CARBON FARM PLAN

McKenzie Table Mountain Preserve

Prepared by:

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Signature Page

The Carbon Farm Plan is an important part of the conservation management system for your fertilized crop and/or pastureland. This Carbon Farm Plan documents the planning decisions and operation and maintenance information for carbon farming on the planned land units.

NRCS Client Name: McKenzie Preserve

Facility / Ranch: McKenzie Preserve

	Contact Information:	Physical Address and phone (if different):
Street Address:	PO Box 691	22477 Auberry Rd,
City, State, Zip:	Mariposa, CA 9538	Clovis, CA 93619
Phone:	(209) 742-5556	(209) 742-5556

☐ I identify as a Socially Disadvantaged Farmer or Rancher (SDFR) as defined by the CDFA.

Total Cropland Acreage (Owned/Leased) Included in Plan: 2,960 acres.

Operation Type: Table Mountain Preserve

Client Initial Management Objectives:

Mackenzie Preserve is looking to improve rangeland by implementing practices that allow them to increase soil carbon, native plant species planting, removal of invasive plant species, prescribed grazing implementation, and installation of structures to reduce runoff.

I, as the decision-maker for the Rangeland covered by this Carbon Farm Plan (CFP), confirm my involvement in the planning process. I agree that each item and practice listed in the CFP's elements are desired and will meet my management and conservation goals. I am aware that I am responsible for maintaining all necessary records related to the implementation of this plan. It is my intention to pursue funding for implementation of this CFP, to complete practices as outlined in the plan.

Signature:  Date: 9/9/2024

Name: Bridget Fithian

As a certified CFP Planner, I certify that I have reviewed both the CFP and supporting documentation for technical adequacy, and the elements of the documents are technically compatible, reasonable, and can be implemented.

Signature: _____ Date: _____

Name: Harol Gonzalez Gallardo

Title: Technical Service Provider

Certification Credentials: TSP #21-23594

Introduction

Carbon is an essential element for all life and understanding how it moves helps with comprehending the biological processes and factors that influence it. One form of carbon is the greenhouse gas carbon dioxide, (CO_2). Increased levels of CO_2 insulate the Earth, causing temperatures to rise. Understanding how CO_2 is absorbed then released into the Earth's atmosphere helps us learn more about the climate and predict global warming.

Carbon is crucial to soil function and productivity, as it is a primary component of healthy soil conditions. Soil management plays a critical role in determining whether the carbon remains in the soil or is released into the atmosphere. Agricultural practices can affect both the amount and composition of soil organic carbon, which in turn impacts the physical, biological, and chemical condition of the soil, as well as overall soil health. Farm practices can influence carbon levels, which in turn affects agricultural productivity and resilience, and the carbon cycle itself. Soil has the capacity to hold more carbon than the atmosphere and vegetation combined, and for longer periods of time. This has led people to explore soil carbon as an opportunity to mitigate and adapt to climate change, as well as address ecosystem functions. For example, a type of ecosystem is grasslands, which are empty spaces for livestock production or flyover land between urban areas. Grasslands play a significant role in the composition of the atmosphere, with greater potential than fossil fuels, they can accumulate carbon, rather than just releasing it into the atmosphere.

Importance of Soil Organic Carbon

The agricultural sector can have a significant impact on the carbon cycle, through the release of carbon and the sequestration of carbon. However, farmers have a vested interest in retaining and increasing soil organic carbon levels for their individual fields. This is because higher soil organic carbon promotes soil structure or tilth, which leads to greater physical stability. This improvement boosts soil aeration (oxygen in the soil) and water drainage and retention, reduces the risk of erosion and nutrient leaching, and enhances the chemical composition and biological productivity of the soil, including fertility and nutrient holding capacity. As carbon stores in the soil increase, carbon is "sequestered," and the risk of losing other nutrients through erosion and leaching is reduced. An increase in soil organic carbon typically leads to a more stable carbon cycle and enhanced overall agricultural productivity. On the other hand, physical disturbances of the soil can lead to a net loss of carbon into the surrounding environment due to the formation of CO_2.

Carbon Farm Planning

The Carbon Farming framework advances land management practices known to enhance the rate at which CO_2 is removed from the atmosphere and converted into plant material and soil organic matter. A Carbon Farm Plan (CFP) is a whole-farm assessment that embodies all the opportunities for carbon sequestration as well as evaluating co-benefits, from increased productivity, water retention, and biodiversity to greater drought and climate resiliency on a particular farm or ranch. A set of online tools (including COMET-Planner) allows the quantification of greenhouse gas (GHG) benefits associated with each land management practice. A completed CFP provides the producer with a portfolio of recommended land management practices and an estimation of benefits and costs.

Carbon farming combines cutting-edge agricultural practices with the tools of ecological design to build healthy soil and profitable farms and ranches, as well as improve the rate at which carbon dioxide is removed from the atmosphere and converted to plant material and/or soil organic matter. CFPs can be developed for natural and working lands including rangelands, forests, croplands, and orchards.

Steps to creating a CFP include the use of Natural Resources Conservation Service (NRCS) COMET-Planner and COMET-Farm tools for preliminary calculations of the carbon sequestration potential of land management practices

Landowner and Property Information

Sierra Foothill Conservancy

Sierra Foothill Conservancy (SFC) a 501(c)(3) Nonprofit Land Trust established in 1996. Accredited by the Land Trust Accreditation Commission, August 2014, whose objectives are to protect wildlife & conserve native flora and historic rangelands, provide educational and recreational opportunities for the community, promote biodiversity and scientific study of foothill ecosystems and maintain open space and beautiful vistas.

MISSION

The grasslands, foothills, and forests between Yosemite and Kings Canyon National Parks provide land for farms and ranches, a home for native plants and wildlife, and a source of clean water.

Sierra Foothill Conservancy honors their natural and cultural heritage by protecting these resources and ensuring that present and future generations will continue to experience and enjoy the land in this region.

VISION

From the snow-capped Sierra to the Central Valley floor, expansive landscapes, important habitats, and clean water resources are conserved and managed to ensure continuing public benefits. SFC supports a thriving land-based economy while promoting a conservation ethic that spans generations.

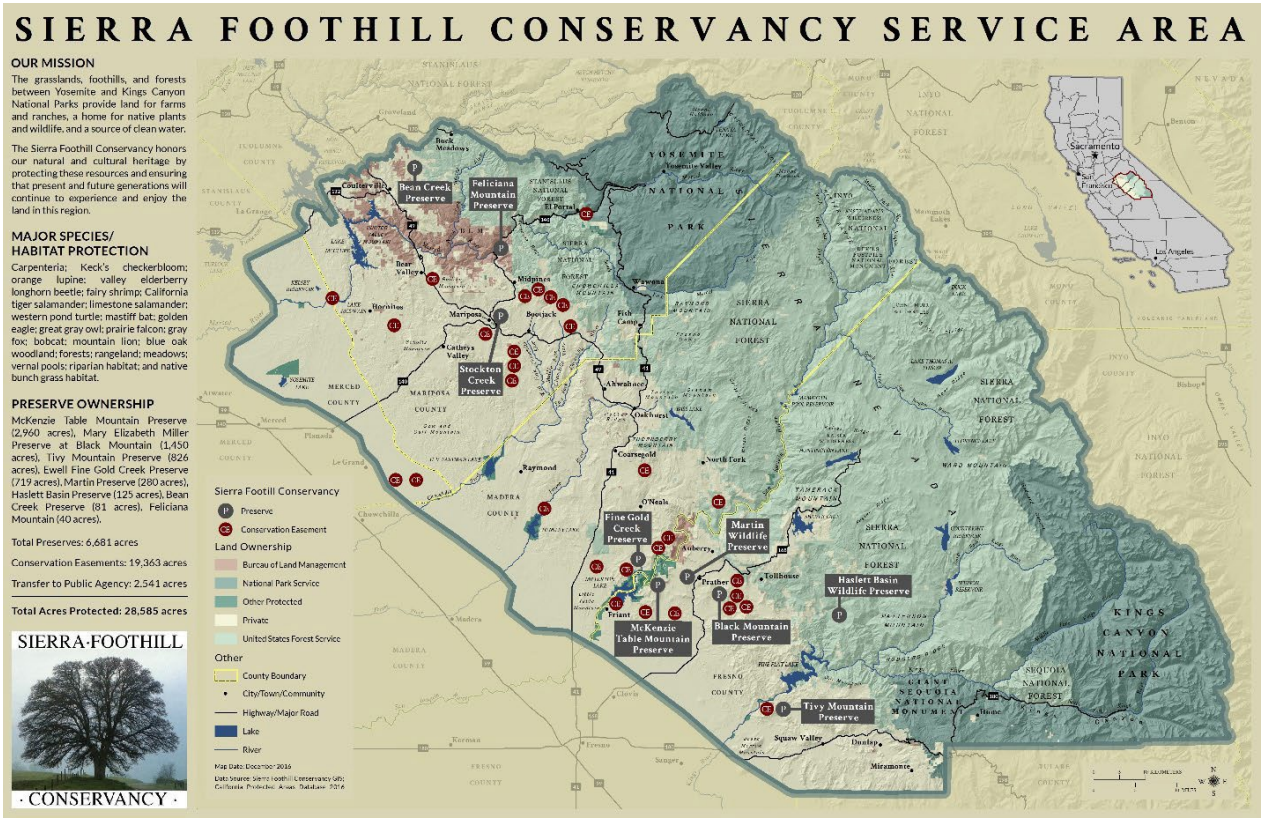


Figure 1 Sierra Foothill Map

Ruth McKenzie Table Mountain Preserve

The Ruth McKenzie Table Mountain Preserve (Preserve) is 2960 acres, and located between Friant and Prather, on the north side of Auberry Road. Vegetation consists primarily of annual grassland and blue oak woodland that slopes upwards towards the basalt lava table lands that give the Preserve its name. Most hikes on the Preserve include a climb to the top of the table formation, where visitors can enjoy majestic views of the San Joaquin River drainage and the Sierra Nevada mountains.

History

The Preserve was acquired in trust from The Nature Conservancy (TNC) in 1998. The Preserve had previously been placed in a trust by its owner, Ruth McKenzie, a descendant from an early Fort Miller pioneer family who wanted the Preserve to remain in ranching and open space in perpetuity. After Ruth's passing, she left 2,000 acres and a considerable amount of money to TNC for the long-term conservation of the property.

Habitat

The Preserve includes a significant portion of one of the flat-topped tables that are visible from the road. In spring, rainwater collects in the table's low spots, forming vernal pools and because the basalt is impermeable, these pools can hold water for several weeks to months until they evaporate. These pools provide habitat for a variety of highly specialized vernal pool species, including rare plants, amphibians and crustaceans that have a life cycles directly tied to water cycle. When the pools dry up in late spring, the crustaceans become seeds or cysts to survive the rest of the year. On the far side of the table formations, out of sight of Auberry Road, the land slopes steeply down to the San Joaquin River. These north-facing slopes sustain an excellent mix of foothill pine forest and chaparral. The Preserve also includes a 47-acre parcel along the Little Dry Creek on the south side.

Riparian Zone

A first order tributary stream to the Little Dry Creek runs through the McKenzie Preserve and several other intermittent streams. Many reaches of the streams go dry during the summer months and during dry years, however there are several spring fed pools found along the stream bed year-round. Removal of the invasive figs will most likely result in more productive springs providing more water for wildlife and aquatic species reliant on the stream such as Sierra Newts (Taricha sierrae).

There are some reaches of the stream that are devoid of normal riparian woody species, possibly from a history of poor grazing management. SFC wants to restore the riparian corridor by increasing plant litter and cover; diversify composition, encourage growth, and improve vigor of desirable riparian vegetation; and protect stream banks from erosion.

Livestock Management

After the first fall rains (usually in November), a herd of approximately 200 stockers or 100-125 cow/calf pairs are grazed from germination, with a mandate to leave a minimum residual dry matter of 700 lbs/acre in each pasture. Stocking rate is customized yearly depending on rainfall (fewer cattle in drought years, more in wet years). The cattle are rotated through 11 hard-fenced pastures, containing each at least one concrete water trough. SFC utilizes an adaptive management strategy, so that the timing and duration of annual grazing events in each pasture follows the limits laid out in the grazing plan, whilst incorporating new information (i.e. Rangeland Monitoring Network data). Also, the seasonal on-the-ground observations including forage condition, rainfall patterns, and other ecological indicators adhere to the same adaptive management system.

Hikes

Most hikes on the Preserve include a climb to the top of the table formation, where visitors can enjoy spectacular views of the San Joaquin River drainage and the Sierra Nevada mountains. In spring, there are picturesque displays of wildflowers on the slopes and tabletops; with the trails being at the low end of the preserve. A four-mile self-guided Discovery Trail along the ranch road and part of the historic SJ&E railroad right of way is suitable for easy walking. The climb to the top of the table is strenuous; the table top itself is level, but walking is difficult because of the rocky surface. Total distance along the trail from the parking area to the top of the table is about six miles, round trip, with just over 1,000 ft elevation change.

Infrastructure

The Preserve boundary is completely fenced, with the exception of the precipice of the Table Mountain where no fence is necessary and across the McKenzie Table. Most of the fencing is in good condition and will hold cattle. There are 8 fields on the main part of the McKenzie preserve ranging in size from 3 to 360 acres and are all separated with 4 strand barbed wire. There is also a corral for shipping cattle at the entrance to the property. Water is well distributed across the ranch via developed springs, tanks, above ground poly-pipeline and troughs. There is a 1st order stream with intermittent flows, several springs and seeps, vernal pools, and several tanks and water troughs. All of the troughs have wildlife escape ramps, but some are in need of replacement.

There are two dirt roads on the Preserve, with one that sits atop a historic railroad grade. There are some erosion concerns on the roads that will be addressed in the conservation plan.

Soil

The Preserve is composed of many soil types over a wide range of slopes. Ahwahnee, Auberry, and Vista sandy loams dominate the site, with the exception of soils on the tabletop and the Bolin gap field which have stony, gravelly, and cobbly loam. Most of the slope's grades are 30-70% with a few shallower areas. Soils were sampled by Innovative Ag Services for Minerals, Organic Matter and Total carbon. Results show low content of macro-nutrients (NPK), organic matter depletion and low carbon content. See Attachment for soil lab results.

Ahwahnee soils – parent material: quartz diorite; depth to root restrictive layer: 18-40 inches; drainage: well drained; organic matter in surface horizon: 1%

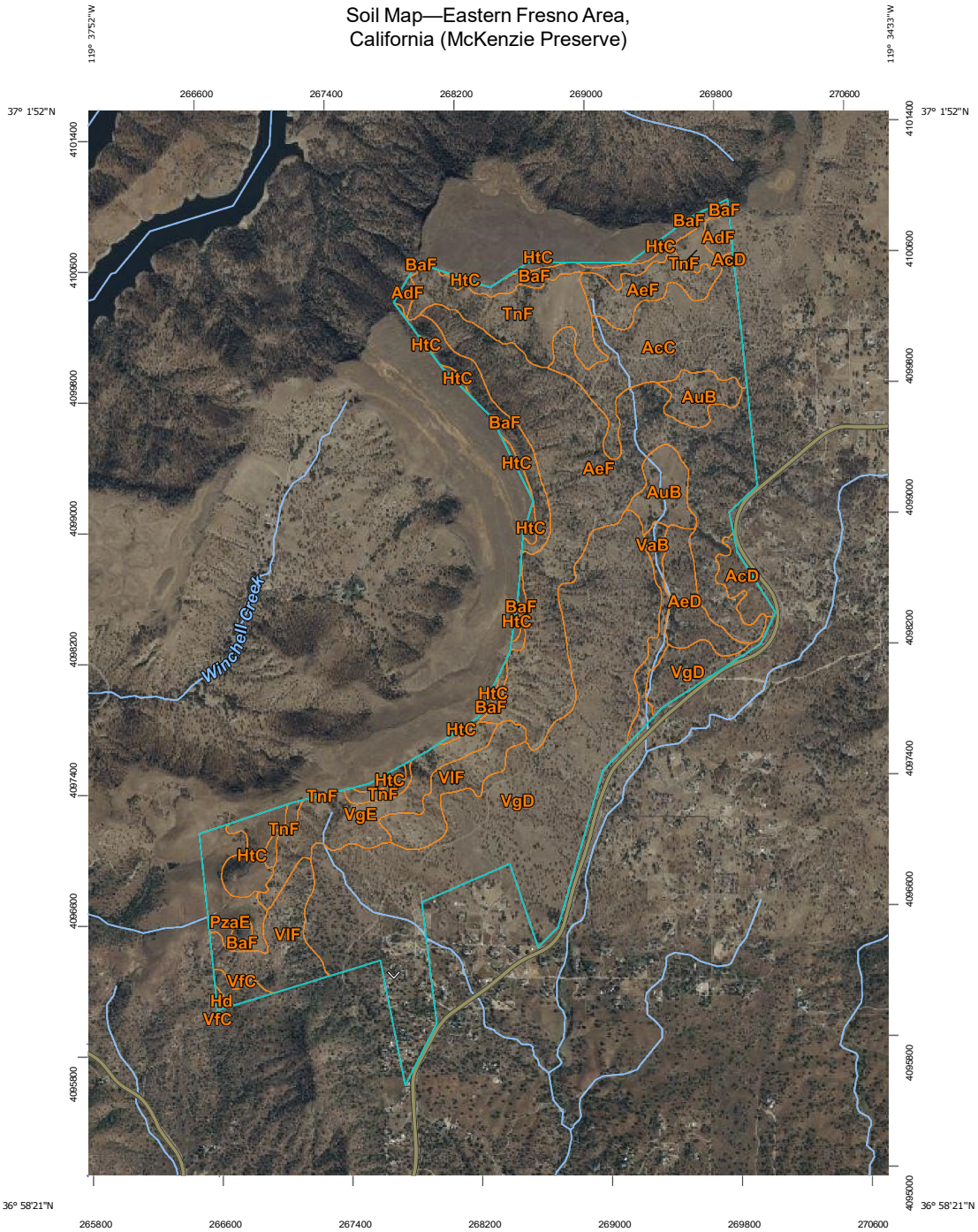
Auberry soils – parent material: quartz diorite; depth to root restrictive layer: 40-60 inches; drainage: well drained; organic matter in surface horizon: 2%

Hideaway soils – parent material: basalt; depth to root restrictive layer: 2-10 inches; drainage: well drained; organic matter in surface horizon: 1%

Toomes soils – parent material: volcanic breccia; depth to root restrictive layer: 3-12 inches; drainage: well drained; organic matter in surface horizon: 1%

Vista soils – parent material: granitic rock; depth to root restrictive layer: 10-20 inches; drainage: well drained; organic matter in surface horizon: 1%

Soil Map—Eastern Fresno Area,
California (McKenzie Preserve)



USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative

Soil Survey

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AcC	Ahwahnee coarse sandy loam, 9 to 15 percent slopes	137.1	7.6%
AcD	Ahwahnee coarse sandy loam, 15 to 30 percent slopes	21.8	1.2%
AdF	Ahwahnee very rocky coarse sandy loam, 45 to 70 percent slopes	14.1	0.8%
AeD	Ahwahnee very rocky coarse sandy loam, shallow, 3 to 30 percent slopes	43.1	2.4%
AeF	Ahwahnee very rocky coarse sandy loam, shallow, 30 to 70 percent slopes	443.2	24.5%
AuB	Auberry coarse sandy loam, 3 to 9 percent slopes	62.3	3.5%
BaF	Basic igneous rock land	83.3	4.6%
Hd	Hanford sandy loam, benches	1.7	0.1%
HtC	Hideaway extremely stony loam, 3 to 15 percent slopes	58.0	3.2%
PzaE	Positas gravelly loam, 30 to 45 percent slopes	40.9	2.3%
TnF	Toomes extremely cobbly loam, 30 to 70 percent slopes	118.0	6.5%
VaB	Visalia sandy loam, 3 to 9 percent slopes	24.8	1.4%
VfC	Vista coarse sandy loam, 9 to 15 percent slopes, fewer frost free days, MLRA 18	8.6	0.5%
VgD	Vista coarse sandy loam, shallow, 9 to 30 percent slopes	553.5	30.6%
VgE	Vista coarse sandy loam, shallow, 30 to 45 percent slopes	82.3	4.6%
VlF	Vista very rocky coarse sandy loam, shallow, 30 to 70 percent slopes	113.7	6.3%
Totals for Area of Interest		**1,806.5**	**100.0%**

Site Map

Mckenzie Table Mountain Preserve

1,000 0 1,000
Feet

Legend

- Field (CAFO)
- Field (Contracted nonCAFO)
- Field (nonCAFO)
- APNs
- Reservoir

Wells (Controlled)

- Domestic (CAFO)
- Irrigation (CAFO)
- Domestic (non-CAFO)
- Irrigation (non-CAFO)
- Groundwater Monitoring
- Inactive

Wells (Not Controlled)

- Domestic
- Irrigation
- Wind Turbine

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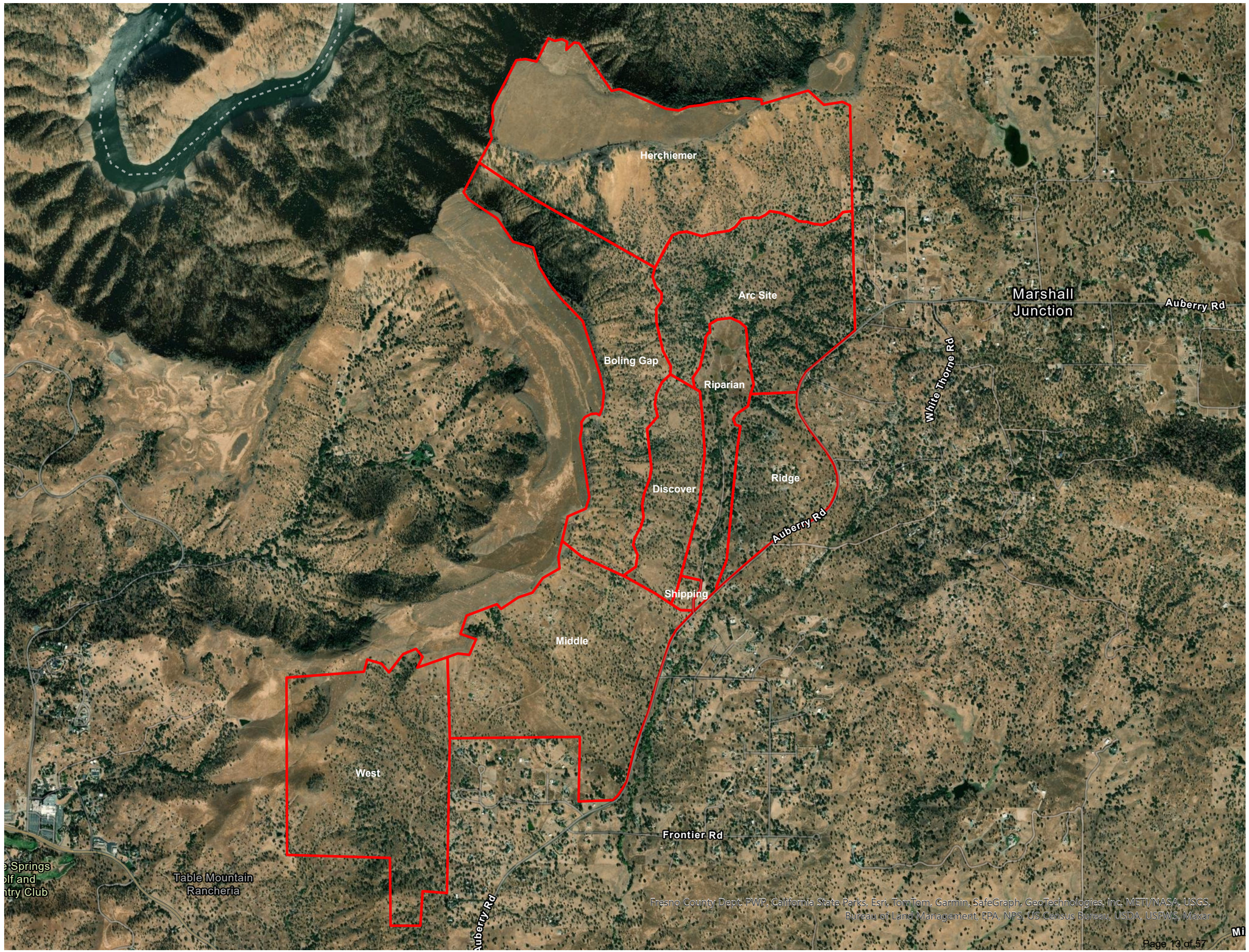

Goals

With the goals to improve soil health and ecosystem function on the Preserve practices recommended by the CFP would serve to increase soil carbon, perform native plant species planting, control invasive plant species, implement prescribed grazing, and installation of structures to reduce runoff.

Resources Concerns

During the visit to Ruth McKenzie Table Mountain Preserve the following resources concerns were identified:

- Organic matter depletion.
- Soil erosion.
- Lack of plant diversity and reproduction.
- Streambank erosion.
- Invasive and noxious weeds.
- Grazing pressure in some areas.

Planned Carbon Beneficial Practices

1. Riparian Restoration (Riparian Forest Buffer CPS 391)

There are some reaches of the stream that are devoid of normal riparian woody species, possibly from a history of poor grazing management or intentional vegetation clearing prior to SFC ownership. SFC wants to improve ecological function by restoring the riparian corridor. Riparian restoration practices will be applied to increase plant litter and cover; diversify composition, encourage growth, improve the vigor of desirable riparian vegetation; and protect stream banks from erosion.
Cottonwood, willow and other appropriate riparian vegetation should be planted on both sides of the creek in the Riparian pasture. The purpose of this practice is:

- Reduce transport of sediment to surface water, and reduce transport of pathogens, chemicals pesticides, and nutrients to surface and ground water,
- Maintain or increase total carbon stored in soils and/or perennial biomass to reduce atmospheric concentrations of greenhouse gases.
- Lower elevated stream water temperatures.
- Restore diversity, structure, composition of riparian plant communities, stream bank stability and hydrologic functioning.

Figure 2 Riparian Restoration Implementation Site

2. Prescribed Grazing Implementation (CPS 528)

SFC plans to use prescriptive grazing as a management tool to address resource concerns and enhance the biodiversity on the Preserve. Diversity of grasses, forbs, and functional groups are of high importance to SFC as well as hydrologic function, soil health, a robust and diverse riparian plant community, availability of resources for aquatic and riparian dependent wildlife, health and viability of vernal pools, and upland wildlife habitat.

This practice is recommended on the 1,800 acres seasonally utilized as cattle pasture. Prescribed grazing implementation will Improve or maintain desired species composition, structure and/or vigor of plant communities, Improve or maintain quantity and/or quality of forage for grazing and browsing animal health and productivity, improve or maintain surface and/or subsurface water quality and/or quantity, reduce soil erosion, and maintain or improve soil health.

3. Compost Application (CPS 336)

Application of compost/compost tea is also recommended, higher rates (6 ton/acre) applied to the grazing areas where the cattle is located can improve the quality of the grass, soil and increase carbon sequestration.

4. Composting Facility (CPS 317)

There is an opportunity to sequester additional carbon and store it in the soil by locally producing at least part of the compost tea, from plant residues, cow manure, etc., which are regularly produced within the Preserve and need to be handled and disposed of. By having the necessary equipment for compost tea manufacturing on site, the Preserve could improve its rangeland area which is showing signs of degradation.

Additional Beneficial Practices:

1. Cultural Plant Establishment (Riparian Herbaceous Cover CPS 390)

The areas where cultural plant establishment will be implemented are currently dominated by non-native species. Eurasian origin annual grasses and noxious wetland cultivars currently dominate the identified Cultural Plant Establishment sites. This current suite of species has effectively excluded the desired native vegetation which would be characteristic of these wetland features. Native sedges, rushes and perennial grasses will be established at the designated sites after control of the non-native species either through torch burning, hand removal or grazing impact.

2. Cross Fencing (CPS 382)

Crossing fences could be utilized in the west and middle fields, this would facilitate adequate planned grazing implementation of livestock in the area. Currently the cattle only graze at the base of the hill and avoid going to higher areas. Separating the fields in smaller sizes would allow for better planned grazing implementation, increasing benefits like longer recovery periods between grazing treatments, balance between natural pasture species and those most suitable for livestock, and greater control of the soil, the harvest, and the nutritional quality of the grass.

3. Pile Burning and seed sowing (Prescribed Burning CPS 338)

SFC will apply multiple burning techniques to reduce invasive species cover on the Preserve and create a seed bed for establishment of native perennial grass species. The proposed species for establishment is nodding needle grass (*Stipa cernua*). The native grass species is expected to increase soil water infiltration rate, storage capacity and soil carbon sequestration. One of SFC's key ecological objectives is to increase the abundance of native perennial grass species. This conservation outcome is desired for the ecological and cultural benefits that native grass species provide on the Preserve.

The understory of mixed annual grasses will be burned along with woody vegetation that is sourced from a nearby stand of interior live oak which is desired to be thinned for fire hazard reduction purposes.

4. Invasive species removal (Herbaceous Weed Treatment CPS 315)

High density of invasive species has been observed in some areas of the Preserve. Herbicide application using a backpack sprayer is necessary to control Italian thistle and Medusahead species. The purposes of this practice are enhancing accessibility, quantity, and/or quality of forage and/or browse, Restore, or release native or desired plant communities for wildlife habitat, Protect soils and control erosion and control pervasive plant species to a desired level of treatment.

5. Rock Drops Structures (CPS 362 Diversion)

In the northern area of the Preserve, erosion problems can be observed in some places due to high-period rainwater runoff. During the rainy period and the steep slopes, water descends from higher areas with greater momentum creating complications such as the movement of sediments and erosion as mentioned earlier.

To avoid this problem, rock drops have been built in some places (Figure 3), but it is vitally important to build more of these structures in the other effected areas to preserve soil and vegetation. The formation of these structures would start by placing the rocks on the ground, on top of the erosion in a tile-like fashion. Then, they are built up on the sides with smaller aggregates to fill any gaps and spaces and continue to the soil profile that is desired. Smaller aggregates are tamped in with appropriate-sized tools. The rock is worked within the confines of the stream so little compaction is necessary.

Figure 3. Rock Drops Structures.

Recommended/Planned Carbon Beneficial Practices

Table 1 summarizes carbon sequestration and Greenhouse Gas (GHG) emission reduction potential from the implementation of the NRCS Conservation Practices listed above (see Implementation Map for location of practice implementation). Using COMET-PLANNER we estimate a potential of 1,068 tons of CO2 equivalent sequestered or mitigated as greenhouse gas emissions per year for the entire Preserve upon implementing the plan. This is equal to 254 passenger vehicles not driven in one year or 371 tons of waste recycled instead of landfilled according to the EPA GHG Equivalency Calculator (**https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)**.

Table 1: Estimated Annual Carbon Sequestration and GHG Emission Reductions Associated with Implementation of Suggested Conservation Practices

Conservation Practice (applicable NRCS Practice Standard #)	***Description (List Location ID on Map)***	***Size (Specify dimensions)***	***Carbon Dioxide (CO2)***	***Nitrous Oxide (N2O)***	***Methane (CH4)***	***Total CO2eq/yr***	***Quantification Method ****	***Implementation Notes***
336 Soil Carbon Amendment	Middle	*238 ac*	*1,058*	*-5*	*1*	*1,054*	*COMET - planner*	*6 tons/acre compost application*
391 Riparian Forest Buffer	Field Riparian	*1ac*	*2*	*-*	*-*	*2*	*COMET - planner*	*Replace a Strip of Grassland Near Watercourses or Water Bodies with Woody Plants*
528 Prescribed Grazing	Field West, Middle, Shipping, Discover, Boling Gap, Riparian, Arc Site, Herchiemer Gap, Thicket, Ridge	*1800 ac*	*8*	*4*	*0*	*12*	*COMET - planner*	*Grazing Management to Improve Rangeland or Non-Irrigated Pasture Condition*
Total						*1,068*		

Implementation Map

Mckenzie Table Mountain Preserve

1,000 0 1,000
Feet

Legend

- Field (CAFO)
- Field (Contracted nonCAFO)
- Field (nonCAFO)
- APNs
- Reservoir

Wells (Controlled)

- Domestic (CAFO)
- Irrigation (CAFO)
- Domestic (non-CAFO)
- Irrigation (non-CAFO)
- Groundwater Monitoring
- Inactive

Wells (Not Controlled)

- Domestic
- Irrigation
- Wind Turbine

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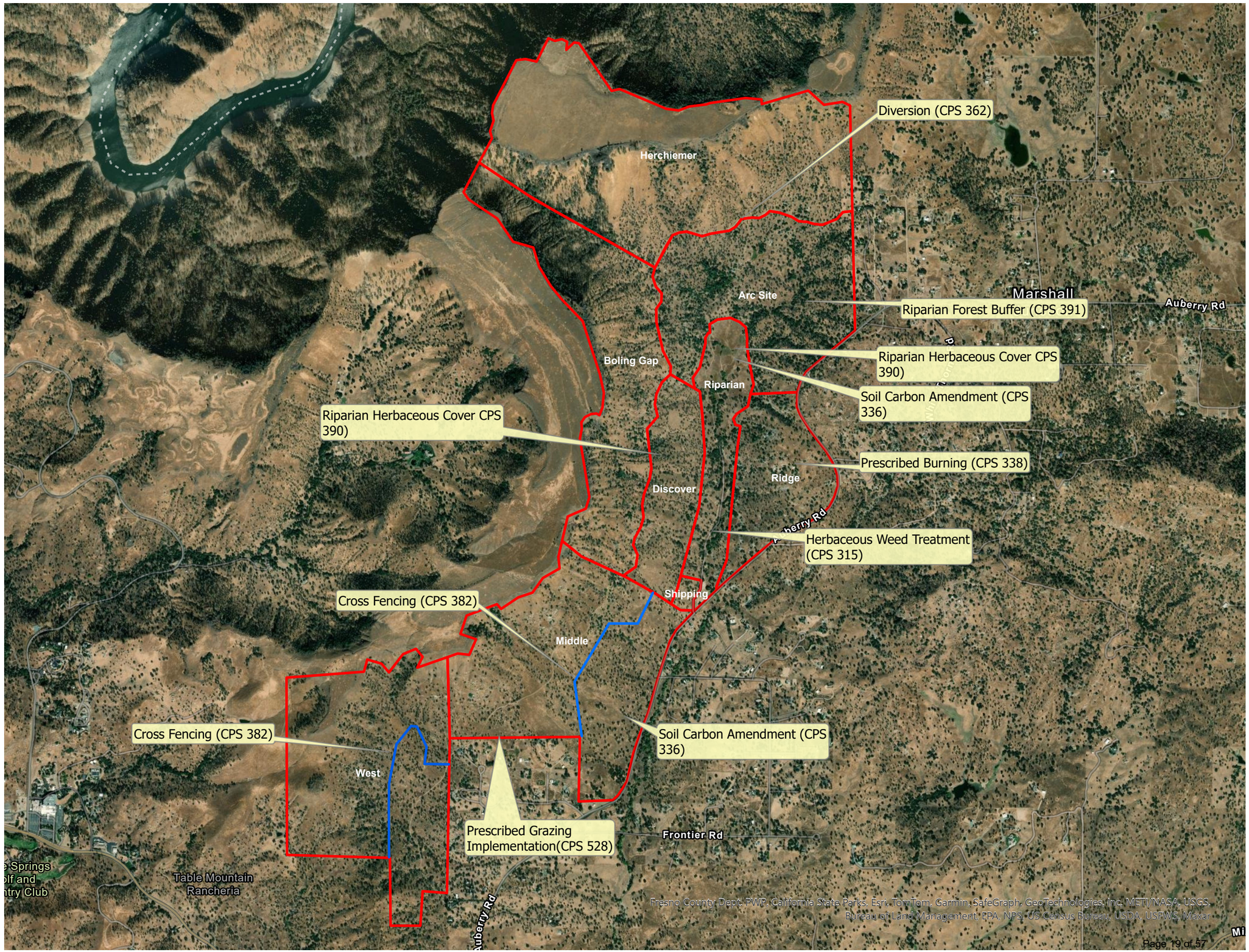

Implementation Plan and Timeline

Table 2 shows the implementation for the Preserve. It also mentions the benefits associated with the implementation of these practices.

Table # 2 Implementation Plan

Conservation Practices	CO2 Benefit	Associated Benefit							Date
NRCS Conservation Practice Standard & Code	COMET-Planner	Soil Health	Water Quality	Water Quantity	Wildlife Enhancement	Plant Community	Air Quality	Producer Economics	Implementation Plan
Soil Carbon Amendment (CPS 336)	1,054	x	x	x		x		x	December, 2025
Riparian Forest Buffer (CPS 336)	2	x	x	x		x	x	x	December, 2025
Prescribed Grazing (CPS 528	12	x	X	x		x	x	x	December, 2025
Composting Facility (CPS 317)									December 2025
Cultural Plant Establishment (Riparian Herbaceous Cover CPS 390)		X			X	X			December 2025
Cross Fencing (CPS 382)		X			X	X			January 2026
Pile Burning and seed sowing (Prescribed Burning CPS 338)						X			December 2024
Invasive species removal (Herbaceous Weed Treatment CPS 315)						X			December 2025
Rock Drop Structures (Diversion CPS 362)		X					X		December 2025

Appendix 1 Soil Lab Results

DELLAVALLE™
LABORATORY INC

Innovative Ag Services
1201 Delta View Rd., Ste 5
Hanford, CA 93230

Account# 00-0015707
Account Manager: Chad Reenders
Submitted By: Caleb Crawford
Ranch: McKenzie Preserve

Received: 05/08/2024 8:10
Reported: 06/11/2024 09:18

Sample Results

Sample: McKenzie
24E0485-01 (Soil)

Sampled: 5/6/2024
Sampled By: C. Crawford

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Saturated Paste									
Boron, Soluble	ND	mg/L	0.1	1		05/10/24 08:39	S 1.50		BFE0244
Calcium, Soluble meq	**0.6**	meq/L	0.05	1		05/10/24 08:39	S 1.60		BFE0244
Chloride meq	**0.5**	meq/L	0.003	1		05/09/24 13:14	S 1.70		BFE0244
Electrical Conductivity	**0.17**	mmhos/cm	0.01	1		05/10/24 08:39	S 1.20		BFE0244
ESP	**0.2**	%	0.1	1	9.9	05/10/24 08:39	Calc		BFE0244
Potassium, Soluble meq	**0.1**	meq/L	0.003	1		05/10/24 08:39	S 1.60		BFE0244
Lime Presence	ND		0	1		05/09/24 10:30	Hnbk 60-23a		BFE0244
Lime Requirement	ND	lbs/ac-6in	500	1		05/10/24 11:51	Hnbk 60-23a		BFE0344
Magnesium, Soluble meq	**0.2**	meq/L	0.008	1		05/10/24 08:39	S 1.60		BFE0244
Sodium, Soluble meq	**0.6**	meq/L	0.004	1		05/10/24 08:39	S 1.60		BFE0244
pH	**5.9**	units	1.0	1		05/09/24 10:30	S 1.10		BFE0244
Sulfate as SO4-S, Soluble meq	**0.1**	meq/L	0.006	1		05/10/24 08:39	S 1.70		BFE0244
Saturation Percentage	**20**	%	0.5	1		05/09/24 10:30	S 1.00		BFE0244
Extractables									
Calcium, Extract	**807**	mg/kg	1	1		05/09/24 13:21	S 5.10		BFE0244
Calcium, Extract est	**59.2**	%	0.1	1		05/09/24 13:21	Calc		BFE0244
Calcium, Extract meq	**4.0**	meq/100g	0.1	1		05/09/24 13:21	Calc		BFE0244
Ca:Mg Ratio	**4.2**		0.1	1		05/09/24 13:21	Calc		BFE0244
Cation Exchange Capacity, est	**6.8**	meq/100g	0.1	1		05/09/24 13:21	Calc		BFE0244
Copper, Extract	**0.5**	mg/kg	0.1	1		05/09/24 15:27	S 6.10		BFE0244
Iron, Extract	**24**	mg/kg	0.1	1		05/09/24 15:27	S 6.10		BFE0244
Hydrogen	**15.5**	mg/kg	0.1	1		05/10/24 11:51	S 2.50		BFE0344
Hydrogen est	**22.7**	%	0.1	1		05/09/24 13:21	Calc		BFE0244
Hydrogen meq	**1.5**	meq/100g	0.1	1		05/10/24 11:51	Calc		BFE0344
Potassium, Extract	**69**	mg/kg	2	1		05/09/24 13:21	S 5.10		BFE0244
Potassium, Extract est	**2.6**	%	0.1	1		05/09/24 13:21	Calc		BFE0244
Potassium, Extract meq	**0.2**	meq/100g	0.1	1		05/09/24 13:21	Calc		BFE0244
K:Mg Ratio	**0.2**		0.1	1		05/09/24 13:21	Calc		BFE0244
Magnesium, Extract	**115**	mg/kg	6	1		05/09/24 13:21	S 5.10		BFE0244
Magnesium, Extract est	**13.9**	%	0.1	1		05/09/24 13:21	Calc		BFE0244
Magnesium, Extract meq	**0.9**	meq/100g	0.1	1		05/09/24 13:21	Calc		BFE0244
Manganese, Extract	**8.2**	mg/kg	0.1	1		05/09/24 15:27	S 6.10		BFE0244
Sodium, Extract	**26**	mg/kg	5	1		05/09/24 13:21	S 5.10		BFE0244
Sodium, Extract est	**1.6**	%	0.1	1		05/09/24 13:21	Calc		BFE0244
Sodium, Extract meq	**0.1**	meq/100g	0.1	1		05/09/24 13:21	Calc		BFE0244
Nitrate Nitrogen as NO3-N, Extract	**3**	mg/kg	1	1		05/09/24 11:16	S 3.10		BFE0244

DELLAVALLE™
LABORATORY INC

Innovative Ag Services
1201 Delta View Rd., Ste 5
Hanford, CA 93230

Account# 00-0015707
Account Manager: Chad Reenders
Submitted By: Caleb Crawford
Ranch: McKenzie Preserve

Received: 05/08/2024 8:10
Reported: 06/11/2024 09:18

Sample Results
(Continued)

Sample: McKenzie (Continued)
24E0485-01 (Soil)

Sampled: 5/6/2024
Sampled By: C. Crawford

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Extractables (Continued)									
Phosphate as PO4P, Extract	ND	mg/kg	2	1		05/09/24 11:16	S 4.10		BFE0244
Phosphate as PO4P, Bray Extract	**8**	mg/kg	1	1		05/10/24 10:19	S 4.20		BFE0344
Zinc, Extract	**0.2**	mg/kg	0.1	1		05/09/24 15:27	S 6.10		BFE0244
Additional Analytes									
Nitrogen, Total	**0.04**	%	0.01	1		05/09/24 16:07	S 9.30		BFE0244

AGVISE LABORATORIES

804 Highway 15 West
P.O. Box 510
Northwood, ND 58267

(701) 587-6010
FAX (701) 587-6013

northwoodlab@agvise.com
www.agvise.com

AGVISE Soil Characterization Report

Submitted For:
MCKENZIE PRESERVE
WORK ORDER: 24E0485

Submitted By: DE3312
DELLAVALLE LABORATORY INC
1910 MCKINLEY, STE 1

FRESNO, CA 93728-1

Field ID = MACKENZIE
Co-op/Contr. ID =
Township = PO# 60562
County =
Section =

Sample ID = 24E0485-01
Quarter =

Date Received = 5/15/24
Date Reported = 5/31/24

AGVISE Lab No = 28,080
AGVISE Ref No = 20,632,219

Sand Size Analysis by Wet Sieving:

% Sand retained on 53 um sieve	71.4	
Wet-stable aggregation % total (>53 um)	80.4	
large macroaggregate % (>2000um)	13.9	
macroaggregate % (250-2000um)	38.9	
microaggregate % (53-250um)	27.6	
Wet-stable aggregation (sand corrected), % total (>53 um)		23.0
large macroaggregate % (>2000um)		4.0
macroaggregate % (250-2000um)		11.1
microaggregate % (53-250um)		7.9

AGVISE LABORATORIES

Innovative Ag Services #15707/22
Ranch: McKenzie Preserve

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Field ID = MACKENZIE
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County =
Section =

Sample ID = 24E0485-01
Quarter =

Date Received = 5/15/24
Date Reported = 5/31/24

AGVISE Lab No = 28,081
AGVISE Ref No = 20,632,220

% Carbonates (Pressure Method)	0.4
% Total Carbon (Carbon Analyzer)	0.4
% Inorganic Carbon	0.0
% Organic Carbon Analyzer	0.4
% Organic Matter Analyzer	0.7
Solvita ppm CO2-C =	98.1
Active Carbon (POXC) (ppm)	117
ACE Protein mg/g	1.4

Appendix 2: Implementation requirements

USDA United States Department of Agriculture
Natural Resources Conservation Service

315 - Herbaceous Weed Treatment Chemical Implementation Requirements

Client	Sierra Foothill Conservancy - McKenzie Preserve	**Date**	June 3, 2024
Farm/Tract		**Field(s)**	Bottom Field
Location	22477 Auberry Rd, Clovis, CA 93619	**Acres**	300.0
Planner	Harol Gonzalez Gallardo	**County**	Fresno

1. Management Objectives (check one or more)

☐ *Enhance accessibility, quantity, and/or quality of forage and/or browse

☒ *Restore or release native or create desired plant communities and wildlife habitats consistent with the site potential.

☐ *Protect soils and control erosion

☐ *Reduce fine fuel loads and wildfire hazard

☒ *Pervasive plant species are controlled to a desired level of treatment that will ultimately contribute to creation or maintenance of an ecological site description "steady state," addressing the need for forage, wildlife habitat, and/or water quality

☐ *Improve rangeland health

Management Objective Narrative(s) (include what to measure, where, when, etc.):
High density of invasive species has been observed in some areas of McKenzie Preserve. Herbicide application using a backpack sprayer is necessary to control Italian Thistle and Medusahead species.

2. Desired Plant Communities and Target Herbaceous Weed Species

Ecological Site Name/Number or Approximate Desired Plant Community Composition, Structure, and Function	Target Species	% Cover (before)	%Cover (after)
Ecological site R018XC103CA, Lithic Thermic Foothills. Community 1.1, G This community phase is dominated by annual grasses. AVFA, BROMU, HORDE, and FESTU are the most common species.	**Medusahead, Italian Thistle**		

3. Monitoring Plan

Monitoring is done to assess degree of herbaceous weed control and to identify areas needing further treatment.

Monitoring will be performed by NRCS and/or landowner at least annually at the end of the growing season following treatment.

Percent cover or density of the target species (see item 2 above) will be measured and compared to desired percent cover or density (% cover after (item 2 above)). If the measured amount is less than or equal to the desired amount, this practice is to be considered complete. If the measured amount is greater than the desired amount, additional treatments will be scheduled and noted in item 5 of this specification.

Additional Narrative:

4. Selected Treatment Method(s) (check one or more)

☐	**Aerial Application**	☐	**Ground Application**
☒	**Spot Application**	☐	**Other (Describe):**

HERBACEOUS WEED CONTROL CHEMICAL ALTERNATIVES				
	Alt. No. 1	**Alt. No. 2**	**Alt. No. 3**	**Alt. No. 4**
Chemical	Milestone (Aminopyralid)	Transline (Clopyralid)	Perspective (Aminocyclopyrachl or Chlorsulfuron)	Capstone (Aminopyralid triclopyr)
Rate	TBD	TBD	TBD	TBD
Time	TBD	TBD	TBD	TBD
Remarks				
Caution	• Keep out of reach of children • Personal protective equipment needed when applying. • Read about toxicological and environmental precaution.	• Keep out of reach of children • Personal protective equipment needed when applying. • Read about toxicological and environmental precaution.	• Keep out of reach of children • Personal protective equipment needed when applying. • Read about toxicological and environmental precaution.	• Keep out of reach of children • Personal protective equipment needed when applying. • Read about toxicological and environmental precaution.
Source of Recommendation	Recommendation should be done by a PCA	Recommendation should be done by a PCA	Recommendation should be done by a PCA	Recommendation should be done by a PCA

➢**All chemicals will be applied according to label instructions.**

➢**WinPST evaluations are attached. Ratings of Intermediate or higher require mitigation measures as described below.**

- ☐ ➢**Integrated Pest Mgt. 595 is required to mitigate potential hazards or to apply Integrated Pest Management (IPM)*:***

Additional Narrative:
To minimize drift, check local forecasts and refer to the UC Extension information "Minimizing Pesticide Drift"

5. Treatment Schedule

Include all treatments needed to achieve effective control of the target plant species. This includes any additional treatments needed to achieve effective control of pervasive plant species.

Treatment Location (field)	Planned Treatment Year	Planned Acres	Applied Treatment Year	Applied Acres
Bottom Field	2024	300.0		

6. Wildlife Considerations

All work conducted will be performed at times that meet the needs of resident and transient wildlife.

Additional Narrative:

7. Maps included with this specification

- Plan map showing area to be treated, areas not being disturbed, and any sensitive areas
- Soil map

8. Additional Requirements

Additional Narrative:

9 . Operation and Maintenance

Perform the following items:

- Monitor each year to evaluate desired plant community and any regrowth or recurrence of target pest species. Apply appropriate spot treatments as needed to maintain desired plant community.
- Review and update the plan annually to incorporate new IPM technology.
- Maintain mitigation techniques selected to ensure continued effectiveness.
- Develop a safety plan for individuals exposed to pesticides
- Follow labels requirements for mixing/loading setbacks from wells, streams, rivers and natural or impounded pond, lakes and reservoirs.
- Post signs according to label directions and/or Federal, Tribal, state and local laws around treated sites. Follow restricted entry intervals.
- Dispose of pesticide containers according to label directions and Federal, Tribal, state and local regulations.
- Calibrate application equipment according to University of California Cooperative Extension and/or manufacturer recommendations before each seasonal use and with each major chemical change.
- Replace worn nozzle tips, cracked hoses and faulty gages.
- Handle all pesticides with caution and wear appropriate protective clothing according to label instructions.
- Maintain appropriate Material Safety Data Sheets (MSDS).
- Maintain records of pesticide application for restricted use materials as per the California Department of Pesticide Regulation record keeping requirements.
- Report monthly agricultural pesticide use to the County Agricultural Commissioner in accordance with California law.

10. References

NRCS does not develop chemical treatment recommendations; however, NRCS can provide current acceptable chemical control references. A list of these references is below;

- **http://wric.ucdavis.edu/information/natural%20areas/natural_areas_scientific_A-B.htm**
- **http://ipm.ucanr.edu/index.html**
- **http://www.cdpr.ca.gov/docs/license/liccert.htm**
- **http://www.cdpr.ca.gov/docs/pestmgt/ipminov/ipmmenu.htm**
- **http://www.epa.gov/espp/**
- **http://www.cdpr.ca.gov/docs/emon/vocs/vocproj/reducing_voc_emissions.pdf**

Design Approval: (to be completed by the NRCS)

Practice Code	Practice	Lead Discipline	Controlling factor	Units	Job class				
					I	II	III	IV	V
315	Herbaceous Weed Treatment	BCSD Graz Land Spec	Treatment Type	Treatment Type	1 Type	2 Types	All Types	All Types	All Types
			Slope	Percent	0 – 15 %	16 – 25 %	26 – 35 %	All	All
			Method	Type	Mechanical	Biological	Chemical	All	All
This practice is classified as Job Class (check one):					☐	☐	☐	☐	☐

Design Approved By: /s/ _____ Date: _____

Job title _____

Refer to the Following Conservation Practice Specifications [✓]			
☐	Prescribed Grazing 528	☐	Access Control 472
☐	Integrated Pest Management 595	☐	Critical Area Planting 342
☐	Brush Management 314	☐	Range Planting 550
☐	Forage Harvest Management 511	☐	Forage and Biomass Planting 512
☐	Wetland Wildlife Habitat Mgt. 644	☐	Upland Wildlife Habitat Mgt. 645
☐ Other:			

Client's Acknowledgement Statement:

The Client acknowledges that:

a. They have received a copy of the specification and understand the contents and requirements.

b. It shall be the responsibility of the client to obtain all necessary permits and/or rights, and to comply with all ordinances and laws pertaining to the application of this practice.

c. Certification documentation (see below) must be provided to NRCS by the client before the practice can be certified as applied:

Accepted By: /s/_____ Date: _____

Certification:

The client has provided one of the required ***certification documentation options*** (acceptable forms of documentation are listed below), it has been reviewed, meets the specifications and will be placed in the case file.

☐ Applicators log / receipts from applicator

☐ Client Documentation Worksheet

Treatment Location (field)	What is Measured	Time of Year	Desired Condition	Year	Measured Condition

☐ Map(s) – including field numbers, fields treated, and acres treated

☐ Photo monitoring

☐ Other:

Brief Description

_____

_____

_____

I have completed a review of the information provided by the client and certify this practice has been applied according to the practice standard and the practice implementation requirements above.

Certified By: /s/ _____ Date: _____

Job title _____

Client Documentation Worksheet

Examples in grey

Field Number(s)	Date Sprayed	Applicator Name	Wind Speed/ Direction	Weather*/ Air Temp.	Equipment Used**
14	9/10/2014	Western Spray Inc.	5 mph, S-SE	Partly cloudy, 65 F	ATV

Alternative Selected: ☐Alternative 1 ☐Alternative 2 ☐Alternative 3 ☐Alternative 4

Product Name: List all Herbicides, water conditioner, surfactants, or dyes used.	**Rate (per acre)** oz., pints, etc.	**Acres Treated**	**Total Quantity Used**	**Amount of Water Used per Acre**
Plateau (Imazapic)	4 oz.	45	180 oz.	10 gallon acre

Comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

*Clear, partly cloudy, overcast, showers, etc. ** Back pack sprayer, ATV, Boom sprayer, Fixed winged aircraft, helicopter etc.

United States Department of Agriculture
Natural Resources Conservation Service

336 – Soil Carbon Amendment Implementation Requirements - Compost

Customer Name:	Sierra Foothill Conservancy - McKenzie Preserve	**Date:**	6/25/2025
Location:	22477 Auberry Rd	**Field Office:**	
County:	Clovis, 93619	**Prepared by:**	Harol Gonzalez Gallardo
Farm/Tract/Field:		**Contract Number:**	

Practice Purpose: (check all that apply)

☒ Improve or maintain soil organic matter
☒ Sequester carbon and enhance soil carbon (C) stocks
☒ Improve soil aggregate stability
☒ Improve habitat for soil organisms

IT IS THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.

Installation shall be in accordance with the following drawings, specifications and special requirements. NO CHANGES ARE TO BE MADE IN THE DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR APPROVAL OF THE NRCS TECHNICIAN.

X **Plan map attached with planned Soil Carbon Amendment treatment area designated, including soil type, slope, drainage class.**

Type of Soil Carbon Amendment to be applied: Compost ☒

Land Use: Crop ☐ Pasture ☒ Range ☐ Forest ☐ Associated Ag. Land ☐ Developed Land ☐ Farmstead ☐

Complete and document the following to implement this practice:

- pH
- soil texture (may be determined by NRCS)
- soil organic matter or soil organic carbon
- extractable phosphorus
- potassium
- calcium,
- sulfur
- magnesium.
- cation exchange capacity

☒ Document physical and chemical analysis of compost applied.

A. Compost

i. Analysis must be done by a lab that successfully meets the performance standards of the U.S. Composting Council's Seal of Testing Assurance Program (STA),or use an alternative NRCS- or State- approved certification program that considers laboratory performance and proficiency to assure accuracy of results.

ii. Analysis must report parameters below (Table 1.)

iii. Use compost that meets the following criteria as determined by the Test Methods for the Examination of Composting and Compost (TMECC), or by Land Grant University (LGU) recognized methods, per the criteria with specific numeric ranges (Table 1).

☐ Provide invoice showing total compost delivered with analysis.

☐ Document application rate, date of application and planting dates for crops on amendment-treated land. Calculate the total nitrogen (N) and phosphorus (P) applied with the amendment using the application rate and the analysis. If the application rate results in an application of 100 lbs or more of N, provide records documenting all other sources of N applied to the land to which compost applied (e.g. fertilizer, irrigation water with significant nitrate levels) and describe how N applied with compost is considered in the N management budget for the crop.

☐ If applied to fields adjacent to surface water, provide photo documentation to demonstrate that amendment is applied following all setback and spreading restrictions to avoid sensitive areas, such as: wetlands, karst sinkholes, vernal pools, hydric soils, or naturally low fertility sites (e.g. serpentine soils, sage steppe, alkali sink or chaparral).

☐ For C:N compost >25:1 , plant available nitrogen may be limited for crop growth. Apply supplemental nitrogen as needed.

Installation Requirements

- Do not apply compost to rangelands except where it is facilitating CPS Range Planting (Code 550) or CPS Critical Area Planting (Code 342).
- Do not apply soil carbon amendments on slopes greater than 15%.
- Do not apply soil carbon amendments
    - During high wind events
    - To frozen or snow-covered fields, or when the top 2 inches of soil are saturated
    - Where the area will not be vegetated for longer than 3 months following application, or where nutrients from the amendment will cause leaching or runoff loss and water quality concerns
- Calibrate application equipment to ensure accurate distribution of material at planned rates.
- Inspect and evaluate surface applied applications after the first heavy precipitation event to assure that the material is stable and does not impact non-target areas

Table 1: Parameters for Compost Amendments

Parameter	Range	Unit
Fecal coliform	<1000	MPN[2] per g dry compost
Salmonella spp.	<3	MPN per 4 g dry compost
Feedstock	Report[1]	Type by %
pH	Report	pH units
Electrical Conductivity (EC)	Report	dS/m
Moisture	Report	%
Organic matter/Carbon	Report[1]	% DW[2]
Total Nitrogen	Report	% DW
C:N	>10:1	unitless
Particle Size	Report	% per size class
Phosphorus	Report	mg/kg[4] DW
Potassium	Report	mg/kg DW
Calcium	Report	mg/kg DW
Magnesium	Report	mg/kg DW
Arsenic[3]	<41	mg/kg DW
Cadmium	<39	mg/kg DW
Copper	<1500	mg/kg DW
Lead	<300	mg/kg DW
Mercury	<17	mg/kg DW
Nickel	<420	mg/kg DW
Selenium	<100	mg/kg DW
Zinc	<2800	mg/kg DW

[1]Report results, also see criteria under amendment type.

[2]DW = Dry weight.

[3]Pollutant concentration limit values from US EPA Title 40 Part 503 STANDARDS FOR THE USE OR DISPOSAL OF SEWAGE SLUDGE. Follow State and local laws and regulations.

[4]milligrams per kilogram (mg/kg) = parts per million (ppm) = grams per ton (g t^{-1})

[1]Report = Required results only, no threshold or range needs to be met.

[2]MPN = Most Probable Number.

PRACTICE APPROVAL:

Job Classification:

Practice Code and Name	Lead Discipline	Controlling factor	Units	Job class				
				I	II	III	IV	V
336 – Soil Carbon Amendment	Agronomist	Material	Type	Compost	Biochar	Other	All	None
For this project, this practice is classified as Job Class (check one)								

Prepared by:_____ **Date:**_____

Design Approved by:_____ **Date:**_____

LANDOWNER/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the drawings, maps, specifications and implementation requirements, and understand the contents.

b. He/she has obtained all the necessary permits and/or rights and will comply with all ordinances and laws pertaining to this installation.

c. No changes will be made to the installation of this job without prior concurrence of the NRCS technician.

d. Maintenance of the installed work is necessary for proper performance during the project life.

Accepted by:_____ **Date:**_____

PRACTICE CERTIFICATION / COMPLETION:

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and certify the practice meets NRCS standards and specifications.

Certified by:_____ **Date** _____

U.S DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
CALIFORNIA

IMPLEMETATION REQUIREMENTS FOR 338 - PRESCRIBED BURNING

For: Business Name Sierra Foothill Conservancy - McKenzie Preserve

Job Location 22477 Auberry Rd, Clovis, CA 93619

County Fresno RCD Sierra RCD Farm/Tract No.

Referral No. Prepared By Harol Gonzalez Gallardo Date 6-3-2024

IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.

Installation shall be in accordance with the burning plan requirements. NO CHANGES ARE TO BE MADE IN THE BURN PLAN WITHOUT PRIOR APPROVAL OF THE LEAD AGENCY.

1. Lead Agency: a. _____ California Department of Forestry, phone:_____
   b. _____ USFS, _____ Ranger District, phone:_____
   c. _____ Local Fire District, phone:_____
   d. _____ _____ phone: _____
   e. CDF Permit yes X no_____
   f. Air Pollution Control District Permit yes X no_____
   g. Burn Plan Attached: __ Yes _____ No

2. Species to be burned: Nodding needle grass (*Stipa cernua*)

3. Special Requirements: We will be burning small piles of woody vegetation to create a seed bed for establishment of native perennial grass species. The proposed species for establishment is Nodding needle grass (Stipa cernua). The native grass species is expected to increase soil water infiltration rate, storage capacity and soil Carbon sequestration. One of SFC's key ecological objectives is to increase the abundance of native perennial grass species. This conservation outcome is desired for the ecological and cultural benefits that native grass species provide on the Preserve.

4. Special Maintenance Requirements: Cultural burning techniques will be utilized to prepare the seedbed. Fire intensity will be closely monitored within each burn pile. Further, the native grass seed will be raked in with the ashes as has been performed by local tribes for millenia. Conservation grazing will be the primary stewardship activity to maintain the site after the practice is implemented. The annual grasses surrounding the established native species must be managed to prevent overcrowding and excessive competition with the desired grasses. Targeted grazing will be applied in the late fall and early spring to control annual grasses and maintain the health of the established native species.

PRACTICE APPROVAL:

Job Classification:

Show the limiting elements for this job. This job is classified as, Class _____

Limiting elements:	Units
Area treated	0.04 ac
Land Slope	0.2 %

Plan Approved by: _____ Date: _____

LANDOWNER'S/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the burn plan and specifications, and that he/she has an understanding of the contents, and the requirements.

b. He/she has obtained all the necessary permits.

c. No changes will be made in the installation of the job without prior concurrence of the lead agency.

d. Maintenance of the installed work is necessary for proper performance during the project life.

Accepted by: _____ Date: _____

PRACTICE COMPLETION:

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and certify the practice meets NRCS standards and specifications.

Completion Certification by:

/s/_____ Date _____

382 - Fence
Permanent Smooth, Barbed, Woven
Implementation Requirements

Client	Sierra Foothill Conservancy - McKenzie Preserve	**Date**	6/3/2024
Farm/Tract		**Field(s)**	South, Filaree
Location	Fresno, CA	**Length(s)**	7,600
Planner	Harol Gonzalez Gallardo	**County**	Fresno CA

1. Management Objectives/Resource Concerns:

Resource Concerns being addressed:

Crossing fences are needed in the South and Filaree fields, this will allow adequate rotation of livestock in the area. Currently the cattle only graze at the base of the hill and avoid going to higher areas. Separating the fields in smaller sizes will allow a better rotation increasing benefits like quick grass recovery, balance between natural pasture species and those most suitable for livestock, and greater control of the soil, the harvest, and the nutritional quality of the grass.

2. Fence Specifications (check all that apply or fill in blank with information):

	Livestock Type:	X	**Cattle** (cow/calf, stockers, bulls)		**Sheep**		**Goats**		**Horses**
x	**Barbed Wire**		**High Tensile Wire**		**3-Wire**	X	**4-Wire**		**5-Wire**
	Woven Wire		**26 inch**		**32 inch**		**Other** (Describe)		
X	**Line Post Type**	X	**Steel**		**Wood**		**Other** (Describe)		
	Wire Spacing (from ground up, in inches)	**e.g., 16, 6, 8, 12** **16 inches**							
	Post Spacing (feet)	**12 ft**		**Stays** (yes/no)		**No**	**Stay Type if used:**		
	Total Fence Length (feet)	**7,600**					**Other information:**		

3. **Additional Specifications or Special Provisions Specific to the Site:**

Narrative: The Producer/contractor is responsible for calling 811 for DigAlert information.

If wildlife crossing is a concern, fence should be no higher than 42" with spacing of the top 2 wires at 10 inches apart. This reduces the instance of deer getting caught in the fence. Bottom wire should be smooth set at 14".

Assure that H-Braces are placed at all changes in fence angle, at fence ends, at gates and at top and bottom of steep slopes.

☐ **See attached map(s) for location of fence.**

☐ **See attached if any additional design criteria is required.**

DESIGN APPROVAL:

Practice code	Practice	Lead Discipline	Controlling factor	Units	Job class				
					I	II	III	IV	V
382	Fence	Range Specialist	Type of Fence	Type	Conventional	Electric/ Suspension	All	All	All
			Slope	Percent	0 – 15 %	0 – 15 %	16 – 30 %	31 – 45 %	All
			Number of Limitations	No.	0	1	2	3	All
This practice is classified as Job Class (check one):									

Design Approved by:_____ Date:_____

CLIENT'S ACKNOWLEDGEMENT:

The Client acknowledges that:

a. Specifications for materials and fence construction have been reviewed and *agreed to.*

b. They have received a copy of the maps, drawings, specification, and implementation requirements, and that they understand the contents.

b. They have obtained all the necessary permits.

c. No changes will be made in the installation of the job without prior concurrence of the NRCS technician.

d. Maintenance of the installed work is necessary for proper performance during the practice life; at least 15 years.

Accepted by:_____ Date:_____

PRACTICE COMPLETION:

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and have determined that the job, as installed, conforms to the drawings/maps and implementation requirements and certify the practice meets NRCS standards and specifications.

Completion Certification by:_____ Date _____

INSERT PROJECT PHOTOS AFTER COMPLETION:

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

RIPARIAN HERBACEOUS COVER - 390
Implementation Requirements

Client/Landowner: Sierra Foothill Conservancy - McKenzie Preserve Date Planned: _____

Project Location: T- , R- , S- County: Fresno Field/Site ID: _____

USDA Program: _____ Contract #: _____ Project Acres: _____

This Job Sheet is for: ☐ Planting and/or ☒ Natural Re-vegetation with Management

I. Project Goals and Objectives

Landowner/Client's Goals and Objectives (describe):

Native species planting in spring areas and/or smaller tributaries. Practice coupled with invasive species removal and site prep. Irrigation may not be needed if implemented in wetter areas.

Identify the planned purposes by checking the corresponding boxes:

- ☒ Restore, Improve or Maintain the Native Plant Community
- ☐ Provide Fish and Wildlife Habitat (including Pollinators)*
- ☒ Carbon Storage and/or Biomass Storage
- ☐ Contaminate Remediation
- ☐ Streambank Stability
- ☐ Other:

**Attach the appropriate Wildlife Habitat Evaluation Guide (WHEG).*

Identify the complementary practices being planned:

☒ Riparian Forest Buffer (391), ☐ Wetland Wildlife Habitat Mgmt., ☐ Stream Habitat Improvement/Mgmt.

II. Baseline Inventory

A baseline (pre-treatment) assessment will be evaluated and documented to assist in conservation plan development and for comparison with post-treatment conditions.

Describe the baseline condition:

The areas where cultural plant establishment will be implemented are currently dominated by non-native species. Urasian origin annual grasses and noxious wetland cultivars currently dominate the site. This current suite of species has effectively excluded

Results of the **Geomorphic Assessment**[1]:

1. Site has the potential to support a riparian herbaceous plant community? ☒ Yes *(If No, this practice may not be used)*

1.a. Will the site require stream or streambank stabilization before implementation? ☒ No ☐ Yes
If Yes, use NRCS practice 395/580 prior to, or in conjunction with, this practice. The site must be adequately stable.

1.b. Will the site require hydrology restoration before implementation? ☒ No ☐ Yes
If Yes, use NRCS practice 395 (or other) prior to, or in conjunction with, this practice.

2. Maximum Sustainable Width of the Herbaceous Riparian Zone: 7 feet (on average)

3. Description of the Site Hydrology

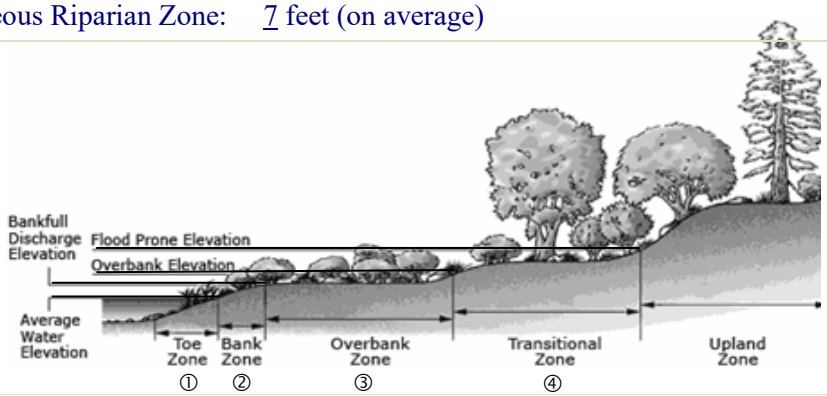
① Avg. Water Elevation*: 1-2
(top of the Toe Zone)

② Bankfull Discharge*: 1-2
(top of the Bank Zone)

③ Overbank Elevation: 1-2
(top of the Overbank Zone)

④ Flood Prone Elevation: 1-2
(top of the Transitional Zone)

*Required.



[1] Refer to the practice specification for details on conducting a geomorphic assessment.

III. Project Design

III. a. Planting (*if applicable*)

Type of Planting: ☐ Entire maximum sustainable width of the herbaceous zone will be planted (see Section II, 2), *or*
☐ One or more zones will be planted (but not the entire sustainable width), *or*
☐ Only selective areas or species will be planted, *or*
☐ This is an aquatic planting (zone 1 submergent and stream-overhanging plants used).

Timing of Planting:
☒ Just after the peak flows when water levels are gradually dropping, approx.: April
Note: Use a stream hydrograph to assist in determining when the peak flows normally occur. http://nm.water.usgs.gov/
☐ During the late summer wet season, approx.: _____

Size of Area to be Planted: 0.2 total acres *(used for progress reporting and contracting purposes)*

Planting Area ID:

Zone 1: width _____ ft., length _____ ft. = _____ sq.ft.
Zone 2: width _____ ft., length _____ ft. = _____ sq.ft.
Zone 3: width _____ ft., length _____ ft. = _____ sq.ft.
Zone 4: width _____ ft., length _____ ft. = _____ sq.ft.

	Selected Plant Species[1] [2]	Plant Material Type (seed, plug)
Zone 1		
Zone 2		
Zone 3		
Zone 4		

Planting Area ID:

Zone 1: width _____ ft., length _____ ft. = _____ sq.ft.
Zone 2: width _____ ft., length _____ ft. = _____ sq.ft.
Zone 3: width _____ ft., length _____ ft. = _____ sq.ft.
Zone 4: width _____ ft., length _____ ft. = _____ sq.ft.

	Selected Plant Species[1]	Plant Material Type (seed, plug)
Zone 1		
Zone 2		
Zone 3		
Zone 4		

[1] Access the CA eVeg guide for suitable species. Additional species information can be found in the 390 Practice Specification in Appendix 1. Selected plants must be adapted to the site hydrology and provide the structural and functional diversity preferred by fish and wildlife (regardless if fish/wildlife is a purpose of the practice). If fish/wildlife is a practice purpose, then only native plant species may be selected. Use only viable, high quality, site adapted materials

The planting areas must be identified on the conservation plan map or on a planting design map.

[2] Lists dominants plants. Attached printout from CA eVeg guide for all planned species including plant material types.

Planting Density: One plug spaced 1.5ft apart, and/or a seeding rate of 40 plants/ft2 PLS.

For Plugs, the minimum planting density is one plug every 1.5 feet. Higher densities will be used when addressing erosion control, bank stabilization (bioengineering) or where otherwise determined. For Seed, use the guidance provided in e-Veg Guide for practice 342-Critical Area Seeding.

For Plug Collection, Identify Necessary Permits or Permissions: _____

III. b. Natural Regeneration (*if applicable*)

Does the site demonstrate that native seeds and propagules are present? ☒ Yes *(If No, this practice may not be used)*
Is it expected that the site will reach its full potential within two years? ☒ Yes *(If No, this practice may not be used)*
Describe the regeneration plan and what management actions will be taken to facilitate regeneration:

IV. Site Preparation and Establishment

Refer to the guidance provided in the practice specification. If additional guidance is needed, provide the details below.

V. Operation & Maintenance

The following actions shall be carried out to ensure that this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice, and repair and upkeep of the practice.

- Conditions shall be evaluated and compared to desired conditions on a regular basis; to be able to quickly adjust the conservation plan. If it is not progressing or functioning as intended, contact NRCS for technical assistance.
- If damages are identified (such as erosion or damaged/dead plants) contact NRCS for technical assistance.
- Replacement of plugs will be required until the intended functions of the practice are accomplished.
-
-
-

VI. Management

Management systems applied will be designed to maintain or improve the vigor and reproduction of the desired plant community. Ensure that practice criteria, for the intended purpose(s), are addressed.

Protect the riparian vegetation and water quality by reducing or excluding haying and grazing until the desired plant community is well established (generally defined as two years). *Describe how this will be accomplished*:

Timing, intensity and duration of haying or grazing, after the establishment period, will be designed to sustain riparian functions and values (inc. maintaining and improving plant reproduction). *Describe how this will be accomplished*:
Grazin the area 2 times per year, in late fall and early spring

Harmful pests (including noxious, invasive weeds) present will be controlled or eliminated as necessary to achieve and maintain the intended purposes. *Describe how this will be accomplished*:
Refer to Herbaceous Weed treatment (CPS 315) Implementation requirement.

Additional actions

Design Approval:

Practice Code	Practice Name	Lead Discipline	Controlling factor	Units	Job class				
					I	II	III	IV	V
390	Riparian Herbaceous Cover	Wildlife Biologist	Weed Pressure	degree	Low: No invasive/ aggressive weed species present	Medium: Invasive/ aggressive weed species (10% cover or less)	High: Invasive/ aggressive weed species (>20% <50% cover)	Very High: Invasive species (>50% cover)	All
			Species Planted	Number	3	5	8	All	All
			Precipitation	Inches	Saturated soils	Irrigated	>18	<18, >12	<12, >9
			Stream Bank Degradation	Degree	6-8	3-5	0-2	All	All
This practice is classified as Job Class (check one):									

Design Approved by: /s/ _____ Date: _____

Job title: _____

Client's Acknowledgement Statement:

The Client acknowledges that:

a. They have received a copy of the maps, drawings, specification, and implementation requirements, and that they understand the contents.

b. They have obtained all the necessary permits

c. No changes will be made in the installation of the job without prior concurrence of the NRCS technician.

d. Maintenance of the installed work is necessary for proper performance during the project life.

e. Landowner assume all liability for any damages that may occur as a result of this practice.

Accepted By: /s/ _____ Date: _____

NRCS Approval:

Approved By: /s/ _____ Date: _____

Certification:

I have completed an on-site inspections or a review of the information provided by the client and certify this practice has been applied according to standards and specifications.

Completion Certified By: /s/_____ Date: _____

Job title: _____

IMPLEMENTATION REQUIREMENTS
FOR
391 – RIPARIAN FOREST BUFFER

For: Business Name Sierra Foothill Conservancy - McKenzie Preserve

Job Location 22477 Auberry Rd, Clovis, CA 93619

County Fresno, CA RCD Sierra RCD Farm/Tract No.

Purpose: _X_ Lower Water Temperature _X_ Intercept sediment, nutrients, pesticides, other items

_X_ Wildlife Habitat __ Other (Specify) _____

IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.

Installation shall be in accordance with the following drawings, specifications and special requirements. NO CHANGES ARE TO BE MADE IN THE DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR APPROVAL OF THE NRCS.

1. Design Planting Sketch Attached

2. Practice Specifications 391, _____, _____, _____, _____

3. Soil or suitability group Ahwahnee very rocky coarse sandy loam,

4. Area to be planted: Length 360 ft Width 20 ft Acres 0.2

5. Species Avg Row Spacing Avg Plant Spacing Amount/acre

Planting cottonwood and willow on both sides of the creek, the total area to be planted is approximately 0.2 acres.

:

Approx. total number per acre: 0.2

6. Planting Operation:

Planting shall be performed within the period: Planting in early spring

Planting Method: (circle) Tree Planter Auger X Hand x Other _____

7. Irrigation: Type _____ (Circle) None X Preplant PostPlant

8. Weed and Pest Control N/A

9. Establishment Protection: N/A

10. Other Management and Maintenance N/A

PRACTICE SPECIFICATION PREPRATION:

Practice Code and Name	Lead Discipline	Controlling factors	Units	Job class				
				I	II	III	IV	V
391 Riparian Forest Buffer	ESD-For (& CED-LA & ESD-Wbio)	Planting complexity and site sensitivity	Type of planting stock, potential seedling mortality rating, and harvest equipment operability ratings from Soil Survey.	Container stock; potential seedling mortality low; harvest equip operability well suited	Bare-root stock or cuttings; potential seedling mortality moderate; harvest equip operability moderately suited	Direct seeding or natural regeneration; any seedling mortality rating, any harvest equip. operability rating	All	All
		Stream Order	Number	Stream orders 1 & 2	Stream order 3	Stream order > 3 or specific wildlife requirements	All	All
For this project, this practice is classified as Job Class (check one)								

Prepared by: _____ **Date:** _____

Design Approved by: _____ **Date:** _____

LANDOWNER'S/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the drawings and specifications, and that he/she has an understanding of the contents, and the requirements.

b. He/she has obtained all the necessary permits.

c. No changes will be made in the installation of the job without prior concurrence of the NRCS.

d. Maintenance of the installed work is necessary for proper performance during the project life.

Accepted by:_____ Date:_____

_____

PRACTICE COMPLETION:

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and certify the practice meets NRCS standards and specifications.

Completion Certification by:

/s/_____ Date:_____

USDA United States Department of Agriculture

528 – Prescribed Grazing, Perennial Rangeland Implementation Requirements

Client	Sierra Foothill Conservancy - McKenzie Preserve	**Date**	6/3/2024
Farm/Tract		**Field(s)**	South, Filaree
Location	22477 Auberry Rd, Clovis, CA 93619	**Acres**	1800 acre
Planner	Harol Gonzalez Gallardo	**County/RCD**	Sierra RCD

Grazing Season for this implementation requirement	Month Year – Month Year

IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.

Installation shall be in accordance with the following specifications and implementation requirements. NO CHANGES ARE TO BE MADE IN THE SPECIFICATIONS AND IMPLEMENTATION REQUIREMENTS WITHOUT PRIOR APPROVAL OF THE NRCS TECHNICIAN.

1. Management Objectives (check one or more):

☒ Improve or maintain desired species composition, structure and/or vigor of plant communities.

☒ Improve or maintain quantity and/or quality of forage for grazing and browsing animals' health and productivity.

☐ Improve or maintain surface and/or subsurface water quality and/or quantity.

☐ Improve or maintain riparian and/or watershed function.

☒ Reduce soil erosion and maintain or improve soil health.

☐ Improve or maintain the quantity, quality, or connectivity of food and/or cover available for wildlife.

☐ Manage fine fuel loads to achieve desired conditions.

Management Objective Narrative(s) (include what to measure, where, when, etc.):
SFC plans to use prescriptive grazing as a management tool to address resource concerns and enhance the biodiversity on McKenzie Preserve. Diversity of grasses, forbs, and functional groups are of high importance to SFC as well as hydrologic function, soil health, a functioning riparian plant community, health and viability of vernal pools, and upland wildlife habitat.

2. Practice Specifications Attached: 528 – Prescribed Grazing, Perennial Rangeland

3. Resource Inventory:

Identify existing resource conditions and concerns, ecological sites or forage suitability groups for each management unit. Include opportunities to enhance resource conditions in notes on inventory forms or other appropriate documentation. Locate structural improvements such as fences and water developments on maps and describe their condition and any use limitations (seasonal availability, water quality, water quantity, age, etc.). See CA-528A Specification for more information.

Additional Narrative:
Stream erosion, road erosion, plant diversity and reproduction, and bare ground were all identified as resource concerns during field visits.

4. Feed and Forage Balance

☐ DEFERMENT ONLY: Prescribed Grazing deferment is needed to facilitate management objectives. Feed and forage balance is achieved since there will be no livestock grazing on management area. Post-deferment grazing management has been discussed with the landowner and long-term grazing strategies have been identified. **At this time detailed forage supply, and livestock demand is not needed to achieve a feed and forage balance.**

Additional Narrative:

Operation Name and Location:				Sierra Lands Beef - McKenzie Preserve					Last Revision:		1/29/15			
Field Number or Name	Acres	Total Available Forage During Normal Production Years (lbs/ac)	*Total Available Forage - Unfavorable Production Years (lbs/ac)*	Perennial Forage System? (yes/no)	Harvest Efficiency Target	Proper Stocking Rate Adjustment	RDM Basis (lbs/ac)	AUM Perennial System - Normal Production Years	AUM Annual System - Normal Production Years	*AUM Perennial System - Unfavorable Years*	*AUM Annual System - Unfavorable Years*	*Animal Months Available - Unfavorable Years*	Animal Months Available - Normal Production Years	Animal Days Available - Normal Production Years
South	350.10	925	*476*	no			600		63		*-24*	*-40*	105	3,164
Filaree	314.10	1,271	*750*	no			600		117		*26*	*44*	195	5,853
Boling	512.20	896	*598*	no			600		84		*-1*	*-1*	140	4,211
Tabletop	153.40			no										
Arc	282.00	1,515	*1,005*	no			600		143		*63*	*106*	239	7,164
Bottom	289.80	1,407	*889*	no			600		130		*46*	*77*	217	6,495
shipping	26.70	1,656	*942*	no			500		17		*7*	*11*	29	858
Total:	1,928.30						**Total:**	0.0	554.9	*0.0*	*118.0*	*196.6*	925	27,745
							Total Available AUM - Normal Years:				**554.9**			
							Total Available AUM - Unfavorable Years:				**118.0**			

☐ See attached Feed and Forage Balance for additional detail.

5. Prescribed Grazing Strategy

Timing and duration of grazing by livestock will be based on the rate of growth, length of recovery period and degree of use of the following plant species in the corresponding fields. Timing, intensity, frequency, and duration of use are modified as needed to meet vegetation objectives.

Critical period use in any grazing unit will be limited to a maximum frequency of once every other year.

Critical Period (CP):	Boot Stage (or seed set) of MU key species
Grazing Unit(s) NOT grazed during CP:	

Most (2/3) of the individual plants of the management unit (MU) key species will have a maximum utilization level of percent or a minimum remaining stubble height of inches when livestock are removed from a grazing unit

☐ See attached grazing schedules and plan for more information.

Additional Narrative:

6. Special Considerations:

Provide additional specifications for grazing in unique and/or sensitive areas (riparian areas, critical habitat, grazed woodland, irrigated/wet pasture conditions, cultural resource sites, etc.).

Additional Narrative:

7. Wildlife Considerations:

Grazing management maintains enough standing forage for resident and transient wildlife use (harvest efficiency for livestock is not exceeded).

Additional Narrative:
SFC would like to use grazing as a management tool to retain the natural hydrology of the vernal pools so that they will be more resilient against invasion by exotic grasses. Medusahead has been observed colonizing the McKenzie Table where most of the vernal pools occur. However, half the table is owned by Bureau of Land Management (BLM), meaning grazing for vernal management is contingent on a management agreement with BLM. Currently, BLM does not allow grazing of the Table Mountains.

8. Threatened & Endangered Species or Species of Concern Considerations:

Grazing schedule/strategy considers and is integrated with the needs of T&E species.

Additional Narrative:

9. Contingency Plan / Options

Provide for alternative sources of forage and/or roughage during periods of drought, flood, or other occurrence to prevent overuse of plant communities, degradation of ecological condition, or adverse effects to animal health.

Additional Narrative:
In the event of a catastrophic event such as wildfire, drought, or disease/pest infestations, managers need a plan to help them keep a viable operation in such circumstances. These events can result in significant loss of forage that affects carrying capacity.

10. Monitoring Plan

Grazing utilization levels will be monitored at each key grazing area.
Photos at repeatable photo points for each key grazing area and areas of special concern identified in the planning process will be taken.

Additional Narrative:
SFC will keep records of how many stockers are brought onto the McKenzie and dates of moves between pastures. Total forage production will be measured using grass clipping at peak standing crop in May at 9 locations across the ranch in 3 slope classifications. Across the ranch, slope has been broken into 3 classifications: 0-10, 10-20, and 20-40 degrees. This sampling will be performed by SFC's

11. Additional Specifications:

Additional Narrative:

12. Operation and Maintenance

Operation: Prescribed Grazing will be applied on a continuing basis throughout the occupation period of all grazing units. Adjustments will be made as needed to ensure that the goals and objectives of the prescribed grazing strategy are met.

Maintenance: Monitoring data and grazing records will be used on a regular basis within the prescribed grazing plan to ensure that objectives are being met. All facilitating practices (i.e., fence, watering facilities, etc.) that are needed to effect adequate grazing distribution as planned by this practice standard will be maintained in good working order.

Additional Narrative:

PRESCRIBED GRAZING SCHEDULE

Client	Mckenzie Preserve	**Date**	6/3/2024
Farm/Tract		**Planner**	Harol Gonzalez Gallardo
Herd Name			

Season for this grazing schedule	20aa – 20bb

No.	Animal Class	AUE
300	Cows (w/calf)	1.00
	Heifers	0.70
	Bulls	1.35

No.	Animal Class	AUE
	Yearlings	0.70
	Horses	1.25
	Other:	

☐ DEFERMENT ONLY: Prescribed Grazing deferment is needed to facilitate management objectives. Feed and forage balance is achieved since there will be no livestock grazing on management area. Post-deferment grazing management has been discussed with the landowner and long-term grazing strategies have been identified. Identify deferment schedule below.

Start Date	End Date	Management Unit	Acres	AUMs Needed	AUMs Available	Target RDM	Key Specie(s)
		TOTALS					

Management Unit	*Oct.*	*Nov.*	*Dec.*	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*Jun.*	*Jul.*	*Aug.*	*Sep.*

Notes:

Design Approval:

Practice code No.	Practice	Lead Discipline	Controlling factor	Units	Job class				
					I	II	III	IV	V
528	*Prescribed Grazing*	Grazing Land Specialist	Veg Types & Complexity Factor (# grazing units) & Scope (# of Herds)	# of Veg Types # of Grazing Units Herd #'s	1 Veg Type <=4 Pastures <=1 Herd	<2 Veg Types <= 7 Pastures <=3 Herds	<4 Veg Types <=12 Pastures <=5 Herds	<6 Veg Types <=15 Pastures <=5 Herds	Un-limited
This practice is classified as Job Class (check one):					☐	☐	☐	☐	☐

Design Approved By: /s/ _____ Date: _____

Job title _____

LANDOWNER'S/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the drawings and specifications, and that he/she has an understanding of the contents, and the requirements.

b. He/she has obtained all the necessary permits.

c. No changes will be made in the installation of the job without prior concurrence of the NRCS technician.

d. Maintenance of the installed work is necessary for proper performance during the project life.

Accepted by:_____ Date:_____

Refer to the Following Associated Conservation Practice Implementation Requirements [X]			
☐	Access Control 472	☒	Prescribed Burning 338
☐	Upland Wildlife Habitat Management 645	☐	Wetland Wildlife Habitat Management 644
☐	Brush Management 314	☐	Critical Area Seeding 342
☒	Fence 382	☐	Watering Facility 614
☐	Pipeline 516	☐	Spring Development 574
☐	Range Planting 550	☐	Other:

PRACTICE COMPLETION:

The client has provided certification documentation. Options and acceptable forms of documentation are listed below, it has been reviewed, meets the specifications and will be placed in the case file.

- Monitoring Manual for Grassland, Shrubland, and Savanna Ecosystems methods
- Livestock herd management records
- Utilization records for key grazing areas indicating the protective nature of the grazing strategy to the sensitive areas.
- A map delineating sensitive areas to be protected.
- Grazing start/end records
- WHEG evaluation before implementation and after implementation of grazing strategy.
- Records of targeted grazing treatments, rate applied, timing, etc. Grazing records must support the herbicide label requirements for re-entry or grazing restrictions if/when used in conjunction with chemical herbicide. Map(s) delineating the area that was treated.
- Rangeland Health Evaluation Sheet is completed per Technical Reference
- Other (Brief Description):

_____

_____

_____

I have completed a review of the information provided by the client and certify this practice with field verification has been applied according to this specification.

Multiple CIN Certification Table

CIN #	ACRES	SIGNATURE & DATE	CIN #	ACRES	SIGNATURE & DATE

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and certify the practice meets NRCS standards, specifications and implementation requirements.

Completion Certification by:

/s/_____ Date _____

U.S DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
CALIFORNIA

IMPLEMENTATION REQUIREMENTS FOR 317 – COMPOSTING FACILITY

For: Business Name Sierra Foothill Conservancy - McKenzie Preserve

Job Location 22477 Auberry Rd, Clovis, CA, 93619

County Fresno RCD Sierra RCD Farm/Tract No.

Referral No. Prepared By Harol Gonzalez Gallardo Date 7/11/2024

IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.

Installation shall be in accordance with the following drawings, specifications and special requirements. NO CHANGES ARE TO BE MADE IN THE DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR APPROVAL OF THE NRCS TECHNICIAN.

1. Drawings, No. See Composting facility Plan

2. Practice Specifications Structural Details , Plan showing layout and location ,

3. Special Requirements: Compost Tea Brewer, 65 gallon conical tank with 4 air stones and air pump that will oxygenate the tea. The Tea is 5 cups of earthworm castings, 5 tablespoons of black strip molasses, and 4 cups of sea kelp. A 60 gallon batch of tea can do 12 acres per spray.

4. Special Maintenance Requirements: Tea Brewer needs to be cleaned after eat use, rinsed.

PRACTICE APPROVAL:

Job Classification: (Ref: Section 501 NEM)

Show the limiting elements for this job. This job is classified as, Class _____

Limiting elements:	Units
Litter/Manure/Organic Material	ft.^{3}
Earthworm casting	
Sea Kelp	
Black strip molasses	

Design Approved by:_____ Date:_____

LANDOWNER'S/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the construction drawings and specification, and that he/she has an understanding of the contents, and the requirements.

b. He/she has obtained all the necessary permits.

c. No changes will be made in the installation of the job without prior concurrence of the NRCS technician.

d. Maintenance of the installed work is necessary for proper performance during the project life.

Accepted by:_____ Date:_____

PRACTICE COMPLETION:

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and certify the practice meets NRCS standards and specifications.

Completion Certification by:

/s/_____ Date _____

U.S DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
CALIFORNIA

IMPLEMENTATION REQUIREMENTS
FOR
362 – DIVERSION

For: Business Name Sierra Foothill Conservancy - McKenzie Preserve

Job Location 22477 Auberry RD, Clovis, CA, 93619

County Fresno RCD Sierra RCD Farm/Tract No.

Referral No. Prepared By Date

IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.

Installation shall be in accordance with the following drawings, specifications and special requirements. NO CHANGES ARE TO BE MADE IN THE DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR APPROVAL OF THE NRCS TECHNICIAN.

1. Drawings, No.

2. Practice Specifications Rock drops, armaring erosion issues with on site materials. .Rocks are started on the floor of the erosion in a tile like fashion then built up on the sides with smaller aggregates to fill any gaps and spaces. This continues to the soil profile that is desired.

3. Compaction Method smaller aggregates are tamped in with appropriate sized tools. The rock is worked within the confines of the scare so little compaction is necessary.

4. Special Requirements: On site rock materials and road based decomposed granite.

5. Special Maintenance Requirements: Structures are checked yearly and after big weather events to make sure that they are structurally sound. These installations are designed to slowly trap sediment and fill in over the years. Sometimes a few more stones can accelerate the process.

PRACTICE APPROVAL:

Job Classification: (Ref: Section 501 NEM)

Show the limiting elements for this job. This job is classified as, Class _____

Limiting elements:	Units
Design Capacity	cfs

Design Approved by:_____ Date:_____

_____

LANDOWNER'S/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the construction drawings and specification, and that he/she has an understanding of the contents, and the requirements.

b. He/she has obtained all the necessary permits.

c. No changes will be made in the installation of the job without prior concurrence of the NRCS technician.

d. Maintenance of the installed work is necessary for proper performance during the project life.

Accepted by:_____ Date:_____

_____

PRACTICE COMPLETION:

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and certify the practice meets NRCS standards and specifications.

Completion Certification by:

/s/_____ Date _____

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION ASSISTANCE NOTES

NRCS-CPA-6
11-97

LAND USER	ADDRESS	ACREAGE	LOCATION OF UNIT
McKenzie Preserve	22477 Auberry Rd, Clovis, CA 93619	2960	Fresno

CURRENT CONSERVATION OBJECTIVES: Carbon Farm Plan, Implement cover crops to prevent erosion and improve soil health, Apply compost to increase organic matter levels, Implement a Nutrient Management Plan to improve crop and soil health and fertilizer efficiency

LIST POSSIBLE ALTERNATIVE RESOURCE MANAGEMENT SYSTEMS THE NRCS CONSERVATIONIS TMIGHT CONSIDER WITH THE LAND USER (As objectives change record them in the notes)

NOTES OF SIGNIFICANT ASSISTANCE PROVIDED, ALTERNATIVES CONSIDERED, DECISIONS R EACHED, RESOURCE MANAGEMENT SYSTEMS OR COMPONENT PRACTICES INSTALLED, AND FOLLOWUP PROVIDED MAY BE RECORDED CHRONOLOGICALLY BEL W AND ON ADDITIONAL PAGES TO PROVIDE A HISTORY OF RESOURCE CONSERVATION PLANNING AND IMPLEMENTATION ACTIVITIES WITH THE LAND USE RINCLUDE AND EVALUATION OF SIGNIFICANT AND SOCIAL, CULTURAL, ECONOMIC, AND ENVIRONMENTAL RESOURCES. (These included consideratio ofwetlands, flood plains, endangered species, archeological values, prime lands, etc.)

DATE	ASSISTED BY (initials)	NOTES
2-20-24	HGG	Grower Outreach
3-14-24	HGG	1st Field Visit
4-15-24	HGG	Soil Sampling
4-17-24	HGG	Map creation
4-25-24	HGG	Carbon Farm Plan goals
5-15-24	HGG	2nd Field Visit and grower interview.
5-21-24	HGG	Existing Farm Practices Discussion
5-21-24	HGG	Comet-Planner Existing Practices
6-10-24	HGG	Comet-Planner Proposed Pracices
6-10-24	HGG	Implementation and timeline development
7-1-24	HGG	Implementation Map development
7-1-24	HGG	Soil properties map creation
7-10-24	HGG	Carbon Farm Plan document development.
7-10-24	HGG	Meeting with grower to discuss carbon farm plan
	HGG	Grower Signature