McDermott “Clear Creek Preserve” Property

Forest Management Plan

Based on the California Forest Improvement Program Mini Management Plan Template,
Edition Date: March 29, 2021

Management Plan Certification

Landowner

"I have reviewed this plan and approve its content."

Name (print or type): **Brent D. and Helen C. McDermott**

Signature:

Date:

Mailing Address: **10780 Genasci Road, Nevada City, CA 95959**

Phone number: **(530) 478-0545**

E-mail: **sugarpine2006@sbcglobal.net**

Plan Preparing Registered Professional Forester

"I certify that I, or my supervised designee, personally inspected this plan area, and that the plan fully complies with the California Professional Foresters Law and meets Federal Forest Stewardship Management Plan Standards. I further certify that this plan is based upon the best available site and landowner information, and if followed, will not be detrimental to the productivity of the natural resources associated with this property."

Name (print or type): **Katherine Benedict**

Signature: 

Date: ***10/17/2022***

Registered Professional Forester #: **3138**

Organization or Company: **FRST Corp.**

Mailing Address: **111 Bank St. #418, Grass Valley, CA 95945**

Phone Number: **(530)446 -1123**

I. Landowner Information

a. Landowner(s) Name

Brent D. and Helen C. McDermott

b. Mailing Address

10780 Genasci Road, Nevada City, CA 95959

c. Property Location Address

N/A; see the driving directions provided below.

d. Phone Number

(530) 478-0545

e. E-mail

sugarpine2006@sbcglobal.net

II. Property Location

a. **County:** Nevada

b. **Assessor's Parcel Number(s):** 013-410-001, 013-410-002

c. **Public Land Survey System (PLSS) Description:** Portion of Section 31, T18N, R12E, MDBM

d. **USGS Quadrangle Maps on which the property is located:** Nevada City

e. **Nearest City or Town:** Nevada City

f. **Driving Directions from Nearest City or Town:** The property is located 31 miles east of Nevada City, CA, in unincorporated Nevada County. The access road is about seven and a half miles off CA SR 20 up Bowman Lake Road (after passing Fall Creek); if you reach the 8-mile mark on Bowman Lake Road, you have gone too far. A dirt road cuts off Bowman Lake Road at this point to the left; about 200 feet down this dirt road, it forks; keep right. This will take you to the ownership.

III. Forestland Conditions

a. Acreage

i. **Total Ownership Acreage:** 106 acres

ii. **Total Forested Acreage:** 106 acres

b. Land Use History

i. **Pre-historic:** This project is within the range of the Nisenan people. Possibly land uses of this property include habitation, hunting, gathering, and seasonal migration. Possible evidences of this that could be found on the property would

include points (ie “arrowheads” or other sharp points for tools), lithic scatter, bedrock mortars, hand tools, midden, or housing pits.

ii. **Historic:** Mining features are present within the property, giving evidence to the historic land use of mining; this is true of much of the region surrounding the property. One historic water conveyance ditch was observed during the field reconnaissance associated with the composition of this plan. Examples of other features that could be present on the ownership include can dumps, waste rock, tailings, and other mining waste. Logging has also been a historic land use of the ownership.

iii. **Timber Harvest:** The property was clear cut around 1900 and was harvested an unknown number of times in the 20th century, though multiple entrances are evidenced by stump ages and stand characteristics. A cut that occurred around 1990 left a stand of white fir and cedar primarily. The current landowners purchased the property in 1996 and operated a Less Than 10% Dead, Dying, and Diseased exemption (#2-96EX-13633-NEV, attached to this plan) on 10 acres in 1997, removing ~25 MBF of white fir. A copy of this Notice of Exemption is attached to this plan. They replanted Ponderosa and sugar pine and Douglas-fir in this area. A well-developed network of skid trails exists throughout the ownership, as well as conveniently located landings and roads (both maintained and unmaintained).

iv. **Other Relevant Historical Information:** In 2008 the Fall Fire burned through about 75% of the property during May and June with low intensity.

The landowner and the Bear Yuba Land Trust entered into a conservation easement in 2012. The conversation easement allows for the commercial harvest of timber; the stated conversation values are “generally defined as timber productivity, wildlife and plant habitat, and water resources that the Property currently possess”.

A few old growth incense cedars exists on the ownership that were likely not cut in previous harvests due to “defects” which make them unmerchantable as sawlogs. One of them is upwards of 8 feet in diameter with a large “catface” burn scar, located within the WLPZ of Clear Creek.

v. **CFIP or Other Cost-share Programs:** The landowner conducted forest improvement activities through the Environmental Quality Improvement Program (EQIP), a Federal program with Farm Bill funding that is administered by the Natural Resource Conservation Service (NRCS) to assist agricultural producers with improving environmental quality and crop productivity on their lands. Approximately 60 acres were pre-commercially thinned from below from 2016-2019 removing overcrowded understory brush and saplings that were providing horizontal and vertical fuel continuity. The result of this treatment is a more open understory and reduced competition between residual individuals. The landowner is currently awaiting funding to treat an additional 40 acres through the program. EQIP also funded the composition of a burn plan for a broadcast burn, which the landowner hopes to implement this fall (2022) if conditions allow.

c. **Present Land Use:** At present the property has a cabin, horse corral (the landowner has previously conducted logging with horses), road network, and rough trail system, with the primary land use being maintenance of a healthy, well managed forest and private recreation by the landowners.

d. **Vegetation Type Description:** The forest stand is composed of Sierra mixed conifer species. The overstory is dominated by white fir and incense cedar, but also includes ponderosa pine, sugar pine, red fir, and scattered black oak (see Figure 1). Given the forest improvement treatments conducted in the past on portions of the ownership, the understory is largely well spaced and comprised of a mix of conifer species as well as understory brush including greenleaf manzanita and *Ceanothus spp.* At present, the stand does not show evidence of severe bark beetle mortality.

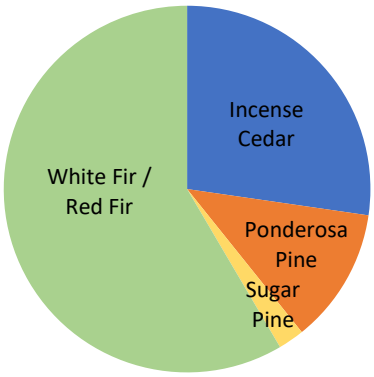


Figure 1: Species composition of ownership by MBF.

e. **Timber Stand Description:**

i. **Forest Inventory:** An inventory of the ownership was conducted in July and August of 2022; the following stocking information is the result of this inventory. The basal area (sqft/acre) of the ownership ranges from 50-400 sqft, with an average of 170 sqft (see Table 1). A full summary of the 2022 inventory is attached to this plan, as well as a copy of the inventory protocol and plot map.

Table 1. The trees per acre and basal area per acre on the McDermott property.

Diameter Class (inches)	*Trees per acre*	*Basal area per acre (sqft)*
10-18	75	66
18 – 30	37	96
30 +	1	6
TOTAL	114	168

Per the California Public Resources Code Section 4561, the property meets the timber stocking standards of a minimum of 50 square feet per acre of basal area on site II classification lands (see the Site Class section below for more information on this classification).

ii. **Vigor:** The stand has a moderate vigor; competition in the overstory and previous high-grading by previous landowners has lowered the vigor of the overall stand, but no widespread mortality is present.

iii. **Site Class:** The timber site class within the plan area is Site II. Site quality is used as a measure of the relative productive capacity of a parcel of land. Site class is based on the total height of a tree at a given age. In California, timberlands are divided into five site classes, with Site II having a moderately high timber productively.

iv. **Age Class:** The current stand is composed of Sierra mixed conifer with two distinct canopy strata: 1) Overstory of white fir and incense cedar, and some ponderosa pine, red fir, sugar pine, and black oak, 2) Understory of mixed species composition that has regenerated within the last 20 years.

v. **Growth Potential:** At present, the stand has a stocked overstory, with some overstocking in the intermediate and suppressed canopy strata, which leads to increased stress and over-competition. If left untreated the growing potential of all age classes may be limited. If treated through mid-story thinning operations, the growing potential will increase. Comparison of the current inventory results to the 2009 inventory results shows that the stand has not grown very much within the last decade.

vi. **Rehabilitation Possibilities:** An overstory thinning prescription that would drop the residual overstory basal area to closer to 75 sqft would provide for the best suited rehabilitation possibility for the forest stand in this plan. This treatment would increase individual tree health and growth potential. Doing this type of thinning may result in increased brush growth in the understory, which would have to be treated through mechanical, hand, chemical, or burning operations. Continued maintenance of these thinning treatments will be necessary for continued treatment efficacy and improved forest health.

vii. **Current Silvicultural Practice(s):** Per the California Forest Practice Rules (CA FPRs) 14 CCR 953.2(a)(2)(A)(2), use of the uneven management silviculture of Selection would require a post-harvest basal area retention of 75 sqft. Uneven management attributes include the establishment and/or maintenance of a multi-aged, balanced stand structure, promotion of growth on retention trees throughout a broad range of diameter classes, and encouragement of natural reproduction. Group Selection, another uneven aged silvicultural system, allows for the removal of groups of trees under 2.5 acres to provide for more successful pine regeneration and promote heterogeneity; 20% of a project area can be groups. This rule is likely to change Jan 1, 2023 to increase the total group area to 33% of the stand.

viii. **Slash Disposal Program:**

Following any such harvest, compliance with the CA FPRs' hazard reduction and slash disposal requirements will be necessary and would provide forest health and fire protection benefits. These standards vary by type of disposal method (pile and burning, mastication, etc.) and location (adjacent to public road or structure, etc.). The following treatments should be of note, though review of the entirety of the 14 CCR 937.2 rule section would be necessary in the event of commercial timber harvest activity:

937.2(a): "Slash to be treated by piling and burning shall be treated as follows: (1) Piles created prior to September 1 shall be treated not later than April 1 of the year following its creation, or within 30 days following climatic access after April 1 of the year following its creation, (2) Piles created on or after September 1 shall be treated not later than April 1 of the second year following its creation, or within 30 days following climatic access after April 1 of the second year following

its creation, or (3) Alternatives to (1) and/or (2) shall be justified in the plan by the RPF and may be approved by the Director."

937.2 (b): "Within 100 feet of the edge of the traveled surface of Public Roads, and within 50 feet of the edge of the traveled surface of permanent private roads open for public use where permission to pass is not required, Slash created and trees knocked down by Timber Operations shall be treated by Lopping for Fire Hazard Reduction, piling and burning, chipping, burying or removal from the zone."

937.2(c): "All Slash and Woody Debris greater than one inch but less than eight inches in diameter within 100 feet of Approved and Legally Permitted Habitable Structures shall be removed or piled and burned; all Slash created between 100-200 feet of Approved and Legally Permitted Habitable Structures shall be Lopped for Fire Hazard Reduction, removed, chipped or piled and burned; Lopping may be required between 200-500 feet where unusual fire risk or hazard exist as determined by the Director or the RPF."

f. **Soil**

i. **Soil Series Type with Brief Description:** The plan area is made up mostly of a Huysink-Horseshoe complex, as well as a Lorack-Smokey-Cryumbrepts complex. Huysink-Horseshoe complexes are well drained, have a moderately high to high capacity to transmit water, and a low to moderate water supply availability. Lorack-Smokey- Cryumbrepts complexes are well drained, have a very variable capacity to transmit water, and a low water supply availability. The USDA Web Soil Survey results are attached to this Plan for reference.

ii. **Slope:** The property is gently sloped from Clear Creek to a ridge that rises approximately 500' to the east. The majority of the slopes on the property vary from gentle to moderately steep (5-45%). The northwest corner of the ownership, north of Clear Creek and west of the unnamed Class II watercourse, has steeper pitches leading out of the creek; however, these are well vegetated and appear stable.

iii. **Aspect:** The property has a generally south-southwest facing aspect.

iv. **Elevation:** The elevation ranges from 5,300-5,800' ASL.

v. **Erosion Hazard Rating:** Erosion Hazard Rating is a rating derived from the procedure specified in 14 CCR § 932.5 designed to evaluate the susceptibility of the soil within a given location to erosion. Per RM-87 (4/87) State of California, Board of Forestry, the areas of the Huysink-Horseshow complex have a low Erosion Hazard Rating (EHR) and the areas of Lorack-Smokey-Cryumbrepts have a moderate EHR under unevenaged management. See the attached Erosion Hazard Rating worksheet.

vi. **Erosion Control Program:** Given the soil series types, Erosion Hazard Ratings, apparent stability of these soils, and evidence of successful erosion control practices in the past, following the standard California Forest Practice Rules guidelines for erosion control facility installment and maintenance following timber harvest or mechanical forest management activities is appropriate. Per 14

CCR 895.1, erosion controls mean drainage facilities, soil stabilization treatments, road and landing abandonment, removal and treatment of watercourse crossings, and any other features or actions to reduce surface erosion, gullying, channel erosion, and mass erosion. Provisions of 14 CCR 934.6 should be followed, including the waterbreak spacing specifications by EHR shown below. Waterbreaks should also be applied to constructed fireline.

MAXIMUM DISTANCE BETWEEN WATERBREAKS

Estimated Hazard Rating	U.S. Equivalent Measure Road or Trail Gradient (in percent)				Metric Measure Road or Trail Gradient (in percent)			
	10 or less	11-25	26-50	>50	10 or less	11-25	26-50	>50
	Feet	Feet	Feet	Feet	Meters	Meters	Meters	Meters
Extreme	100	75	50	50	30.48	22.86	15.24	15.24
High	150	100	75	50	45.72	30.48	22.35	15.24
Moderate	200	150	100	75	60.96	45.72	30.48	22.35
Low	300	200	150	100	91.44	60.96	45.72	30.48

g. Watercourses

i. **Description:** There are multiple watercourses present on the ownership. The main watercourse is Clear Creek that runs through the property and is a Class I watercourse (see classification table below). An unnamed Class II tributary of Clear Creek exists north of Clear Creek within the ownership. Two Class III watercourses come together to form one channel in the southeast portion of the property; this watercourse upgrades to a Class II watercourse due to the development of riparian vegetation and aquatic habitat. All of the watercourses in the ownership are stable and maintain vegetative cover on the banks.

Watercourses on private forest land in California are classified using the descriptions below and should be provided the buffer widths and protection measures in the following table from the Forest Practice Rules (14 CCR 936.5).

Procedures for Determining Watercourse and Lake Protection Zone Widths and Protective Measures[1]								
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.		1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.		No aquatic life present, Watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of Timber Operations.		Man-made Watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.	
Water Class	Class I		Class II		Class III		Class IV	
Slope Class (%)	Width Feet	Protection Measure	Width Feet	Protection Measure	Width Feet	Protection Measure	Width Feet	Protection Measure
					[see 916.4(c)] [see 936.4(c)] [see 956.4(c)]		[see 916.4(c)] [see 936.4(c)] [see 956.4(c)]	
<30	75	BDG	50	BEI	See CFH		See CFI	
30-50	100	BDG	75	BEI	See CFH		See CFI	
>50	150[2]	ADG	100[3]	BEI	See CFH		See CFI	

1 - See Section 916.5(e) for letter designations application to this table.
2 – Subtract 50 feet width for cable Yarding operations.
3 – Subtract 25 feet width for cable Yarding operations.

h. **Property Boundaries and Corners**

i. **Location Description:** The ownership is in the northwest corner of Section 31, T18N, R12E, MDBM. It is situated between United States Forest Service land and other private forestland ownerships and is located within the 'very high fire hazard severity' zone according to Cal Fire.

ii. **Flagging Colors:** The located property corners are marked with red flagging and the property boundaries with the USFS have blaze marks, which are recent in some places and very faint in others (along the northern property line, for example).

iii. **Availability of Survey Notes:** The Assessor's Map, attached to this plan, shows the distances between corners. This map provides that a Record of Survey exists for the property south of this ownership and could be obtained to provide further surveying details. Additionally, the Assessor's Map for the section to the north (Sec 30) may be obtained to provide additional information to help locate the northern corner. Five corners were located during reconnaissance efforts and are shown on the attached Management Plan Map.

i. **Transportation System**

i. **Proximity to Watercourses:** There is an existing road crossing of an unnamed Class II watercourse in the southern part of the property. This crossing is a corrugated metal pipe (CMP) in a concrete headwall and endwall in good, functioning condition. The current landowner had this crossing installed. The unmaintained road system has an additional crossing of this creek, which

appeared to be a rock ford and would be easily re-installed if deemed necessary. No erosional issues are evident or seem likely to occur from this unmaintained road watercourse crossing. Additionally, there is an old crossing of Clear Creek that was used in previous timber harvests. The crossing has been since removed or was a wet ford when used last. If the crossing were to be proposed for use, it would need to be designed to meet the current Forest Practice Rules including being sized for 100-year flood flows, and it would require a Lake and Streambed Alteration Agreement to be obtained from the California Department of Fish and Wildlife, per Fish and Game Code 1600.

ii. **Condition:** The maintained roads within the plan area are well maintained and properly drained. The unmaintained roads are brushed over but maintain a functional road running surface; activation of these roads would require minor reconstruction activities to adhere to road standards and erosion control facilities. The roads are seasonal; see the Forest Management Plan map for their locations.

iii. **Legal Access:** The unmaintained road that connects to Bowman Lake Road is the legal access to the ownership. This road is shown on both the USGS 7.5' Quadrangle, as well as the Assessor's Map.

iv. **Drainage Structures:** Functional drainage facilities, such as dips, ditches, and culverts, are in place on the maintained roads and should be maintained to assure proper drainage and sedimentation prevention throughout the ownership. See the Erosion Control section of this plan for further discussion on erosion prevention and facilities.

v. **Maintenance Requirements:** Clearing out debris from ditches and plugged culverts, as well as maintaining functioning dips where needed to keep water from running down the road surface, are important steps in maintaining a functioning road system and assuring protection of water and soil resources. Care should also be given to assure landings are properly drained as well.

IV. **Management Objectives & Land Use Alternatives Assessment:** The landowner's primary objective for the property is high severity fire prevention. The primary ways this can be done is by reducing fuels to limit the rate of spread and intensity of wildfire, reducing ladder fuels to overstory trees, and removal of slash and understory brush. Thinning overstory and sub-merchantable conifers to create canopy openings will reduce competition and fuel loading and increase availability of water to residual trees. Removing stems, both in the overstory and understory, will reduce stress among residual trees, thus making them more resistant to disease and pathogens, keeping more live trees in the stand.

The landowner wishes to promote ponderosa pine, sugar pine, and Douglas-fir regeneration on their ownership. Removing the white fir and incense cedar from the stand in favor of planting pine species would help to create more species evenness and fire resilient forest structure, as pine are a more fire resilient species. Ponderosa and sugar pines are shade intolerant species and Douglas-fir is a partially shade intolerant species; therefore, opening the canopy will be necessary to successfully regenerate these species.

Additionally, the landowner wishes to increase forest health and growing capacity of their forest stand. A thinning will help to meet this objective as well and will help to achieve a higher quality of wood product when harvesting is conducted.

Presently, the landowner has conducted numerous forest improvement activities, such a sub-merchantable tree thinning, brush removal, and dead, dying, or diseased tree harvesting.

The landowner has no desire to change the land use to an alternative type, such as development or a differing silvicultural treatment. The landowner wishes to maintain the area as forested with uneven aged characteristics. Additionally, the 'no project' alternative would not provide the benefits forest management offers to the forest, landowner, and community. In consideration of the merits of forest management activities and the landowner's objectives, the project as proposed will have the greatest net benefit to both natural resources and to the landowner.

V. Future Harvest Plans, Market Conditions & Locations, & Economic Assessment:

The landowner hopes to conduct timber harvests in the future to achieve their forest management goals. Given the landowner's objectives, a Group Selection-type or Fuelbreak-type silvicultural system would be best suited. Group Selection would allow for an overall forest thinning with the creation of holes up to 2 acres in size over 20% of the property; creating these gaps would help in successful pine and Douglas-fir regeneration as these species need full sun to successfully establish. Fuelbreak would allow for the removal of more trees from the site as it has a lower basal area retention requirement; this would promote more fire resistance and resilience in the stand. There are many logging outfits in the region that would be available for contracting on this property, as well as multiple regional mills that could be available for log buying. The property has a thorough network of existing road, skid trails, and landings to facilitate timber harvest. Additional roads and watercourse crossings may be constructed if pursued through the Cal Fire Timber Harvest Plan system.

VI. Fire Protection Program:

As fire protection is one of the primary objectives of the landowner, the operational suggestions in this plan provide for increased protection against high severity fire on the ownership. Continued maintenance of these treatments and adherence to local and state fire protection and prevention laws and regulations, such as the Public Resources Code 4291 Defensible Space (https://www.fire.ca.gov/programs/communications/defensible-space-prc-4291/), will help to assure increased fire protection to the property and its improvements.

The California Forest Practice Rules include hazard reduction practices following that must be adhered to during Timber Operations (14 CCR 937). These includes slash disposal requirements dependent on location and existing infrastructure, pile burning specifications, and broadcast burning requirements.

PRCs 4427, 4428 & 4430 provide additional guidelines on fire prevention practices required in the state during timber operations.

The following fire protection practices could be implemented on this ownership as well: (1) no operation chainsaws or heavy equipment on Red Flag Days (the following website may be checked for Red Flag Day warnings) and no mastication when the relative humidity is below 20%, (2) constructing a water tank near the cabin could aid in fire suppression efforts in the event of a wildfire on the ownership, and/or (3) contacting the local USFS battalion chief at the White Cloud

Fire Station on State Route 20, as the US Forest Service provides Direct Fire Protection to the property, to make them aware of the road system, gates, and infrastructure on the ownership.

If burning is to be used on the ownership, adherence to local and state (https://burnpermit.fire.ca.gov/) laws regarding burn permits and specifications is essential.

VII. **Insect & Disease Problems and Control:** There is no significant presence of pests such as bark beetles or forest pathogens present on the property. The density of the forest paired with the on-going drought conditions in the region have created a stressed forest stand. Mortality is occurring on a small scale throughout the ownership due to competition for resources, which can be addressed through thinning of conifers and spacing residual healthy individuals. Additionally, thinning will provide improved access to resources such as increased soil moisture that will aid in improving forest health. Proper and timely slash disposal following forest management activities will help to remove brooding habitat for bark beetles as fresh slash is host material for many types of bark beetles. Chipping, masticating, burning, or covering slash in clear plastic to solarize slash can all prevent slash from being breeding grounds for bark beetles.

VIII. **Security Concerns:** There are no security concerns exhibited on the property. The primary concern may be from travelers on Bowman Lake Road that may stop where the road is adjacent to the ownership and trespass, or more likely, litter. In the event of trespassing issues, the landowners can contact the following local protection agency:

Nevada County Sheriff's Office: Emergency number (530) 265-1471 or 911.

IX. **Recreation Potential, Projects**: The property is private and not open for public recreation; therefore, public recreation will not be affected by management of this ownership. Recreation by the landowners may be impacted by management through the creation or destruction of trails dependent on the type, location, and use of machinery. If fireline is constructed during prescribed burn preparation, these lines could be used and maintained as trails for hiking or horse riding. Additionally, trails that are already established by the owner for hiking and horseback riding could be utilized for prescribed burn fire line.

X. **Aesthetic Considerations, Impacts:** Continued forest management of this ownership will create a more aesthetically pleasing and ecologically sound forest which will increase overall property aesthetic. Given the intensity of recent fire seasons, there has been a large increase in support for fuels reduction and forest health improvement activities in the region.

XI. **Cultural Resources Assessment:** This subject will need to be addressed before initiating any ground disturbing activities, including prescribed fire. The NRCS should have addressed this in their EQIP planning process, so it may be possible for the landowner to obtain the results of the California Historical Resources Information System (CHRIS) Information Center records search, cultural resources survey results, additional site records, and protection measures associated with previous EQIP projects.

XII. **Community/Agency Cooperation Mechanisms**

Nevada County Resource Conservation District
113 Presley Way, Suite 1
Grass Valley, CA 95945
(530) 272-3417

Fire Safe Council of Nevada County
143 B Spring Hill Drive
Grass Valley, CA 95945
(530) 272-1122

Nevada-Yuba-Placer CAL FIRE Unit
10242 Ridge Road
Nevada City, CA 95959
(530) 265-4589

University of California Agriculture and Natural Resources (UCANR) Cooperative Extension Sutter-Yuba Counties (there is not a Forestry/Fire Advisor for Nevada County, this is the closest advisor)
142A Garden Highway
Yuba City, CA 95991-5512
Phone: (530) 822-7515
Fax: (530) 673-5368
Email: sutteryuba@ucanr.eduucanr.edu/forestry

XIII. **Forestry Assistance Management Recommendations:** Contacting the above community agencies may aid in future forestry assistance. Additionally, maintaining a relationship with a Registered Professional Forester with ties to the community and grant-funding entities in the region and State may help to provide insight on opportunities for further assistance in the future.

Any forest management or tree work that may need to occur along or within the striking distance of a powerline should be done in cooperation with PG&E and their vegetation management program (https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/vegetation-management.page) .

XIV. **Wetlands:** An area with montane meadow characteristics exists adjacent to the riparian corridor along Clear Creek and acts as an important filter stripe and aquatic habitat. It is seasonally wet. It should be provided appropriate protections dependent on management activities provided.

XV. **Carbon Cycle & Climate Change:** Forest vegetation treatments such as mechanical thinning and other similar stand and fuel density management treatments are essential tools to restore forest health and resiliency. They enable forests to be net sinks of carbon over time and provide a range of other ecosystem and social benefits. Treatments in densely stocked stands can vary in method used and forest structure outcomes, and therefore can lead to different impacts on forest carbon in both the short and long term. These treatments can yield a range of woody materials with uses including biomass energy, compost, composite wood products, and solid wood products.

Extensive and timely thinning of significant areas of California's forests will make forests healthier and more resilient to insects and disease for many generations to come, while significantly reducing the threats to life, property, forest carbon stocks, and other forest benefits from disease and fire.

The practices proposed in this plan will create short-term carbon emissions during the operations, but will provide long-term, lasting carbon sequestration potential in the healthier, more resistant forest.

XVI. Forest Resource Improvement Needs / Potential Projects

The following activity descriptions are possible future forest management activities that could be conducted on the ownership dependent on landowner desires, market conditions, and funding availability. Mitigation measures and further activity specifications will need to be developed if such activities are pursued.

a. **Commercial Timber Harvest:** The discussion provided in the future Harvest Plans, Market Conditions & Locations, & Economic Assessment section, as well as many other sections, of this plan helps to inform the types of harvests that could be conducted on this ownership given the forest type and landowner's objectives. Involvement of a California Registered Professional Forester and composition, review, and approval of a Cal Fire timber harvesting (https://www.fire.ca.gov/programs/resource-management/forest-practice/) form will be necessary in the event of selling, bartering, or trading forest products from the property.

b. **Reforestation**

   i. **Trees and Planting:** Following a commercial harvest using Group Selection, planting may be pursued in the group openings to promote pine and/or Douglas-fir establishment. While natural regeneration will establish, planting nursery-propagated seedlings will help to assure desired species composition and seedling success. Species composition, seed sourcing, and planting spacing would be determined when planting is planned for.

   ii. **Tree Shelters:** Tree shelters, such as Vexar Tubing, may be placed around seedlings when planted to protect them from herbivory by deer and other small ungulates.

c. **Stand Improvement**

   i. **Precommercial Thinning or Release:** While this has been conducted on much of the ownership through the EQIP grant, future pre-commercial thinning or release may be necessary or desired. The objective of pre-commercial thinning is to regulate stocking of regeneration within the understory. Trees and other competing vegetation (brush) may be treated by machine or hand cutting. The target is generally to remove suppressed trees and those intermediate trees which are not to be kept for crop trees, while giving consideration to maintenance of a multi-aged stand. Trees for removal would be those below the general crown level, which do not have an opportunity to occupy growing space amongst co-dominant and dominant crowns.

   ii. **Pruning:** Pruning may be conducted throughout the ownership to reduce ladder fuels by removing limbs up to 10’ or less as to maintain at least 50% live crown.

   iii. **Follow-up:** Slash of all sizes created by PCT and pruning operations should be treated by either mechanical or burning follow-up operations.

Maps & Attachments

1. Forest Management Plan Map (includes Parcel, Water Resources, Road Assessment, Vegetation Unit, and Project Map information)
2. Property Location Map
3. Aerial Imagery Project Map
4. McDermott Inventory Summary
5. McDermott Inventory Protocol and Map
6. Assessor's Map
7. USDA Soils Report and Map
8. Erosion Hazard Rating Worksheet
9. #2-96EX-13633-NEV
10. CFIP Forest Management Plan Review and Acceptance Signature Page

McDermott Forest Management Plan Map

Nevada Co, CA T18N R12E S31

CalWatershed Mapper v2: Fall Creek (#5517.340301)

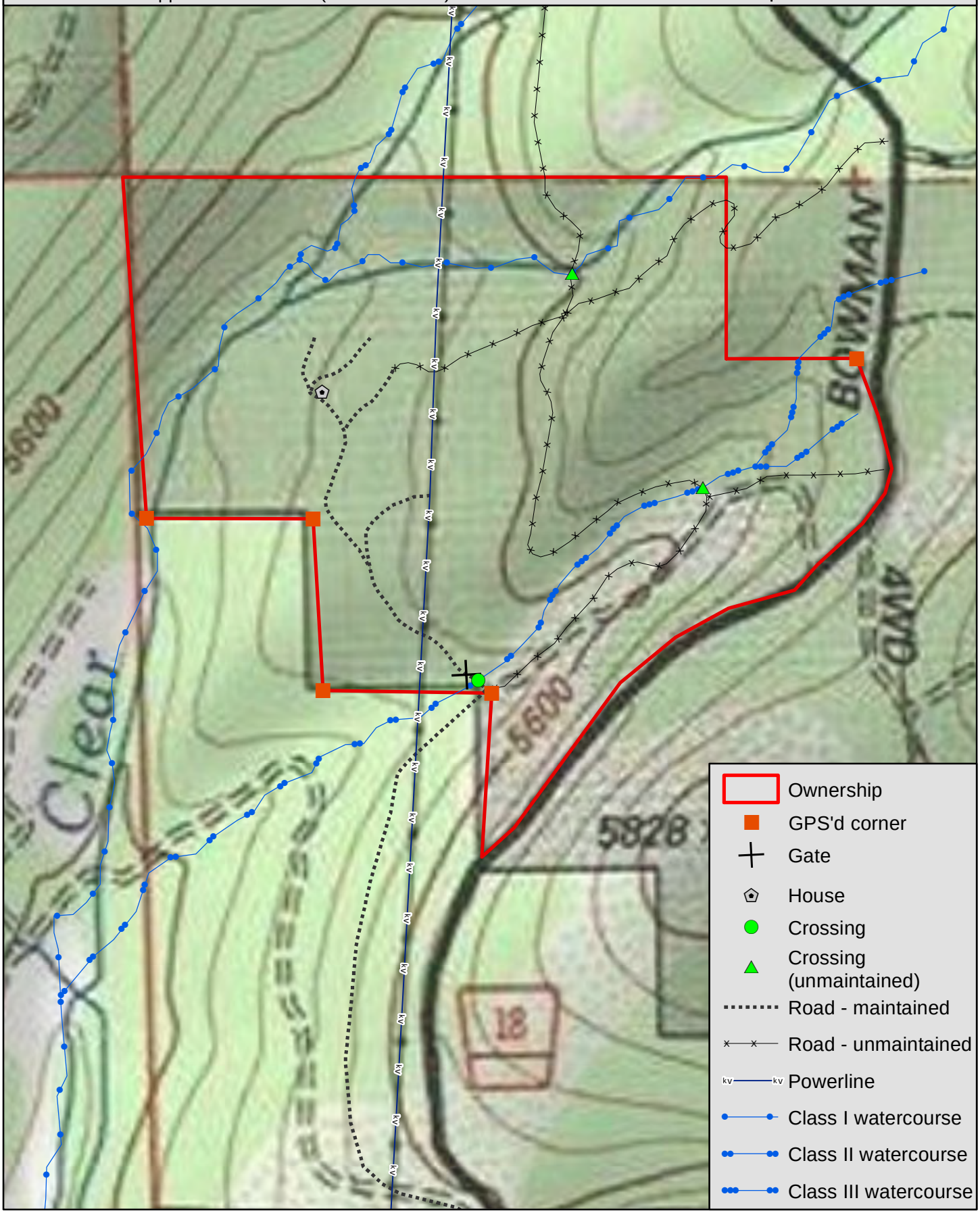
1:6,000

0 625 Feet

N

FIRST CORP

Date: 10/13/2022



McDermott Property Location Map

Nevada Co, CA T18N R12E S31

CalWatershed Mapper v2: Fall Creek (#5517.340301)

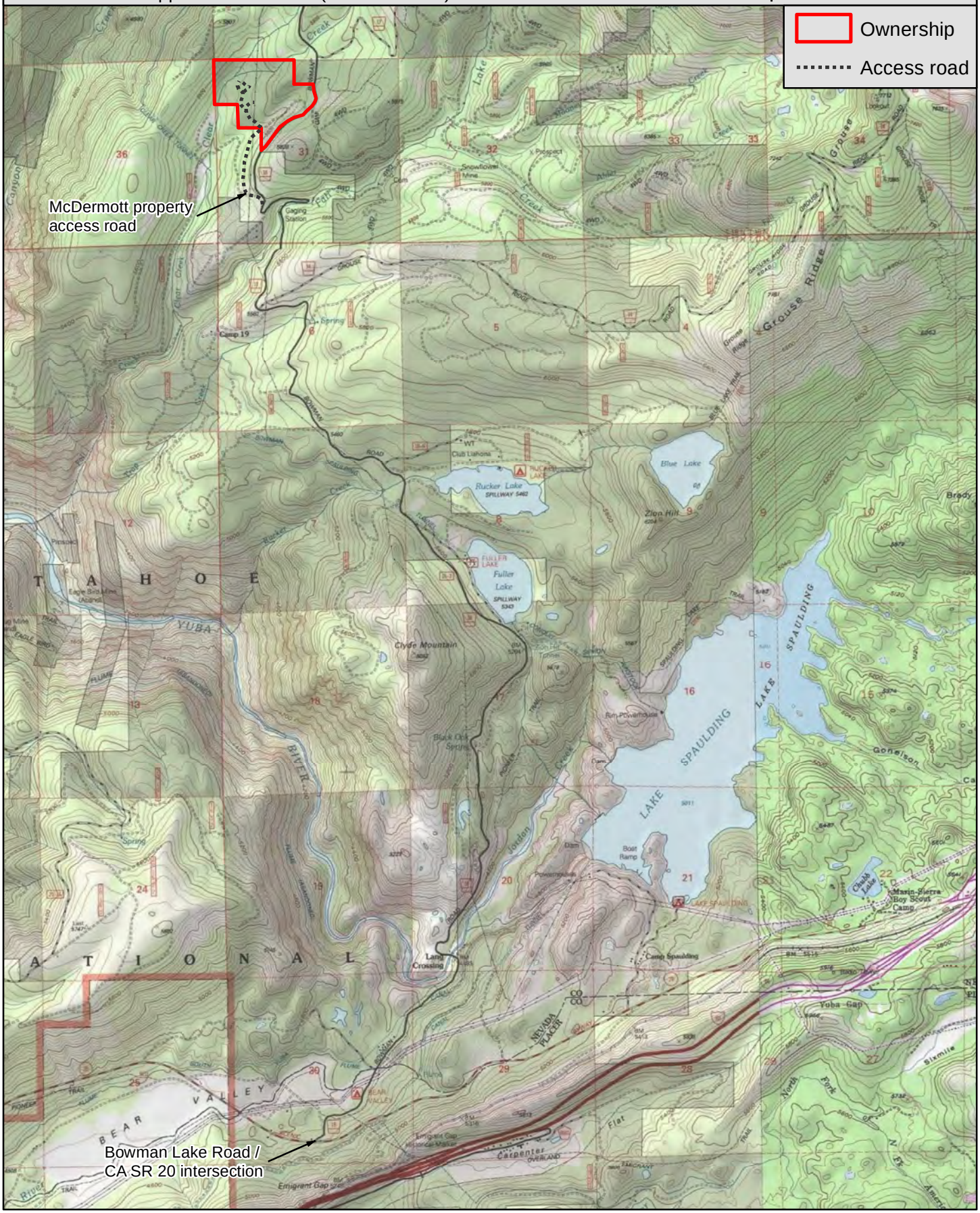
1:45,000

0 4,750 Feet

N

FIRST CORP

Date: 9/19/2022



McDermott Forest Management Plan Map

Nevada Co, CA T18N R12E S31

CalWatershed Mapper v2: Fall Creek (#5517.340301)

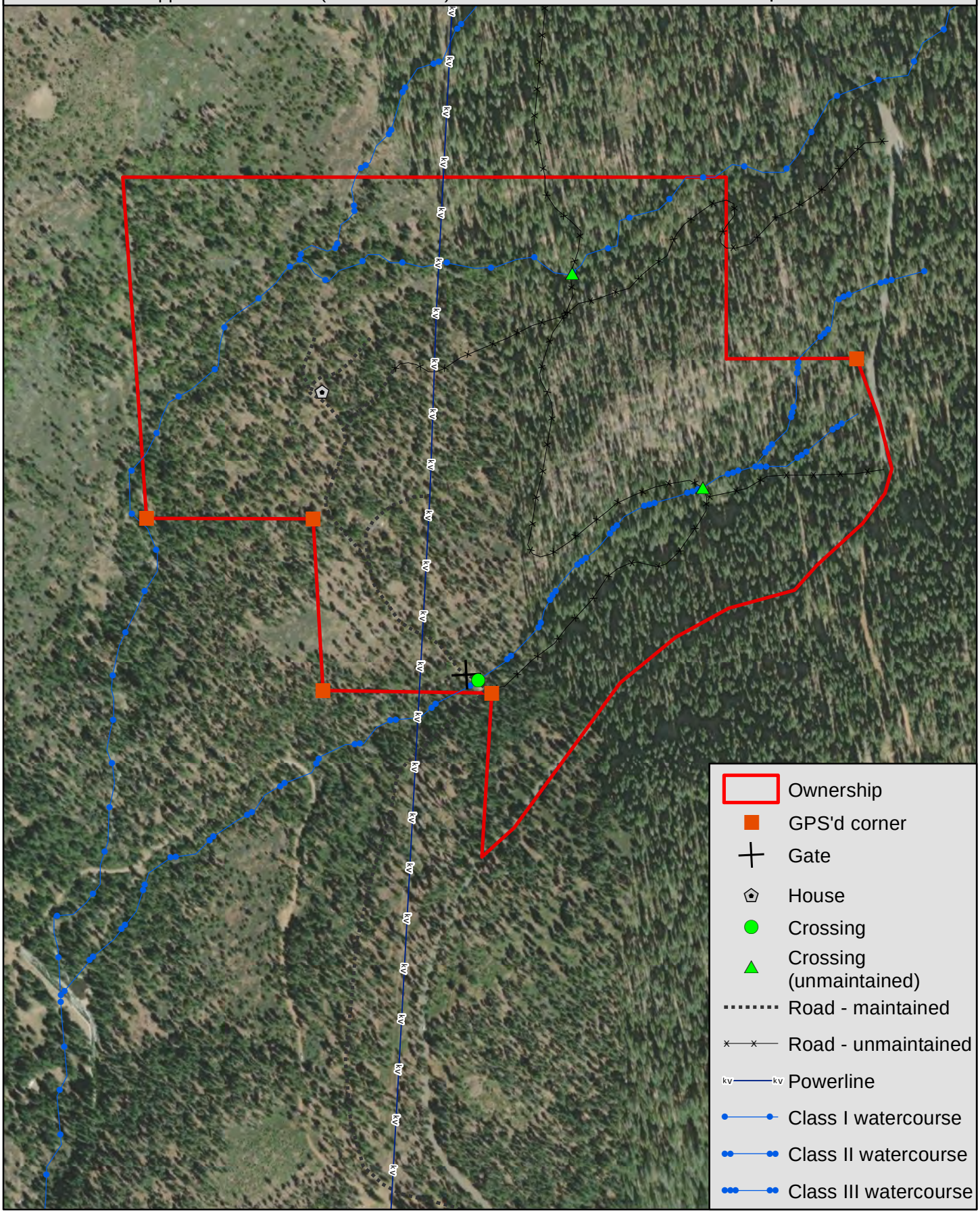
1:6,000

0 625 Feet

N

FIRST CORP

Date: 10/13/2022



McDermott Property Cruise Results

A timber cruise was conducted in July and August of 2022 on the 106 acres of the McDermott property during the preparation of a Forest Management Plan. Forty-seven plots were inventoried to estimate the following volumes. The inventory yielded ~11 net MBF per acre +/- 1.53 MBF at a 90% confidence interval.

Table 1. Property Stocking, All Species

Diameter Class	*Trees per acre*	*Basal area per acre (sqft)*	*Total Net Volume (BdFt)*
10-18	75	66	219,496
18 - 30	37	96	876,177
30 +	1	6	74,218
TOTAL	114	168	1,169,891

Table 2. Property volume by acre

Diameter Class	*Net Volume (BdFt) per acre*
10-18	2,070
18 - 30	8,265
30 +	700
TOTAL	11,036

Table 3. Stocking by Species

	White Fir/Red Fir			Incense Cedar			Ponderosa Pine			Sugar Pine		
Diameter Class	*Trees per acre*	*Basal area per acre (sqft)*	*Total Net Volume (BdFt)*	*Trees per acre*	*Basal area per acre (sqft)*	*Total Net Volume (BdFt)*	*Trees per acre*	*Basal area per acre (sqft)*	*Total Net Volume (BdFt)*	*Trees per acre*	*Basal area per acre (sqft)*	*Total Net Volume (BdFt)*
10 - 12	16.18	9	1,640	13.41	7	-	-	-	-	-	-	-
12 - 14	10.80	9	36,206	6.76	6	13,237	0.54	0	2,929	-	-	-
14 - 16	11.03	12	48,564	4.78	6	16,516	-	-	-	-	-	-
16 - 18	8.84	13	80,868	2.59	4	14,787	0.30	0	4,749	-	-	-
18 - 20	10.37	19	129,187	2.00	4	16,259	0.46	1	10,220	-	-	-
20 - 22	5.28	12	116,905	2.44	6	26,656	0.39	1	11,082	-	-	-
22 - 24	2.70	7	79,488	2.83	8	43,809	0.65	2	25,084	0.16	0	3,605
24 - 26	1.74	6	55,594	2.12	7	49,758	0.66	2	32,768	-	-	-
26 - 28	1.82	7	91,873	1.37	5	40,921	0.21	1	14,975	-	-	-
28 - 30	0.78	3	51,111	0.97	4	38,651	0.40	2	34,360	0.10	0	3,871
30 - 32	-	-	-	0.51	3	28,182	0.08	0	9,384	0.17	1	10,485
32 - 34	0.16	1	14,328	0.15	1	8,543	-	-	-	0.07	0	4,352
34 - 36	-	-	-	0.13	1	9,221	-	-	-	0.07	0	5,623
36 - 38	-	-	-	0.12	1	7,539	-	-	-	-	-	-
38 - 40	0.05	0	6,280	-	-	-	-	-	-	-	-	-
40 - 42	-	-	-	0.10	1	12,787	-	-	-	-	-	-
42 - 44	-	-	-	-	-	-	-	-	-	-	-	-
44 - 46	-	-	-	-	-	-	-	-	-	-	-	-
46 - 48	-	-	-	-	-	-	-	-	-	-	-	-
48 - 50	-	-	-	0.03	0	5,546	-	-	-	-	-	-
TOTALS	69.75	98	712,043	40.31	62	332,411	3.69	9	145,552	0.57	3	27,937

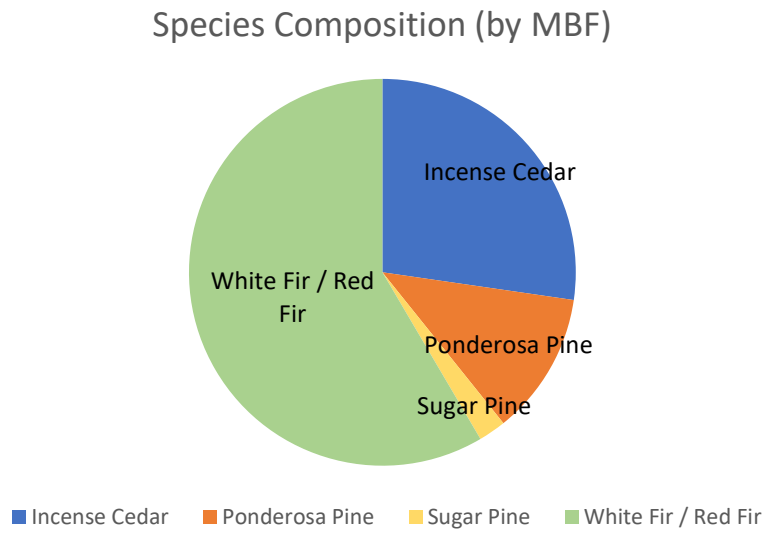


Figure 1. Species composition of the property for all diameter classes by volume

McDermott Inventory Methodology

Cruise Design

Systematic grid of plot centers 310' by 310'; a variable radius 20-BAF plot for all trees >=10.0" DBH.

Equipment List

- 75' or longer Logger's Tape designed to measure in 10ths of feet and 10ths of inches for diameter
- Relaskop or 20 BAF prism or equivalent device
- Clinometer
- Laser hypsometer for heights and tree bole distances
- Electronic data recorder
- Compass
- GPS handheld unit with plot locations and basemap
- Pens, pencil, sharpie, highlighter
- Flagging
- Overview and point location maps

Plot Establishment and Monumentation

- All sample points shall be located as close as possible to the corresponding map point using a commercial grade GPS unit. If the GPS location is bouncing around, the plot shall be established at the cruiser's right toe when the GPS location first crosses the point location on the screen.
- Plots shall not be relocated if they land in unforested areas or internal roads.
- If a plot falls in an area that is unsafe or impossible to measure where it falls, it should be moved one chain (66') in a cardinal direction (starting with north and moving clockwise) towards an area that is safe, and within the project boundaries, and the new plot location should be recorded in the GPS unit.
- A purple flag with the plot number, cruiser's initials, and date shall be hung at eye level as close to the plot center as possible on live vegetation.
- A stick with purple flagging shall be stuck in ground at plot center.
- **Walkthrough procedure:**
    - Perform walkthrough where portion of plot is off the property (as identified on the ground) or portion of plot encounters a paved road.
    - DROP the plot if the plot center is off the property
    - Offset plot 1 ch in a cardinal direction if on mine shaft or building foundation and MAKE A NOTE so this area can be mapped out. Otherwise, do not offset any plots. Do not perform walkthrough or drop for roads or landings.
    - Measure the distance from plot center in a straight line to an "in" tree; continue on the same azimuth the same distance. The tree is counted twice if this point falls outside of the inventory area and counted once if it falls within the inventory area.
    - Any plot near an identifiable property edge or paved road should use the "walkthrough" method for tallying trees. Do not tally any trees that fall outside of

the property boundary. If you cannot identify a property boundary (ie no distinct vegetation change) perform the plot as normal. See illustration at end of protocol.

Plot Measurements

- General considerations:
  - A tree is considered within the plot if the center of the tree at DBH is within the radius/border (corrected for slope) of the plot.
  - On each plot, sampling should begin with the tree that is the first clockwise due north from plot center, and sampling and cruise card tree numbering should continue clockwise.
  - Label all trees on the fixed radius and variable radius plot with the same plot number. Make a continuous list of individual tree numbers – DO NOT begin renumbering between the two plot sizes.
- At each plot record the following general information on the PlotList tab of the cruise card:
  - Date
  - Plot number
  - Notes such as: evidence of past logging system in the plot (skid trail, in landing, on haul road, etc), plot in riparian area, if the plot is a walkthrough and why
  - GPS plot location as taken
- On the TreeList tab of the cruise card, ON ALL plots record:
  - Tree number
  - Tree count (if applicable; only use on walkthrough plot)
  - Species (if species code is not listed, write it in the notes column of cruise card)
  - Status – Live/Dead (L/D) (NOTE: snags must be at least 15' tall to be counted)
  - DBH (round down to nearest tenth of an inch)
    - Trees are to be measured on the uphill side of tree
    - Trees <10.0" (on the fixed-radius plot) can be estimated to nearest 1 inch
    - Snag and hardwood diameters can be estimated to nearest 2 inches
  - Defect by 16' log (for trees >11") as percent (ie 10% → "10") in associated log column
  - Height for all live trees >30" DBH to nearest foot
- On every 5th plot (all plots with plot ID number ending in a 0 or 5), record all of the above, plus:
  - Total height (to nearest foot)
  - If a live or dead tree has a broken top (a broken top tree is considered "recovered" if a new leader is at least 1/3 the diameter of the tree at the break. In these cases, do not record the height but do estimate and record the total defect by log.
  - NOTE: heights for snags and hardwoods heights can be estimated if nearby tree has been measured and confident estimation is within +/- 5'

QA/QC Procedures

Office Review: Prior to delivery of data to supervisor QA/QC review of the data in Excel will be conducted to identify and fix any input errors.

Determining “In” Trees

- Trees are considered in the plot when the HORIZONTAL DISTANCE from the plot center to the bole center at 4.5’ is less than or equal to the tree or plot radius.
- For very close trees, measure the tree diameter at DBH and divide by two to calculate the tree’s radius. Add this to the distance from the plot center to the face of the tree at DBH. Correct for slope as necessary.

Irregular Trees

Height of leaning tree: Height is equivalent to bole length. Measure height with hypsometer or clinometer and then estimate any necessary addition to account for lean.

Tree with irregularities at DBH: On trees with swellings, bumps, depressions, and branches at DBH, diameter will be measured immediately above the irregularity at the place it ceases to affect normal stem form.

Forked trees: Trees that fork below 4.5’ such that DBH can be measured on two distinct stems shall be recorded as separate trees. Otherwise, measure the tree at DBH and record as one tree.

Wind thrown trees: Only include standing trees on plot.

Impossible DBH measurement: In cases where it is unsafe or impossible to take a DBH measurement at the proper location, estimate the diameter

Quick Reference Field Protocol

Record evidence of past logging system, riparian, walkthrough, etc

Trees >=10" → 20 BAF variable radius plot

All plots:

1. Species
2. Live/Dead
3. DBH (est. snags and hardwoods by 2" class)
4. Defect by 16' log
5. Heights for all live trees >30"

Every 5th plot:

1. All items above and
2. Total height of all trees (est for snags and hardwoods)

Every 10th plot:

1. All items above and
2. Site tree (on or near plot)

Species codes (capitalization optional):

Record Code	Common Name
BM	bigleaf maple
BO	California black oak
DF	Douglas-fir
GS	giant sequoia
IC	incense-cedar
LO	interior live oak
PM	Pacific madrone
PP	ponderosa pine
RF	red fir
SP	sugar pine
WF	white fir
DW	dogwood
PY	Pacific yew
RF	Red fir
OH	Other hardwood

Variable Radius Plot Limiting Distance Procedure

1. If a tree is borderline, calculate the limiting distance.
    a. Measure the DBH of the tree in question and record the value.
    b. Measure the slope from DBH to the plot center on the ground. (The slope is measured by looking through the left side of the clinometer (%) from DBH down to the ground at plot center.)
    c. Calculate the Limiting Distance (LD) using the DBH, Slope Correction Factor (SCF, listed in Table 1 on the next page) and the Plot Radius Factor (PRF) (1.944 for 20 BAF).

        LD = DBH x SCF x PRF

    EX: DBH = 12", Slope is 29% so SCF = 1.04, and PRF = 1.944 so…

    Limiting Distance (LD) = (12.0) x (1.041) x (1.944) = 24.3 feet

2. Slope adjusted PRFs (ie the SCF x PRF portion of the equation) are already calculated in the attached reference table!

3. Measure the distance from the center of the tree at DBH to the plot center at the ground. This value is your "Measured Distance" (MD).

4. Compare the Limiting Distance (LD) that you calculated with the Measured Distance (MD) that you just recorded.
    a. If the MD is less than the LD, the tree is "IN"
    b. If the MD is greater than the LD, the tree is "OUT"

        EX 1: MD = 24.1 feet, LD = 24.3 feet (24.1< 24.3) so tree is "IN"

        EX2: MD = 24.4 feet, LD = 24.3 feet (24.4>24.3) so tree is "OUT"

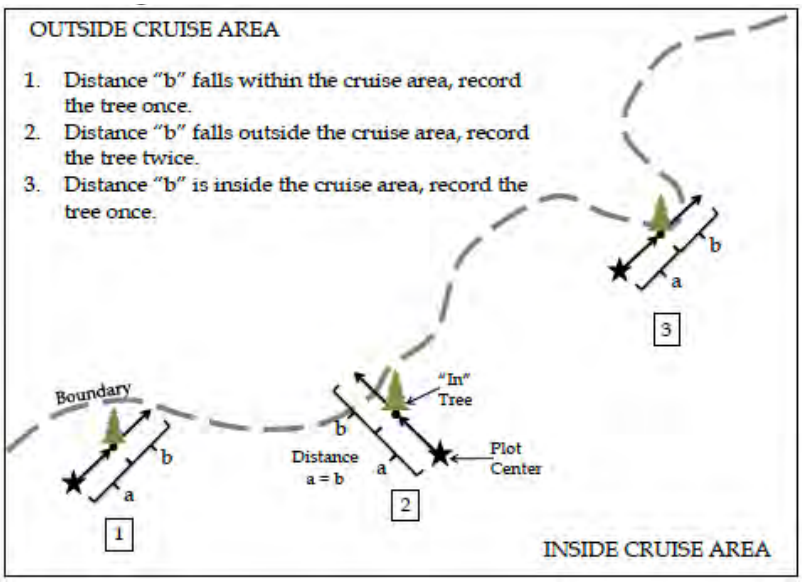
Fixed Radius Plot Limiting Distance Procedure

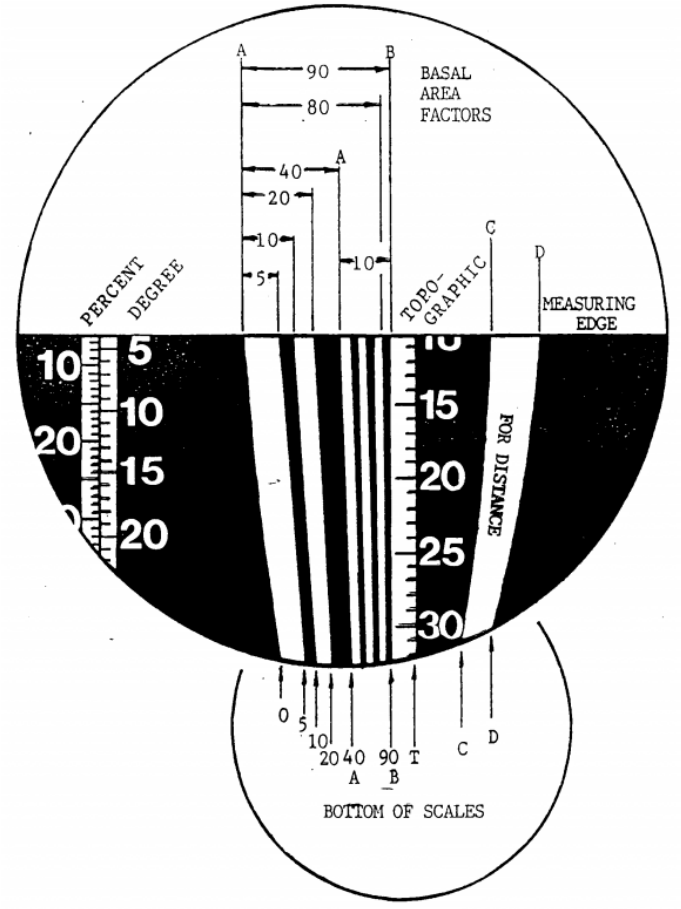
Same as above except DBH does not matter. Limiting distance is simply the slope correction factor multiplied by the plot radius (LD = SCF x plot radius). These have been pre-calculated in the table on the next page.

Table 1: Slope Corrected Plot Radius Factors and Radii

Percent Slope	Slope Correction Factor	1/50 Ac Plot Radius	BAF 20 Calc'd PRFs to Tree Center	Percent Slope	Slope Correction Factor	1/50 Ac Plot Radius	BAF 20 Calc'd PRFs to Tree Center
0%	1.000	16.7	1.944	51%	1.123	18.7	2.182
1%	1.000	16.7	1.944	52%	1.127	18.8	2.191
2%	1.000	16.7	1.944	53%	1.132	18.8	2.200
3%	1.000	16.7	1.945	54%	1.136	18.9	2.209
4%	1.001	16.7	1.946	55%	1.141	19.0	2.219
5%	1.001	16.7	1.946	56%	1.146	19.1	2.228
6%	1.002	16.7	1.947	57%	1.151	19.2	2.238
7%	1.002	16.7	1.949	58%	1.156	19.3	2.247
8%	1.003	16.7	1.950	59%	1.161	19.3	2.257
9%	1.004	16.7	1.952	60%	1.166	19.4	2.267
10%	1.005	16.7	1.954	61%	1.171	19.5	2.277
11%	1.006	16.8	1.956	62%	1.177	19.6	2.287
12%	1.007	16.8	1.958	63%	1.182	19.7	2.298
13%	1.008	16.8	1.960	64%	1.187	19.8	2.308
14%	1.010	16.8	1.963	65%	1.193	19.9	2.319
15%	1.011	16.8	1.966	66%	1.198	20.0	2.329
16%	1.013	16.9	1.969	67%	1.204	20.0	2.340
17%	1.014	16.9	1.972	68%	1.209	20.1	2.351
18%	1.016	16.9	1.975	69%	1.215	20.2	2.362
19%	1.018	17.0	1.979	70%	1.221	20.3	2.373
20%	1.020	17.0	1.982	71%	1.226	20.4	2.384
21%	1.022	17.0	1.986	72%	1.232	20.5	2.395
22%	1.024	17.1	1.990	73%	1.238	20.6	2.407
23%	1.026	17.1	1.995	74%	1.244	20.7	2.418
24%	1.028	17.1	1.999	75%	1.250	20.8	2.430
25%	1.031	17.2	2.004	76%	1.256	20.9	2.442
26%	1.033	17.2	2.009	77%	1.262	21.0	2.454
27%	1.036	17.2	2.014	78%	1.268	21.1	2.465
28%	1.038	17.3	2.019	79%	1.274	21.2	2.477
29%	1.041	17.3	2.024	80%	1.281	21.3	2.490
30%	1.044	17.4	2.030	81%	1.287	21.4	2.502
31%	1.047	17.4	2.035	82%	1.293	21.5	2.514
32%	1.050	17.5	2.041	83%	1.300	21.6	2.526
33%	1.053	17.5	2.047	84%	1.306	21.7	2.539
34%	1.056	17.6	2.053	85%	1.312	21.9	2.551
35%	1.059	17.6	2.060	86%	1.319	22.0	2.564
36%	1.063	17.7	2.066	87%	1.325	22.1	2.577
37%	1.066	17.8	2.073	88%	1.332	22.2	2.590
38%	1.070	17.8	2.080	89%	1.339	22.3	2.602
39%	1.073	17.9	2.087	90%	1.345	22.4	2.615
40%	1.077	17.9	2.094	91%	1.352	22.5	2.628
41%	1.081	18.0	2.101	92%	1.359	22.6	2.642
42%	1.085	18.1	2.109	93%	1.366	22.7	2.655
43%	1.089	18.1	2.116	94%	1.372	22.9	2.668
44%	1.093	18.2	2.124	95%	1.379	23.0	2.681
45%	1.097	18.3	2.132	96%	1.386	23.1	2.695
46%	1.101	18.3	2.140	97%	1.393	23.2	2.708
47%	1.105	18.4	2.148	98%	1.400	23.3	2.722
48%	1.109	18.5	2.156	99%	1.407	23.4	2.736
49%	1.114	18.5	2.165	100%	1.414	23.6	2.749
50%	1.118	18.6	2.173				

Walkthrough illustration:





McDermott Cruise Map

Nevada Co, CA

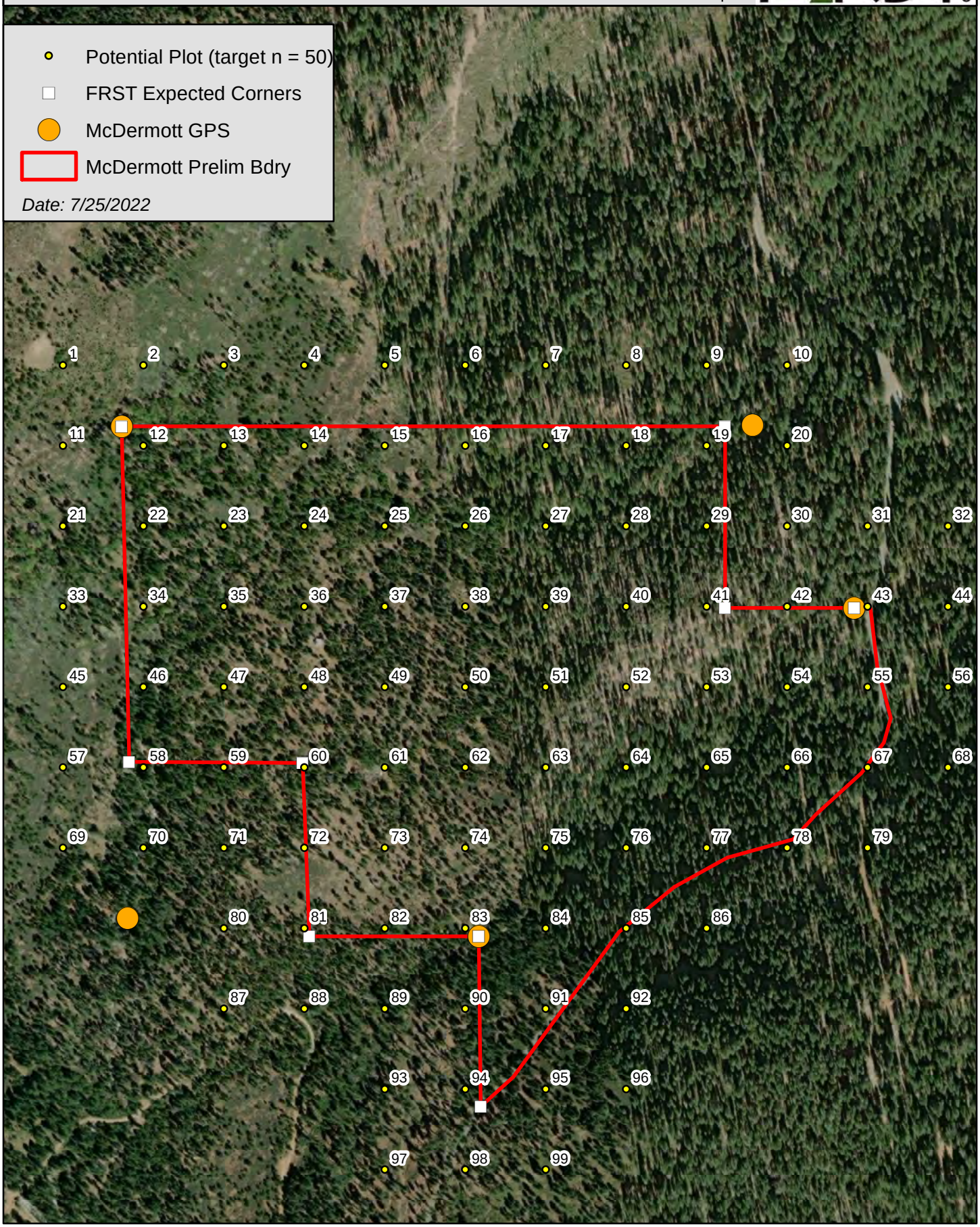
1 inch = 500 feet

1:6,000

0 500 Feet

N

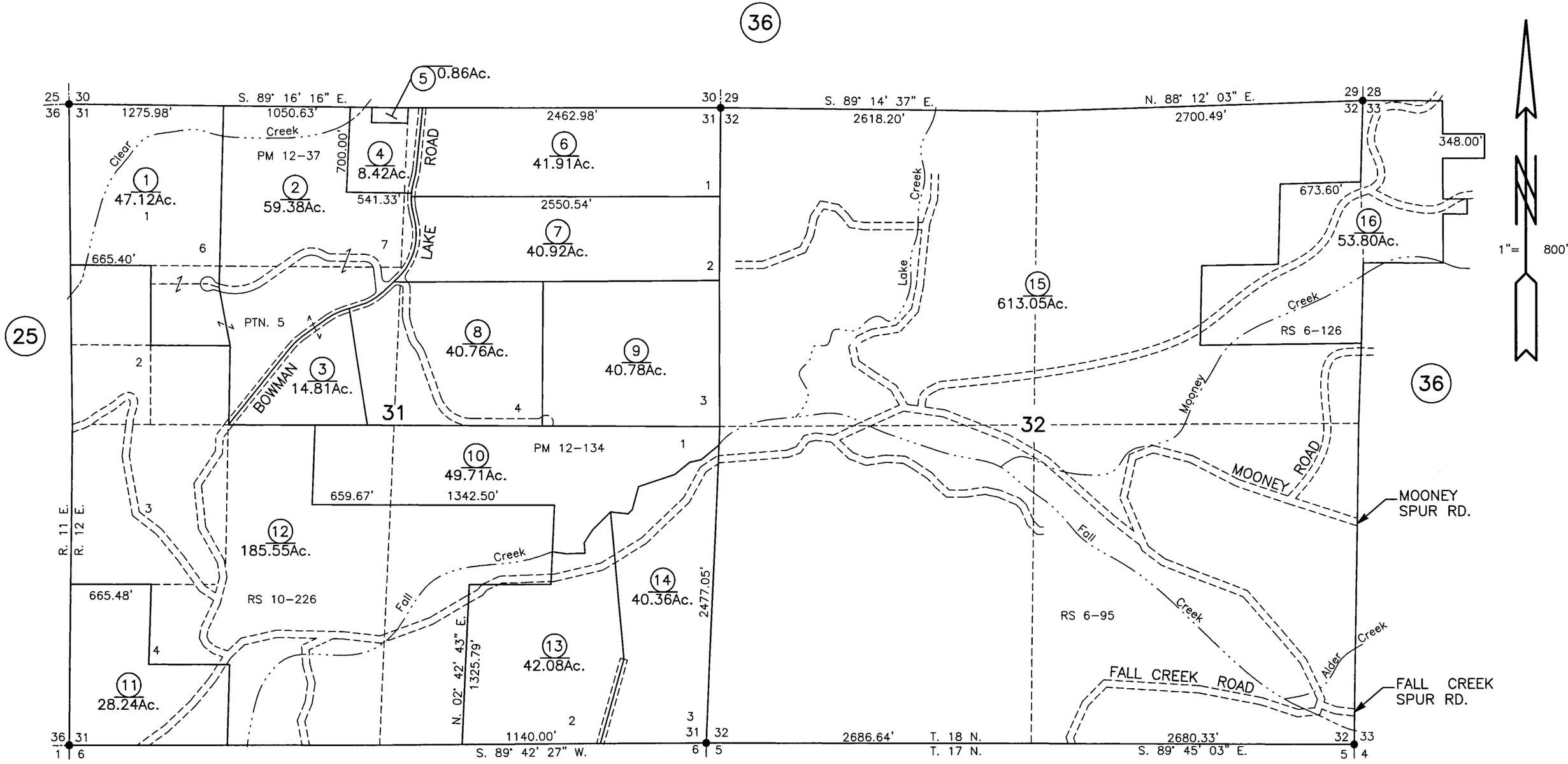
FRST CORP



SEC'S 31 & 32, PTN. 33, T.18 N., R.12 E., M.D.B. & M.

Tax Area Code
79-000

13-41
(Fmly. Ptn. 13-36)



Bk. 64 — 14

ASSESSOR'S PARCEL MAP
This map was prepared for assessment purposes only. No liability is assumed for the accuracy of data shown. Assessor's parcels may not comply with local lot-split or building site ordinances.

1-1-99 Assessor's Map Bk. 13 –Pg. 41
County of Nevada, Calif.
1998

mim 12/98

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tahoe National Forest Area, California

September 6, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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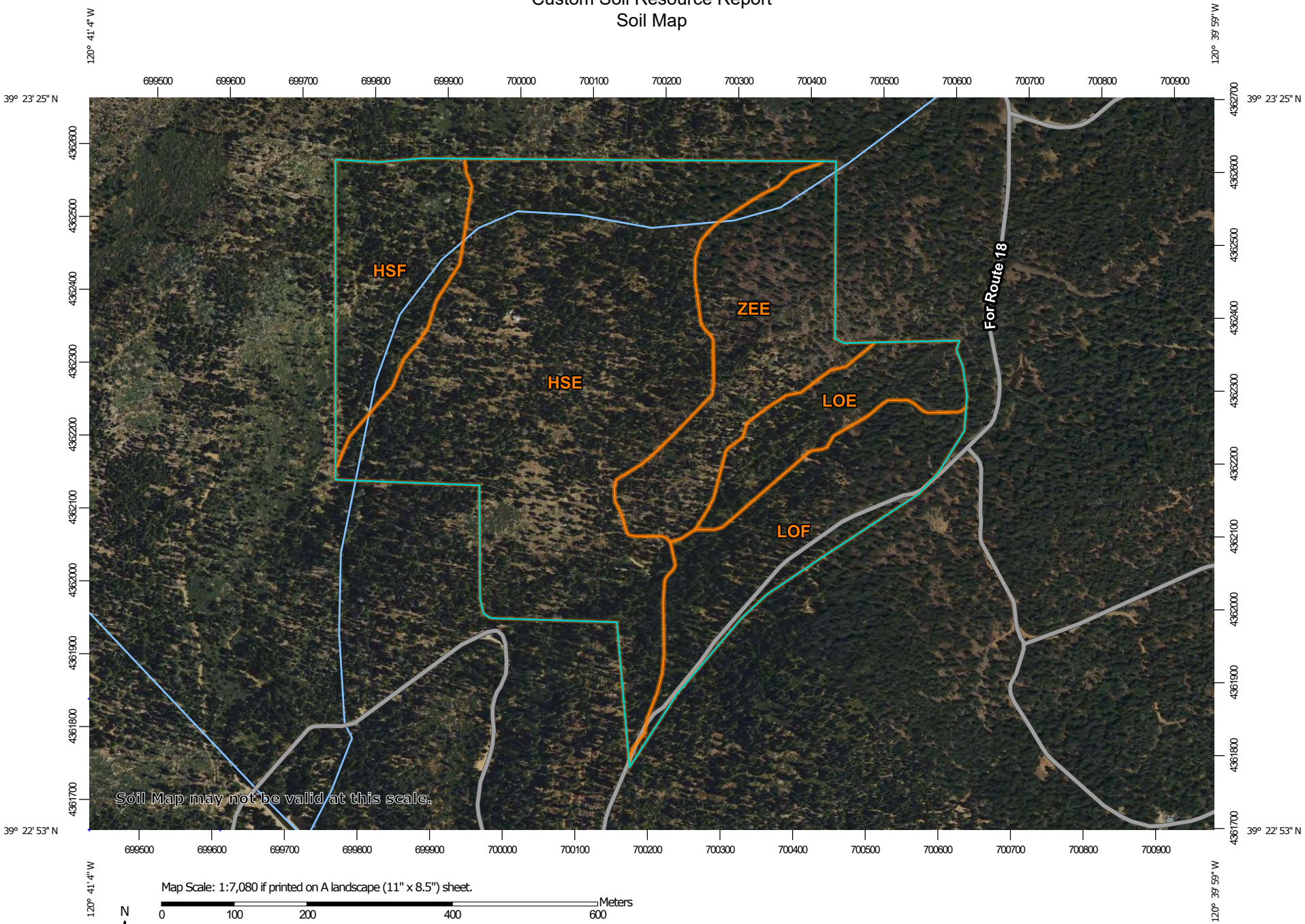
Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:7,080 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 300 600 1200 1800

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tahoe National Forest Area, California
Survey Area Data: Version 15, Sep 8, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 8, 2019—Jun 21, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HSE	Huysink-Horseshoe complex, 2 to 30 percent slopes	56.6	51.2%
HSF	Huysink-Horseshoe complex, 30 to 50 percent slopes	12.5	11.3%
LOE	Lorack-Smokey-Cryumbrepts, wet complex, 2 to 30 percent slopes	8.2	7.4%
LOF	Lorack-Smokey-Cryumbrepts, wet complex, 30 to 50 percent slopes	15.3	13.9%
ZEE	Zeibright gravelly fine sandy loam, 2 to 30 percent slopes	17.8	16.2%
Totals for Area of Interest		**110.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tahoe National Forest Area, California

HSE—Huysink-Horseshoe complex, 2 to 30 percent slopes

Map Unit Setting

National map unit symbol: hljw
Elevation: 4,500 to 5,500 feet
Mean annual precipitation: 50 to 70 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 100 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Huysink and similar soils: 60 percent
Horseshoe and similar soils: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Huysink

Setting

Landform: Outwash plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Glaciofluvial deposits derived from igneous, metamorphic and sedimentary rock

Typical profile

H1 - 0 to 14 inches: very stony loam
H2 - 14 to 69 inches: very stony loam

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R022AW001CA - Valley Bottoms, Basin Floors, and Terraces
Hydric soil rating: No

Description of Horseshoe

Setting

Landform: Terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from siltstone

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 9 inches: gravelly loam
H3 - 9 to 55 inches: gravelly clay loam
H4 - 55 to 65 inches: weathered bedrock

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: 55 to 65 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F022AW004CA - Mesic Mountains <40" ppt
Hydric soil rating: No

HSF—Huysink-Horseshoe complex, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: hljx
Elevation: 4,500 to 5,500 feet
Mean annual precipitation: 50 to 70 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 100 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Huysink and similar soils: 60 percent
Horseshoe and similar soils: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Huysink

Setting

Landform: Outwash plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex

Parent material: Glaciofluvial deposits derived from igneous, metamorphic and sedimentary rock

Typical profile

H1 - 0 to 14 inches: very stony loam
H2 - 14 to 69 inches: very stony loam

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R022AW001CA - Valley Bottoms, Basin Floors, and Terraces
Hydric soil rating: No

Description of Horseshoe

Setting

Landform: Terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from siltstone

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 9 inches: gravelly loam
H3 - 9 to 55 inches: gravelly clay loam
H4 - 55 to 65 inches: weathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 55 to 65 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F022AW004CA - Mesic Mountains <40" ppt
Hydric soil rating: No

LOE—Lorack-Smokey-Cryumbrepts, wet complex, 2 to 30 percent slopes

Map Unit Setting

National map unit symbol: hllf
Elevation: 5,500 to 7,000 feet
Mean annual precipitation: 65 to 75 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 100 to 125 days
Farmland classification: Not prime farmland

Map Unit Composition

Lorack and similar soils: 55 percent
Smokey and similar soils: 20 percent
Cryumbrepts, wet, and similar soils: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lorack

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Outwash derived from igneous, metamorphic and sedimentary rock

Typical profile

H1 - 0 to 8 inches: very gravelly fine sandy loam
H2 - 8 to 56 inches: very gravelly loam
H3 - 56 to 65 inches: cemented extremely gravelly sandy loam

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: 56 to 65 inches to duripan
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R022AW001CA - Valley Bottoms, Basin Floors, and Terraces
Hydric soil rating: No

Description of Smokey

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from metasedimentary rock

Typical profile

H1 - 0 to 4 inches: gravelly sandy loam
H2 - 4 to 14 inches: very gravelly loam
H3 - 14 to 24 inches: very gravelly silt loam
H4 - 24 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 24 to 28 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW011CA - Frigid Mountains >40"ppt
Hydric soil rating: No

Description of Cryumbrepts, Wet

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydric soil rating: No

LOF—Lorack-Smokey-Cryumbrepts, wet complex, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: hllg
Elevation: 5,500 to 7,000 feet
Mean annual precipitation: 65 to 75 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 100 to 125 days
Farmland classification: Not prime farmland

Map Unit Composition

Lorack and similar soils: 55 percent
Smokey and similar soils: 20 percent
Cryumbrepts, wet, and similar soils: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lorack

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Outwash derived from igneous, metamorphic and sedimentary rock

Typical profile

H1 - 0 to 8 inches: very gravelly fine sandy loam
H2 - 8 to 56 inches: very gravelly loam
H3 - 56 to 65 inches: cemented

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 56 to 65 inches to duripan
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R022AW001CA - Valley Bottoms, Basin Floors, and Terraces

Hydric soil rating: No

Description of Smokey

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from metamorphic rock

Typical profile

H1 - 0 to 4 inches: gravelly sandy loam
H2 - 4 to 14 inches: very gravelly loam
H3 - 14 to 24 inches: very gravelly silt loam
H4 - 24 to 60 inches: weathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 24 to 28 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW011CA - Frigid Mountains >40"ppt
Hydric soil rating: No

Description of Cryumbrepts, Wet

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydric soil rating: No

ZEE—Zeibright gravelly fine sandy loam, 2 to 30 percent slopes

Map Unit Setting

National map unit symbol: hlq1
Elevation: 3,500 to 6,000 feet
Mean annual precipitation: 50 to 70 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 100 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Zeibright and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zeibright

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Residuum glaciofluvial deposits

Typical profile

H1 - 0 to 21 inches: gravelly fine sandy loam
H2 - 21 to 62 inches: very cobbly fine sandy loam

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

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Estimated Surface Soil Erosion Hazard

Per RM-87 (4/87) State of California, Board of Forestry

PROJECT: McDermott

							Factor Rating by Area	
I.	Soil Factors						LOE	HSE
A.	Soil Texture		Fine		Medium	Coarse		
1.	Detachability		Low		Moderate	High		
	Rating		**(1-9)**		**(10-18)**	**(19-30)**	25	17
2.	Permeability		Slow		Moderate	Rapid		
	Rating		**(5-4)**		**(3-2)**	**(1)**	1	2
B.	Depth to Restrictive Layer or Bedrock							
	Depth		Shallow 1"-19"		Moderate 20"-39"	Deep 40"-60" (+)		
	Rating		**(15-9)**		**(8-4)**	**(3-1)**	6	1
C.	Percent Surface Course Fragments Greater Than 2 mm in Size Including Rocks or Stones							
	Percent		Low (-)10-39%		Moderate 40-70%	High 71-100%		
	Rating		**(10-6)**		**(5-3)**	**(2-1)**	4	4
						Subtotal	36	24
	Slope Factor							
	Slope	5-15%	16-30%	31-40%	41-50%	51-70%	71-80% (+)	
II.	Rating	(1-3)	(4-6)	(7-10)	(11-15)	(16-25)	(26-35)	5	6
	Protective Vegetative Cover Remaining After Disturbance							
III.				Low	Moderate	High		
			Percent	0-40%	41-80%	81-100%		
			Rating	(15-8)	(7-4)	(3-1)	3	3
	Two-Year, One-Hour Rainfall Intensity (Hundreths Inch)*							
IV.	Two-Year, One-Hour Rainfall Intensity (Hundreths Inch)		Low (-) 30-39	Moderate 40-59	High 60-69	Extreme 70-80 (+)		
	Rating		(1-3)	(4-7)	(8-11)	(12-15)	9	9
						Total Sum of Factors	53	42

Erosion Hazard Rating

<50	50-65	66-75	>75		
Low (L)	Moderate (M)	High (H)	Extreme (E)		
			The determination is	M	L

*Based on CA FPR TRA Appendix 1

Soil Map Area	Soil ID	Percent of Property
LOE	Lorack-Smokey-Cryumbrepts, wet complex	21
HSE	Huysinl-Horsehoe complex	63

BE
NEU
NEV-CP
NC
TNF

CHRISTMAS TREE DEAD, DYING OR DISEASED FUELWOOD OR SPLIT PRODUCTS EXEMPTION

2-96EX 1363 3 NEV

For Admin. Use Only
Ex. # 1363 3 NEV
Date Rec'd. 9-30-96
Date Expires 9-29-97

STATE OF CALIFORNIA
DEPARTMENT OF FORESTRY AND FIRE PROTECTION
NOTICE OF TIMBER OPERATIONS THAT ARE EXEMPT FROM TIMBER HARVESTING PLAN REQUIREMENTS
RM-73(1038ab) (9/95)

VALID FOR ONE YEAR FROM DATE OF RECEIPT BY CDF.

The Director of the Department of Forestry and Fire Protection is hereby notified of timber operations under the requirements of 14 CCR 1038(a) or (b). The following type(s) of timber operation is to be conducted:

___ Harvesting Christmas trees.

X Harvesting dead, dying or diseased trees of any size in amounts less than 10 percent of the average volume per acre, where timber operations will meet the conditions listed in 14 CCR 1038(b).

X Harvesting fuelwood or split products in amounts less than 10 percent of the average volume per acre, where timber operations will meet the conditions listed in 14 CCR 1038(b).

The Timber Owner should complete items 1.-4. and sign below.

1. TIMBER OWNER(S) OF RECORD: Name Brent D. and Helen C. McDermott
   Address 10780 Genasci Rd FAX (916) 265-3602
   City Nevada City State CA Zip 95959 Phone (916) 478-0545
   NOTE: The timber owner is responsible for payment of a yield tax. Timber Yield Tax information may be obtained at the Timber Tax Division, State Board of Equalization, P.O. Box 942879, Sacramento, California 94279-0001.

2. TIMBERLAND OWNER(S) OF RECORD: Name Brent D and Helen C. McDermott
   Address Same as above
   City ___ State ___ Zip ___ Phone ___

3. LICENSED TIMBER OPERATOR(S): Name Bruce Burgess Lic. No. A887
   Address P.O. Box 2247
   City Nevada City State CA Zip 95959 Phone (916) 265-0248 FAX (916)

4. Designate the legal land description of the location of the timber operation. Attach a map showing the location of the timber operation. Map should be a 7 1/2 minute quadrangle or equivalent.

Section(s)	Township	Range	Base & Meridian	County	Acreage (Estimated)	Assessors Parcel # (Optional)
31	18 N	12 E	M.D.M.	Nevada	80	~~#6 and 7~~ A.P.# 13-360-24 #13-360-25

SIGNATURE OF THE TIMBER OWNER OR AGENT THEREOF: Brent D. McDermott Printed Name: Brent D and McDermott

Title: Timber owner Date: 9/29/96

NOTE: Read explanation and instructions on back of this form before attempting to complete.

The following are limitations or requirements for timber operations conducted under a Notice of Exemption for Christmas Trees, Dead, Dying or Diseased, or Fuelwood:

1. This notice must be submitted to and received by CDF at one of the offices listed below prior to the commencement of timber operations.

2. 14 CCR 1038(b) places certain limits on the harvesting of Christmas Trees, dead, dying and diseased trees, and fuelwood or split products. These limits need to be examined to assure compliance.

3. Timber operations conducted under this notice shall comply with all operational provisions of the Forest Practice Act and District Forest Practice Rules applicable to "Timber Harvest Plan", "THP", and "plan". The requirements to submit a completion and stocking report normally do not apply. The requirements for environmental review under the California Environmental Quality Act (See PRC 15300.1) also do not apply.

4. There are special requirements for timber operations conducted in Coastal Commission Special Treatment Areas, the Tahoe Regional Planning Agency area, and in counties with special rules adopted by the Board of Forestry. These rules should be reviewed prior to submitting this notice to CDF.

5. This Notice of Exemption is valid for one year from the date of receipt by CDF.

6. A timber operator with a valid State License must be designated upon submission of this notice.

The following suggestions may help ensure your compliance with the Forest Practice Rules.

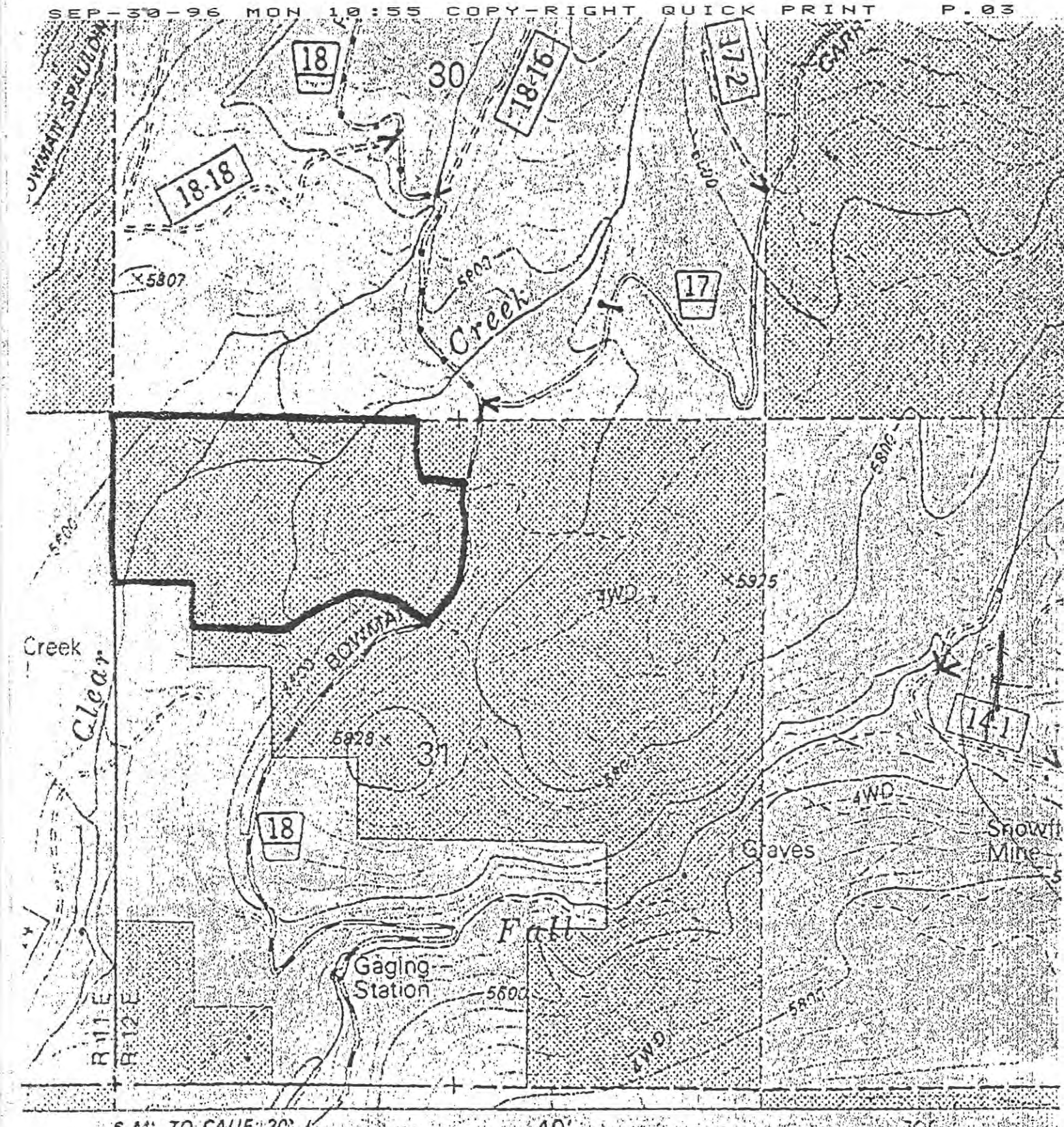
1. Timber owners, timberland owners and timber operators should obtain and review copies of the Forest Practice Rules pertaining to the Notice of Exemption. Copies may be obtained from BARCLAYS LAW PUBLISHERS, P.O. BOX 3066, SO. SAN FRANCISCO, CA. 94080. or from CDF, Forest Practice Section, P.O. BOX 944246, Sacramento, CA 94244-2460.

2. In addition to providing the specific legal description, it is helpful to describe the access route to the timber operation so that it can be easily located, and/or include an assessor's parcel map for small areas.

3. Contact the nearest CDF office listed below for questions regarding the use of this notice.

FILE THIS NOTICE WITH THE NEAREST CDF OFFICE BELOW FOR THE COUNTY IN WHICH THE OPERATION WILL OCCUR:

Humboldt, Del Norte, Mendocino, Sonoma, Marin, Lake, Napa, Colusa, Solano, Alameda, San Mateo, Santa Cruz, Santa Clara, Contra Costa, and western Trinity Counties.	=> P.O. Box 670 => Santa Rosa, CA 95402
Siskiyou, Modoc, Shasta, eastern Trinity, Lassen, Tehama, Glenn, Butte, Sutter, Plumas, Yuba, Sierra, Nevada, and Placer Counties.	=> 6105 Airport Road => Redding, CA 96002
El Dorado, Amador, Alpine, Calaveras, Tuolumne, Mariposa, Merced, Madera, Fresno, Tulare, Kern, Stanislaus, San Benito, Monterey, King, San Joaquin and Sacramento Counties.	=> 1234 Shaw Avenue => Fresno, CA 93710
Ventura, Los Angeles, San Bernadino, Orange, Riverside, Inyo, Mono, San Diego and Imperial Counties.	=> 2524 Mulberry Street => Riverside, CA 92501



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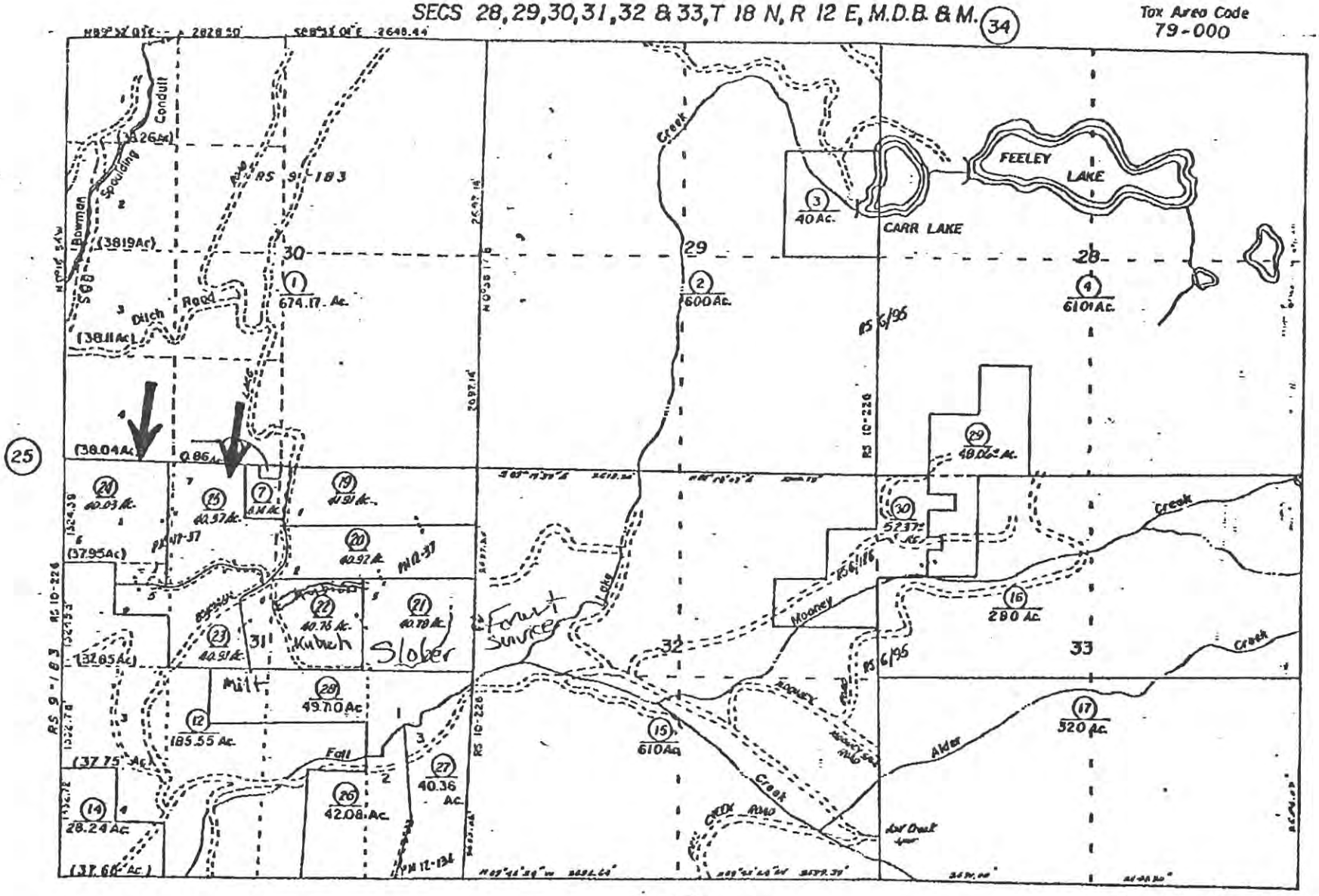

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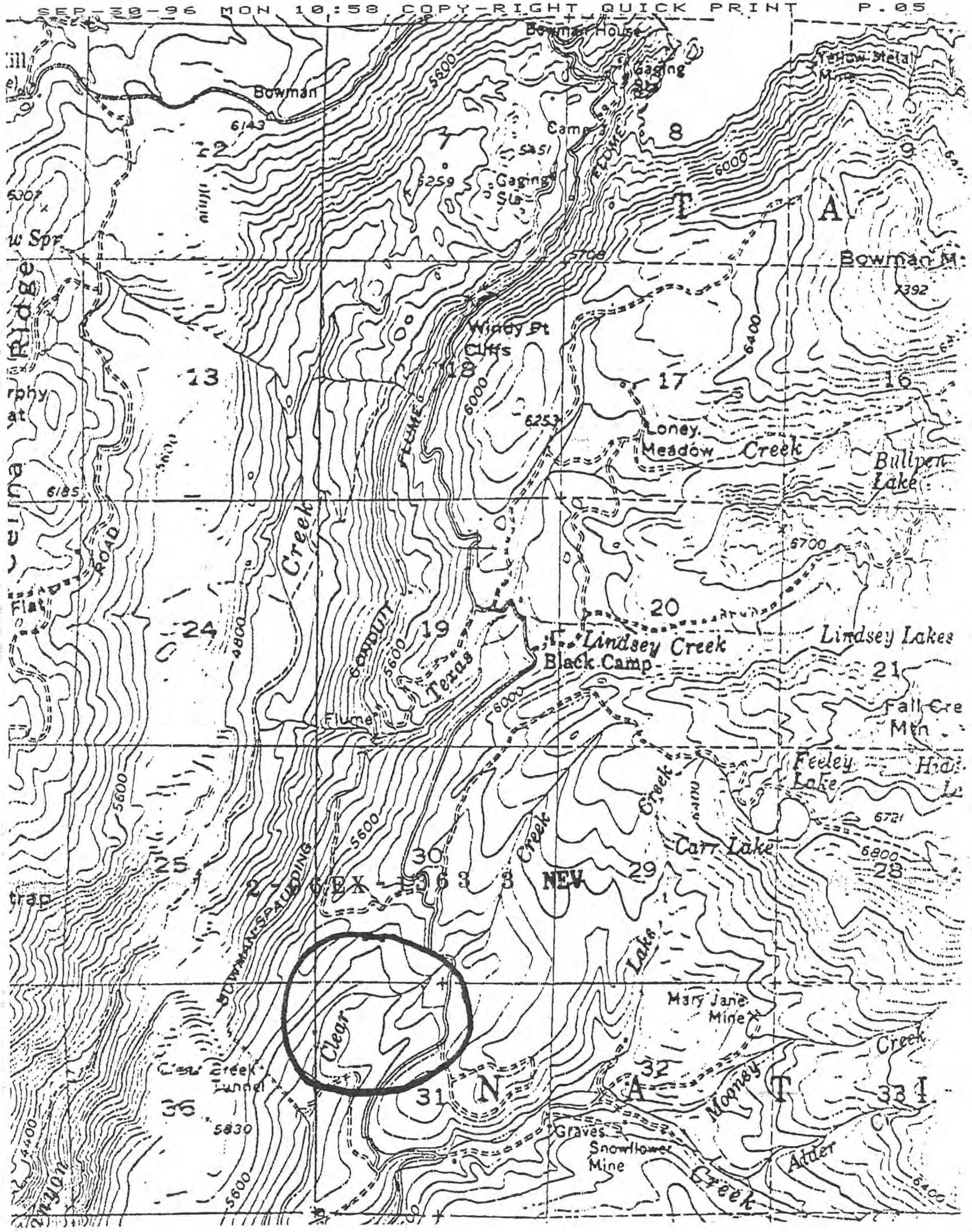
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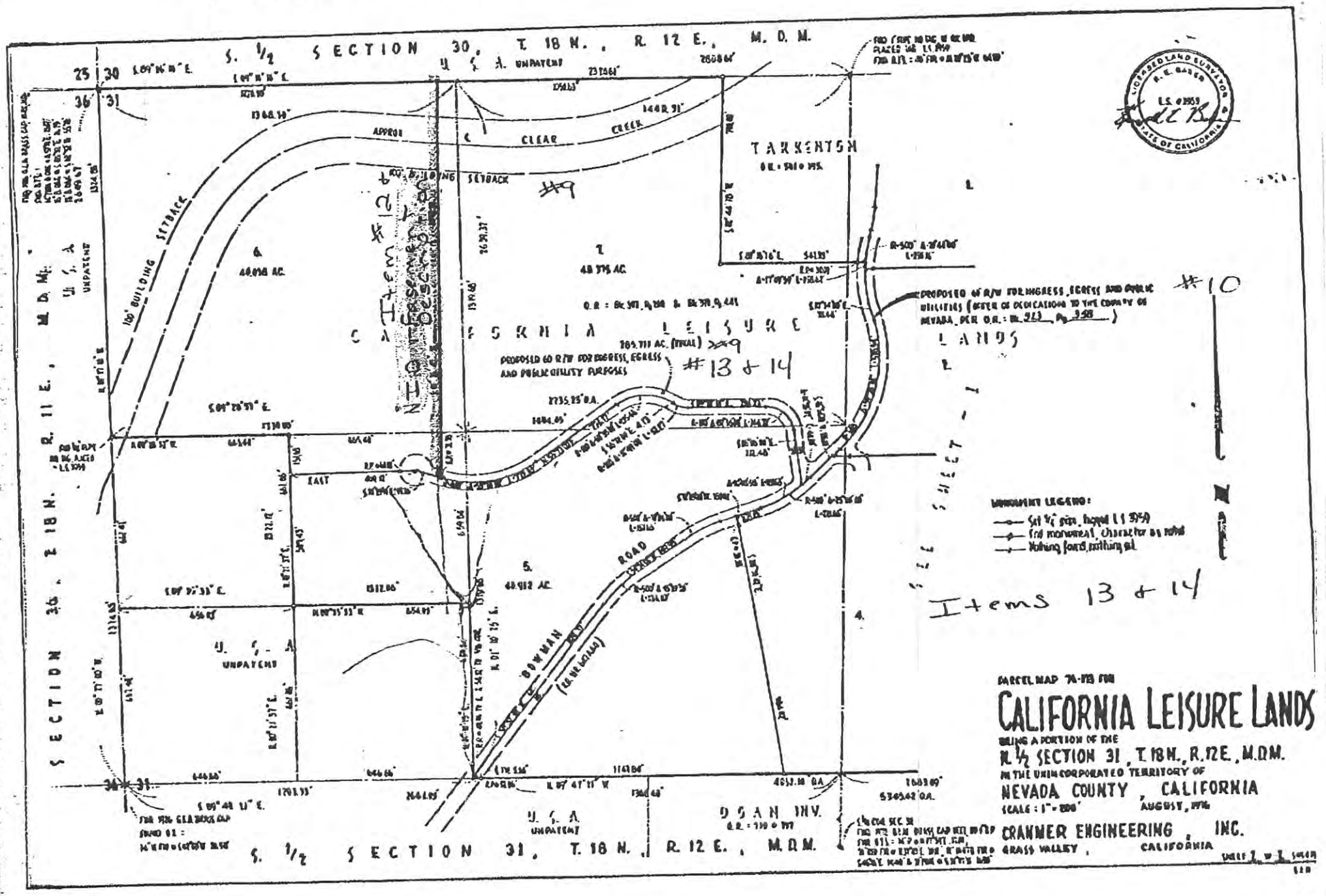

This page may be utilized if the Landowner wishes to submit this Plan to Cal Fire at a later date for CFIP eligibility.

Plan Preparing Registered Professional Forester

"I certify that I, or my supervised designee, personally inspected this plan area, and that the plan fully complies with the California Forest Improvement Program (CFIP) standards. I further certify that this plan is based upon the best available site and landowner information, and if followed, will not be detrimental to the productivity of the natural resources associated with this property."

Name (print or type): **Katherine Benedict**

Signature: 

Date: ***10/17/2022***

Registered Professional Forester #: **3138**

Organization or Company: **FRST Corp.**

Mailing Address: **111 Bank St. #418, Grass Valley, CA 95945**

Phone Number: **(530)446 -1123**

CAL FIRE Unit

"I certify that I, or my supervised designee, personally inspected this California Forest Improvement Program (CFIP) plan area, and that the plan fully complies with the CFIP and Professional Foresters Law, and meets Federal Forest Stewardship Management Plan Standards."

Forestry Assistance Specialist Name (print or type):

Signature:

Date:

Unit & Mailing Address:

CAL FIRE State or Region CFIP Coordinator

“I certify that the plan fully complies with the CFIP and Professional Foresters Law, and meets Federal Forest Stewardship Management Plan Standards.”

CFIP Coordinator Name (print or type): Signature:

Date:

Registered Professional Forester #:

State Contract Number:

CFIP Project Number: