The benefit of this program is exposing the	https://www.blm.gov/learn/teachers/hands-on-the-land

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
	students to working with a diverse group and learning about different resources within the agencies. We partnered with local high school to provide training and hire students to accomplish the work. A benefit to the year, due to additional funding that has been received for 2019 we will be able to hire 2 additional teams of high school students to work with the above-mentioned agencies. The link to the right provides a description for the Hands on the Land Program. For the Sierra National Forest, the Forest manages the program and BLM is a partner.	

5. Based on your project monitoring plan, **describe the multiparty monitoring process. <u>You may simply reference your ecological indicator reports here</u> if they adequately represent your multiparty monitoring process**. <u>If</u> further information is needed, please answer the questions below.

- *What parties (who) are involved in monitoring, and how?*
- *What is being monitored? Please briefly share key broad monitoring results and how results received to date are informing subsequent management activities (e.g. adaptive management), if at all. What are the major positive and negative ecological, social and economic shifts observed through monitoring? Any modifications of subsequent treatment prescriptions and methods in response to these shifts?*
- *What are the current weaknesses or shortcomings of the monitoring process? How might the CFLRP monitoring process be improved? (Please limit answer to one page.).*
- *Please provide a link to your most up-to-date multi-party monitoring plan and any available monitoring results from FY19.*

For the Sierra National Forest, please review the ecological indicator report.

6. FY 2019 Agency performance measure accomplishments:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*
Acres of forest vegetation established FOR-VEG-EST	Acres	674	
Acres of forest vegetation improved FOR-VEG-IMP	Acres	1139	
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	2	
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	40	
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	0	
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	0	
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	607	
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	581	
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles		
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles		
Miles of road decommissioned RD-DECOM	Miles		
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles		
Road Storage *While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.*	Miles		
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number		
Miles of system trail maintained to standard TL-MAINT-STD	Miles		
Miles of system trail improved to standard TL-IMP-STD	Miles		
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles		
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres		
Volume of Timber Harvested TMBR-VOL-HVST	CCF		
Volume of timber sold TMBR-VOL-SLD	CCF		
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	3250	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	0	
Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres	0	
Please also include the acres of prescribed fire accomplished	Acres	0	
Number of priority acres treated annually for invasive species on Federal lands SP-INVSPE-FED-AC	Acres	0	
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres	0	

Units accomplished should match the accomplishments recorded in the Databases of Record.

7. **FY 2019 accomplishment narrative** – Summarize key accomplishments and evaluate project progress *not already described elsewhere* in this report. ***For projects finishing their tenth year***, if you have any additional insights from your cumulative work over the course of the project please share those here as well. (Please limit answer to three pages.)

Silviculture

Project work performed within the collaborative is outlined in detail below. Known Rust Resistant Sugar Pines (RRSP) were surveyed in the spring to monitor status and to see if there was a potential for cone crop. Those still alive had SPLAT Verbenone applied to them to aid in protection against Mountain Pine Beetle *Dendroctonus ponderosae.* There are several live known RRSP trees within the project area, several had adequate crop for cone collections this year.

The High Sierra Ranger District proposed the Blue Rush project in response to high levels of insect-related tree mortality, to reduce hazardous fuels, mitigate hazardous trees, and improve forest health in Blue Canyon area by increasing carbon storage through reforestation. The project area encompasses approximately 4,837 acres with proposed treatments that would not exceed 3,000 acres. This Project incorporates the planned work from the Greenhouse Gas Reduction Fund (GGRF; funding from State of California), which was received by the Sierra National Forest in August of 2017. Much of the field work this season incorporated goals that were set in the application for the GGRF funding.

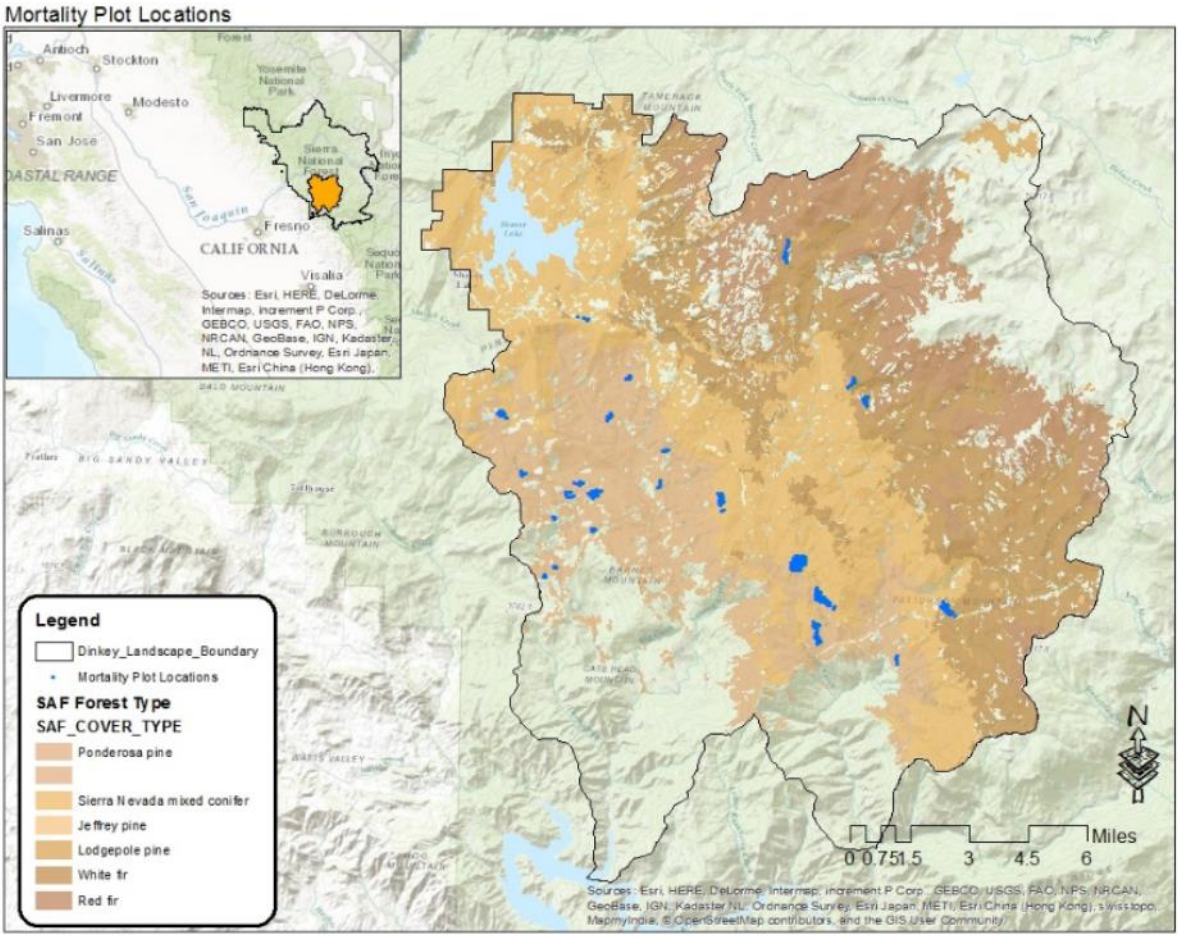
Mortality Plots

The HSRD, with support of the Dinkey CFLRP, State and Private funds and the help of resources from the Stanislaus National Forest selected to re-measure the mortality plots established across the Collaborative boundary in 2015.

Overstory

The district has been monitoring 255 plots that have been surveyed since 2015. These plots were established to further understand the impacts of the mortality event to forest stand structure and composition. This past summer marked the 5th time the plots had been revisited. Past results and findings can be viewed in the 2017 and 2018 Monitoring Report. The 2017 Monitoring Report can also provide breakdowns by elevation bands, tree diameter and species. For this report we will only look at basal area (BA) and trees per acre (TPA) by species.

The data obtained in 2019 shows a decline in the amount of dead TPA compared to 2018. This decrease could be due to the possibility of standing dead trees, beginning to fall. Species wise Ponderosa pine and sugar pine had an increase in dead TPA across in total TPA from 2018 to 2019. Other species monitored either remained the same or decreased.



Cone Collection

Annual seed cone collections are important for providing genetically diverse and locally adapted seedlings for future reforestation efforts. The High Sierra Ranger District collected 230 bushels of cones within the Dinkey CFLRP boundary. The majority of these bushels came from known rust resistant sugar pines. The remaining collections came from low elevation Jeffrey pine.

Timber Stand Improvement (TSI)

The integrated fuels crew worked primarily in the Eastfork compartment performing timber stand improvement prescriptions in the various stands. The crew accomplished 100 acres of thinning mainly in fir dominated stands. The Kings River Hot Shot crew assisted with this thinning project while they were on forest. This work also included thinning along the roadside of McKinley road to reduce pockets of thick, small diameter trees.

Fuel breaks

Greenhouse Gas Reduction Funding (GGRF) received in 2017 funded the initial start of the fuel breaks proposed within the Blue Canyon area. The district committed to installing 300 acres of fuel breaks by March 2020 for the GGRF application. These fuel breaks where historically on the landscape, but had not been maintained since the early 90's. The placement of these fuel breaks aligns with established and planned fuel breaks on private lands. The design of the Blue Canyon fuel breaks was done strategically with Cal Fire in order to provide the best possible protection for the land, private home owners and other structures. Implementation of the fuel breaks began in July of 2018. The design of the

fuel breaks is a shaded fuel break. This retains conifers and hardwoods, but spaced in a fashion as to break up the continuity of fuel. Cutting was finished in October of 2018. The remaining piling, dozer line construction and fire line construction was completed in July of 2019.

Planting

The High Sierra Ranger District committed to planting 500 acres within the Blue Canyon area as a goal for the GGRF application. Reforestation for this project occurred in pockets of high mortality for the purpose of ensuring a viable population and representation of pine species that were dramatically impacted by prolonged drought and bark beetle outbreaks. Reforestation within the Blue Rush Project occurred in tandem with existing prescribed fire plans. After prescribed fire has met targeted fuel loading objectives, areas were evaluated for reforestation. Any existing natural regeneration will be maintained and artificial regeneration was used to supplement in pockets where the desired species composition is not adequate or where natural regeneration failure has occurred due to limited seed supply or where seedbed conditions were not favorable.

In 2019 the High Sierra Ranger district oversaw the successful planting of over 225 acres in the Blue Rush project area. This began in April of 2019 and was completed in May. Favorable planting conditions, supplemented by sufficient contract management led to a successful planting year. Initial fall survival quick surveys have shown seedlings with vigorous growth over the past few months. Survival exams will be performed through the fall.

Release

The release of seedlings occurred after planting to reduce the competition that seedlings will face with the current vegetation within the area. Release methods included herbicide applications and hand grubbing. Without the use of herbicide treatments many areas contain vegetation that will outgrow and overrun conifer seedlings. Conifer seedling survival and growth are closely linked to the amount of shrub cover and available water. More brush cover results in less water available for conifer survival and growth. When brush cover exceeds 15 percent, conifer survival drops quickly (McDonald and Oliver 1983, McDonald and Fiddler 1989). All 225 acres that were planted, where released this field season along with the 425 acres that were planted in FY18.

Roadside Hazard

The removal of diseased and dead trees that threaten roadside safety along with vegetation that poses to be a fire hazard will occur along indicated roadsides. The treatment will occur within a two-hundred-foot buffer along both sides of the road. Dead trees will be mechanically or hand-felled, piled, and burned or removed. Shrubs and other vegetation will also be reduced mechanically typically by mastication.

The 10S02 road leading from the Blue Canyon work center to Pine Flat, was implemented in the end of September 2018 and completed in October. This was 180 acres.

The 10S43 road which connects the Barnes Mountain area to the work center was awarded as a service package to a fuel's reduction and roadside hazard contract. Implementation of the project was begun in late August of 2019. It makes up 180 acres of treatment.

The 10S17 road from the work center connecting to Dinkey creek, was also awarded in our service contract. Implementation begun this past summer and once completed will make up 173 acres of treatment.

Treatment of the 10S18 road was undertaken in collaboration with the National Forest Foundation. This allowed for an increase in pace and scale, with little strain on current staff. Work began in August of 2019 and once completed will consist of 170 acres of treatment.

This collection of roadside hazard projects conjoined with past efforts will complete all the critical roadways in the Blue Canyon area. This will provide for the added safety of our staff and forest recreationalist.

Fuels Reduction and Site preparation

Treatments within this area will include reducing the number of standing dead trees through mechanical or hand-felling, piling and burning. Sites designated for reforestation will be mechanically site prepared, planted, and released by hand-hoeing or herbicide. Ground vegetation will also be masticated or piled to allow for optimal establishment and growing conditions for natural regeneration. This area also requires treating the invasive plants with herbicides and efforts to reduce the amount of broom present.

Through the fuels reduction contract, 300 acres were put forth for site prep. Work began in August of 2019 and is expected to finish by the end of the calendar year.

Timber

Timber harvesting on the Eastfork Stewardship finished in FY18 and the contract was closed in FY19.

Timber harvesting began on the Cow Stewardship in FY19 and 2105 CCF (1227 MBF) was cut and removed in FY19. This is about 16 percent of the original contract volume. Thinning of merchantable trees has been done in some of the units near Camp Fresno and also units in the Foster Ridge area. Hazard tree abatement has also been done along some of the roads.

Timber harvesting began on the Swanson Stewardship in FY19 and 4915 CCF (2758 MBF) was cut and removed in FY19. This is about 32 percent of the original contract volume. Thinning of merchantable trees has been done in some of the units along Dinkey Creek Road and some of the units in the northeast part of the project. Hazard tree abatement has been done along some of the roads. Some of the roadside hazard cull material decked along Dinkey Creek Road has been removed (about 70 loads).

The Camp Fresno Decks sale was awarded in FY19. It will remove about 800 CCF (400MBF) of dead and down and standing trees from the Camp Fresno area. Some of this material has been removed from the site.

The Blue Basin Decks sale was awarded in FY19. It removed about 750 CCF (375 MBF) of cull logs from the Blue Canyon and Jose Basin areas.

Aquatics

- **Dinkey North and South:** Collected stream temperatures in three streams in Dinkey North and one stream in Dinkey South for post project monitoring.
- **Eastfork:** Collected stream temperatures in four streams for third year post project monitoring. Inventoried all nine known occupied meadows for Yosemite toad (YT) (threatened) for compliance with the Programmatic Biological Opinion implementation and take monitoring. YT were observed breeding in four of the nine meadows this season. In PlanID 69, 116 and 216, of the Bear Ridge unit, collected post timber implementation photo point data in occupied YT habitat for upland habitat impacts monitoring.

10S23 and 5 spurs: Decommissioned/obliterated 6.9 miles of road. Removal of: 42 culverts (12-36 in, three at 5-6 ft diameter); 120 feet of rock gabion wire; 30 tons pf asphalt, and one cattle guard bridge at Snow Corral Creek Crossing. Re-contouring of stream channels, stabilization of banks. Collection of pre, post, and post 2018/2019 winter photo points. Monitoring of Sierra Nevada yellow-legged frog (SNLF) (endangered) population in Snow Corral Meadow and Snow Corral Creek.

- **Soaproot**: Collected stream temperatures in three streams for project monitoring. Coordinated limited operation periods within occupied Western pond turtle habitat for hazard tree removal contracted work due to additional tree mortality. Conducted Western Pond Turtle (WPT) (FS sensitive) protocol level surveys on six streams. Observed WPT in two.
- **Bald Mountain:** Collected a pre- and during project stream temperatures in five perennial streams associated with TES species. Inventoried 7 occupied YT meadows (Visual encounter surveys) for presence. YT were observed in 2 of the 7 meadows Surveyed an additional 12 meadows within range of occupied habitat. YT were observed in 2 of the 12 meadows (new sightings). Completed annual inventory of three reaches of WF Cow Creek for Lahontan cutthroat trout (LCT)(threatened) population counts. Results indicated a slight decrease of fish presence in R1 and R2. One YT juvenile YT was observed in Reach 1 during the survey.

  Inventoried Cutts Meadow, Upper Cutts, Rock Creek (and associated meadows), and Swanson Meadow for SNYLF population monitoring. SNYLF were found at all sites at similar levels to previous surveys. Inventories are as per the terms and conditions of the Bald Mountain Project Biological Opinion (2014).

  Finished pre-project monitoring Stream Condition Inventory surveys in Reach 1 of WF Cow Creek (LCT occupied).

  Provided support to the Sale Administrator regarding limited operating periods for the YT in occupied timber units near WF Cow Creek (occupied LCT, YT). Worked with the Sale Administrator to ensure that treatments had minimal impacts to occupied YT habitat and followed terms and conditions in the Biological Opinion (BO). Coordinated with FWS for amendment to the BO to allow hauling after Oct. 1. Conducted YT road mortality surveys on 9S10 between WF Cow Creek and Foster Ridge road during hauling operations. No YT individuals were observed killed.

  Continued on coordination with the US Geological Survey San Diego Field Station Research Center collaboration for the Elevated Road Segment study to address YT road mortality on Forest Service roads 9S02 and 9S09. Additional OHV Event project monitoring for 3 separate Events were also conducted in the area. This included pre-, during, and post-project amphibian road mortality monitoring, and 5 additional surveys for mortality checks on Forest Service roads 9S09 and 9S02 around Cutt's Meadows (occupied by YT and SNYLF). Initial results indicate that mortality decreased on 9S09 from 88 YT individuals in 2017, to 14 in 2018, and up to 16 in 2019. On 9S02, there were four in 2017, six in 2018, and seven in 2019 YT observed killed on the road.
- **Exchequer:** Collected stream temperatures in four streams for pre project monitoring. Conducted pre project meadow surveys in 8 of 12 known occupied YT breeding meadows. Breeding was observed in four of the eight meadows. Survey efforts were in compliance with the Biological Opinion for the Project as pre-implementation monitoring. Four meadows were not visited for time and priority reasons.

Processed information for all inventories completed including entering data into regional databases including NRIS, and WIT, labeling photos and filing data appropriately.

Various monitoring occurred within the landscape from harvesting activities to grazing to water sampling in the headwaters of Dinkey Creek. The results are split into two sections. The first is The Best Management Practices (BMPs) and the second is the Water Quality Sampling completed at the headwaters of Dinkey Creek within the Dinkey Lakes Wilderness.

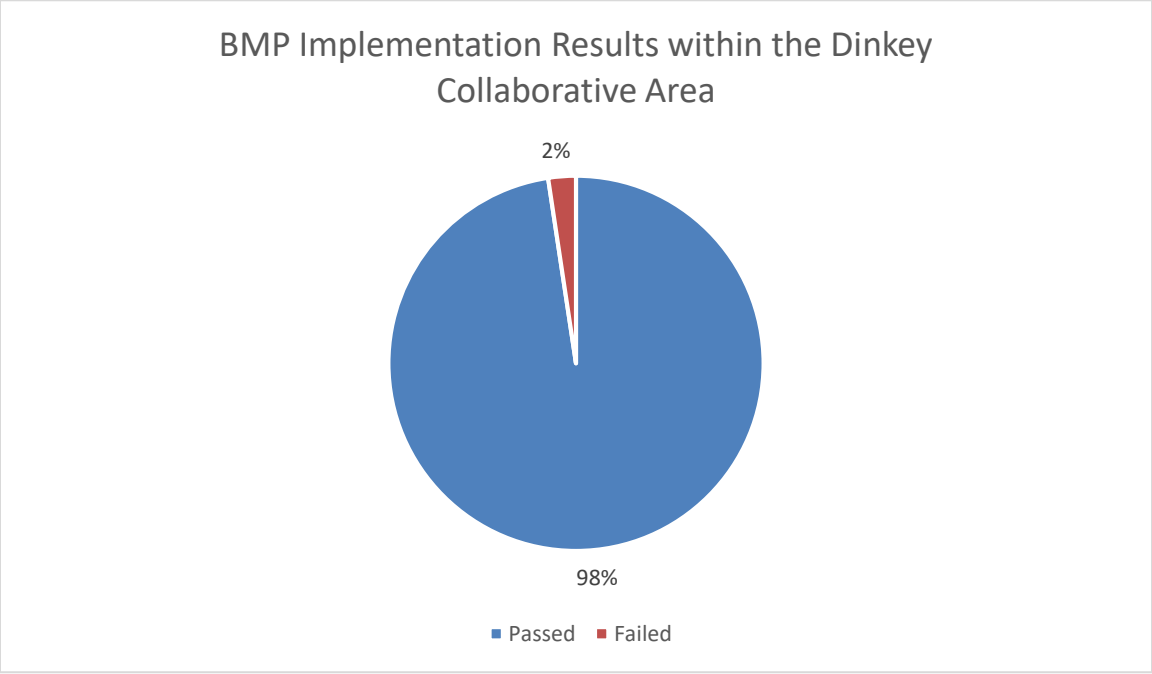
Hydrology

Best Management Practices

The following report details the requirements with California Water Code provisions that require the issuance of Waste Discharge Requirements (DWR's or permits) or conditional waivers thereof for any activities that discharge or propose to discharge waste that could affect the quality of the State's waters. It is also consistent with the State Water board's intention that Regional Boards will waive DWR's for Forest Service (FS) activities provided we reasonably implement the Best Management Practices (BMPs) and the provisions of our Management Agency Agreement (MAA, page 116 of BMP Handbook). Implementation and effectiveness monitoring were evaluated using Best Management Practices reporting forms which provide a detailed visual monitoring of ground disturbing management activities such as, but not limited to, roads, landings, skid trails, water diversions, and stream crossings. BMPs were done across the Forest and within the Dinkey Collaborative.

BMP Implementation Results

The High Sierra Ranger District completed 85 implementation BMPs within the Dinkey Collaborative boundary. Only 2 were not satisfactory. They were with regards to the Eastfork Stewardship project area regarding flagging off a streamside management zone. The problem was resolved by reflagging the area. The graph below is a visual summary of the results. More details on each BMP will follow.



Dinkey Omnibus: (Ongoing)

Unit: 8 units for pile burning

Form F25: Prescribed Fire met project requirements. Burn Plan prescriptions reflected soil and water protections. Once complete the burn met the desired prescription.

Muley Hazard Tree Salvage

Muley Hazard Tree Salvage consists of Timber and Engineering related BMPs. BMP forms applicable are the following. Unless otherwise noted, all BMPs were implemented to meet or exceeds contract and project specifications.

- T01: Streamside Management Zones
- T02: Skid Trails
- T04: Landings
- E14: Temporary Roads

Between the 4 forms listed above, a total of 16 BMPs were completed for the project. A quick summary of each form and how it was successfully implemented is below.

- Form T01: Streamside Management Zones were clearly identified on the ground and widths were specified to project requirements. Mechanized equipment was restricted from SMZ. The project met all requirements for the T01 form.

- Form T02: Skid Trails complied with FSH standards and any special EA conditions related to location, erosion control, width, and making sure skid trails disturbed a minimum of ground in the unit. Utilizing endlining was not applicable.

- Form T04: Landings were not ripped. Landing placement and erosion control treatment complies with FSH 2409.23 standards, and meets any special EA conditions related to location, drainage, size, and landing stabilization. Six existing landings were used.

- Form E14: A temporary road was needed in order to log subdivision 7. The road was constructed to meet plan objectives. Construction contract requirements were met for drainage, slope stabilization, and slash disposal. Once finished, the temporary road was closed and obliterated.

Swanson Stewardship

Swanson Stewardship consists of Timber and Engineering related BMPs. BMP forms applicable are the following. Unless otherwise noted, all BMPs were implemented to meet or exceeds contract and project specifications.

- T01: Streamside Management Zones
- T02: Skid Trails
- T04: Landings
- T05: Timber Administration

Between the 4 forms listed above, a total of 4 BMPs were completed for the project. A quick summary of each form and how it was successfully implemented is below.

- Form T01: Streamside Management Zones were clearly identified on the ground and widths were specified to project requirements. Mechanized equipment was restricted from SMZ. The project met all requirements for the T01 form.

- Form T02: Skid Trails complied with FSH standards and any special EA conditions related to location, erosion control, width, and making sure skid trails disturbed a minimum of ground in the unit. Utilizing endlining was not applicable.

- Form T04: Landings were not ripped. Landing placement and erosion control treatment complies with FSH 2409.23 standards, and meets any special EA conditions related to location, drainage, size, and landing stabilization. Six existing landings were used.

- Form T05: Swanson Stewardship is 5% completed for implementation purposes and is expected to be done 3/31/2021. Erosion control work specified and purchaser was advised to meet contract requirements. Erosion control work is adequate and current. The purchaser maintenance of erosion control structures are adequate to project requirements.

Eastfork Stewardship (Complete)

Eastfork Stewardship consists of Timber and Engineering related BMPs. BMP forms applicable are the following. Unless otherwise noted, all BMPs were implemented to meet or exceeds contract and project specifications.

- T01: Streamside Management Zones
- T02: Skid Trails
- T04: Landings
- T05: Timber Administration

Between the 4 forms listed above, a total of 50 BMPs were completed for the project. A quick summary of each form and how it was successfully implemented is below.

- Form T01: Streamside Management Zones were clearly identified on the ground and widths were specified to project requirements. Mechanized equipment was restricted from SMZ. The project met all requirements for the T01 form.

- Form T02: Skid Trails complied with FSH standards and any special EA conditions related to location, erosion control, width, and making sure skid trails disturbed a minimum of ground in the unit. Utilizing endlining was not applicable.

- Form T04: Landings were not ripped. Landing placement and erosion control treatment complies with FSH 2409.23 standards, and meets any special EA conditions related to location, drainage, size, and landing stabilization. Six existing landings were used.

- Form T05: Eastfork Stewardship is 100% completed for implementation purposes. Erosion control work specified and purchaser was advised to meet contract requirements. Erosion control work is adequate and current. The purchaser maintenance of erosion control structures are adequate to project requirements.

Only 2 BMPs did not meet contract and project specifications. These were minor and resolved on site. Details below further discussion the issues addressed during implementation.

- Form T01: Streamside Management Zones for Unit 316 had a minor departure with regards to clearly identifying SMZs clearly on the ground. This departure caught during the layout phase and before logging operation started. Therefore no ground disturbing actions occurred as a result until SMZs were flagged.

- Form T01: Streamside Management Zones for Unit 116 had a minor departure with regards to clearly identifying SMZs clearly on the ground. This was caught during the layout phase and before logging operation started. Therefore no ground disturbing actions occurred as a result until SMZs were flagged.

Engineering Specific BMPs

Form Road E – Active Road Decommissioning

Both implementation and effectiveness monitoring was done for the Snow Corral road (10S23) on November 7, 2018. The decommissioning consisted of removing waterbody crossings structures and restoring waterbody morphology in disturbed areas. Access to the decommissioned portion was blocked to future use. Approximately 6 miles of road was removed from the landscape and was part of the Eastfork EA. Provisions were provided within the EA, contract specs, and on site by Forest Service Aquatics Biologist and Hydrologist. Implementation went smoothly. No flows were in any

channels during decommissioning. No Evidence of uncontrolled erosion or sediment seen entering stream corridors. No spills or leaks from machinery.

Form Road F – Completed Road Decommissioning

Road decommissioning was completed on November 19, 2018 for the Snow Corral Road (10S23). Approximately 6 miles was removed from the road system. No erosion control plan was available, however, district input from aquatic biologist and hydrologist was included in the contract. Both disciplines were present the entire time and erosion control work completed to meet intent of BMPs and erosion control. Therefore an erosion control plan or supplemental one was not needed. Everything was implemented to design specifications. No spills or leaks observed.

Water Quality Sampling

Water Quality Sampling was completed within the Dinkey Lakes Wilderness. The Dinkey Lakes Wilderness is the headwaters of Dinkey Creek. It is a heavily used wilderness area for day hikes, backpacking, and group camping. Many overnight uses take place near several of the natural lakes. Since these waters make up the headwaters of Dinkey Creek, monitoring various indicators for water quality purposes is warranted. These indicators are water temperature, pH, Electric Conductivity, Total Dissolved Solids, Salinity, Dissolved Oxygen, and Total Alkalinity. The results are in the table below.

Name	Date	Temp (C)	pH	EC (µS)	TDS (ppm)	Salinity (ppm)	Dissolved Oxygen	Total Alkalinity	Time 24hr
First Dinkey Lake	7/25/2019	20.6	6.52	4.6	3.3	0	7.97	26	1309
Island Lake	7/25/2019	16.3	6.36	4.3	2.9	0	8.36	17	1150
Mystery Lake	7/25/2019	19.5	8.21	4.4	3.1	0	8.3	30	935
Mystery Lake	10/1/2019	7.8	8.26	4.6	3.3	0	7.49	25	1016
Second Dinkey Lake	7/25/2019	18.1	6.09	3.3	2.2	0	8.23	20	1120
South Lake	7/25/2019	17.6	6.48	4	2.3	0	8.61	15	1040
Swede Lake	7/25/2019	17.9	5.99	4.6	3.3	0	8.88	20	1011

The results from the table above show no present signs of water quality issues with regards to the lakes at the headwaters of the Dinkey Creek watershed. All values are within acceptable ranges. Additional surveys are recommended to establish baseline data. Additional surveys per year are also recommended if feasible.

Summary for Hydrology

BMP implementation monitoring included road decommissioning, recreation trail maintenance, timber harvesting, grazing, and more. This is the highest amount of BMPs implemented within the Dinkey Collaborative compared to any other year. Out of the 85 implemented, 98% were being effectively implemented to contract specifications and water quality prevention. Only 2% were not satisfactory. However, these 2 were quickly resolved by

re-flagging areas again to protect streams. Essentially, it would have been 100% implemented correctly had the flagging been re-established before the evaluation.

Water quality monitoring occurred with in headwaters of Dinkey Creek in the Dinkey Lakes Wilderness. Various indicators were recorded during July of 2019. The results showed all values were within their appropriated ranges. A follow up survey on Mystery Lake was completed to see if anything had changed in October. No issues were present and it was assumed the other lakes were also fine. Continual monitoring is recommended to better establish baseline ranges as well as adding additional parameters of nitrate and nitrite monitoring.

Terrestrial Wildlife

California spotted owl

The demographic study was initiated in March 1990 and continues contingent on funding. The ongoing study is primarily within the CFLR boundary. The study consists of monitoring spotted owls to answer existing critical questions and to provide for adaptive management of the owl in the future. The monitoring helps understand the movement of the owls when we are implementing mechanical treatments. The objectives of the study are to 1) estimate the spotted owl rate of population change, occupancy status of owl territories; 2) survival and reproductive rates by age class. The study also will look for associations among vital rates and habitats characteristics within the study area.

Pacific fisher

Currently the Pacific fisher has been proposed for listing as threatened. Kings River Fisher Project (KRFP) is tracking individual fishers and looking directly at population vital rates (survival, reproduction, dispersal, status) and habitat selection. The KRFP received funding to continue monitoring with collars for 2019. Once the funding is gone, collars will be removed and data will be analyzed.

8. **The WO (EDW) will use spatial data provided in the databases of record to estimate a treatment footprint for your review and verification**. This information will be posted here on the internal SharePoint site for verification *after the databases of record close October 31*.

- **If the estimate is consistent and accurate**, please confirm that below and skip this question.
- **If the gPAS spatial information does NOT appear accurate**, describe the total acres treated in the course of the CFLR project below (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated?

Fiscal Year	Footprint of Acres Treated (without counting an acre of treatment on the land in more than one treatment category)
FY 2019	983 acres
Estimated Cumulative Footprint of Acres (2010 or 2012 through 2019)	35,915 acres

If you did not use the EDW estimate, please briefly describe how you arrived at the total number of footprint acres: what approach did you use to calculate the footprint?

The footprint acres were calculated by reviewing the Annual reports that have been submitted over the last 10 years.

9. **Describe any reasons that the FY 2019 annual report does not reflect your project proposal, previously reported planned accomplishments, or work plan.** Did you face any unexpected challenges this year that caused you to change what was outlined in your proposal? ***For projects finishing their tenth year***, if you have any additional insights from your cumulative work over the course of the project please share those here as well. (Please limit answer to two pages).

The unexpected challenge that we faced in 2019, we could not burn as much as wanting to be accomplished due to the lack of moisture. There was too high of a fire risk in order to accomplish our underburning and pile burning programs.

10. *Project selected in 2012 and 2013 ONLY* - Planned FY 2020 Accomplishments

Performance Measure Code	**Unit of measure**	**Planned Accomplishment for 2020** (National Forest System)	***Planned Accomplishment on non-NFS lands within the CFLRP landscape[3]***
Acres of forest vegetation established FOR-VEG-EST	Acres		
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre		
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles		
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres		
Miles of road decommissioned RD-DECOM	Miles		
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles		
Volume of timber sold TMBR-VOL-SLD	CCF		
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre		
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres		

Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2020 is available.

11. ***Project selected in 2012 and 2013 ONLY* -** Planned accomplishment narrative and justification if planned FY 2020 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page): N/a

[3] As we shift to more emphasis on sharing results across all lands within the CFLRP projects – if relevant for your project area – please provide estimates for planned work on non-NFS lands within the CFLRP areas for work that generally corresponds with the Agency performance measure to the left and supports the CFLRP landscape strategy. Give your best estimate at this point; if it's unknown how much work will occur off NFS lands, simply state unknown.

12. **Please include an up to date list of the members of your collaborative if it has changed from previous years**. If the information is available online, you can simply include the hyperlink here. If you have engaged new collaborative members this year, please provide a brief description of their engagement.

Out collaborative list is the same that we have submitted in the past.

13. **Media recap**. Please share with us any hyperlinks to videos, newspaper articles, press releases, scholarly works, and photos of your project in the media that you have available. You are welcome to include links or to copy/paste.

Signatures:

Recommended by (Project Coordinator(s)):__/s/**Kim Sorini-Wilson**

Approved by (Forest Supervisor(s)): _/s/**Dean Gould**

Draft reviewed by (collaborative chair or representative): _/s/**Susan Britting, Sierra Forest Legacy Director**