Scope of Work

For

Camp Meeker Recreation & Park District

Sonoma and Gold Ridge RCDs are proposing work to be implemented on Camp Meeker Recreation & Park District lands pending grant funding. The attached maps show the location of proposed treatments, and there are six (6) treatment types proposed: Timber Harvest, Mastication, Burn Unit Preparation, Broadcast Burn, Site Preparation, and Planting. Pile Burning may also be utilized in areas as deemed necessary for operations.

Mastication: Mastication is the reduction of vegetative materials into smaller pieces by grinding or chewing up by way of a mechanical device. Masticating heads can be fitted onto a skid-steer or a boom-mounted excavator or loader. Using this technique, vegetation is ground up into a fibrous material that will decompose much faster than if the material were to remain intact. Mastication equipment is typically limited to slopes <40 percent, due to the limitations of the machines, and safety. As slopes increase in steepness, as with any equipment use, the chance for erosional damage increases due to continued movement of tracked vehicles; however, mastication has the erosional benefit of leaving a mulch-like material on site that acts as an energy dissipater, slowing the movement of water and helping to keep soils from moving. Mastication is typically the cheapest method to mechanically treat fuels on a per-acre basis.

> ***Mastication is proposed for all areas under 40% slope.***

Pile Burning: Pile burning is a method of eliminating vegetative material by incineration. Material is cut down and piled in relatively open areas with decent access by vehicles. The piles are fully or partially covered with tarps or plastic to cure, typically for one year, until they are dry. The piles are burned after a few solid rains have saturated the surrounding vegetation, and typically on days where rain is expected.

It may be difficult locating suitable areas for piles, depending on the steepness of the terrain. Piles can be placed on or adjacent to skid trails, where vegetation has been removed or pruned to eliminate fuel connectivity.

> ***Pile Burning is proposed on select areas as operationally necessary, including a small corner of the property on an identified historic landslide.***

Burn Unit Preparation: This treatment targets existing ladder fuels, fuels which can connect a surface fire to a forested canopy, and lops them to the ground. Standing snags are felled near the edges of burn units to accommodate worker safety and reduce the likelihood of ember cast outside of the burn unit. Appropriately located fire breaks will be installed by hand where necessary to facilitate containment in areas where roads or existing fire breaks do not exist.

> ***Burn Unit Preparation is proposed where broadcast burning is prescribed and mastication is operationally infeasible.***

Broadcast Burning: Broadcast burning is a method of eliminating vegetative material by incineration. Material is burned in place, utilizing drip torches or flame torches, with the fire line carefully monitored by a burn boss and crew. Broadcast burning, often called prescribed burning, is conducted during appropriate times of the year when fuels are conducive to burning but weather conditions are moderate, typically the spring or fall.

Broadcast burning is proposed on the western unit. The Hampton/Baumert Spring unit is not anticipated to have broadcast burning due to inholdings and property boundary issues, but this could be adjusted at a later date pending input from neighbors.

Site Preparation: This practice involves the clearance of above ground vegetation or woody debris that inhibit successful planting and establishment of young trees. This practice is typical of where natural seed sources have been lost and the site is captured by undesirable plant communities. In this particular instance, Sudden Oak Death has diminished the viability of tanoak as a component of the forested overstory and has instead limited it to a brush component and future woody fuel stock. Site preparation will include limited, targeted, use of herbicide on pre-treated tanoak stumps/resprouts to arrest the growth of this competing vegetation with desirable plantings. Herbicide use will also be held as a possible treatment tool for competing invasive species such as scotch broom, which may have latent seed exiting in the seed bank that will emerge following disturbance; herbicide use in this instance is undesirable, we will prefer the planned use of broadcast prescribed fire, which should be timed to eliminate the first flush of any invasive species on site, but is notoriously difficult to time due to weather conditions and availability of suppression resources.

Site Preparation is planned for any areas with Tree/Shrub Planting.

Tree/Shrub Planting: This practice involved the planting of tree species after the site has been prepared for tree growth and establishment. Planting will occur in areas where the existing hardwood canopy has been lost due to Sudden Oak Death. The primary species for planting will be year-old redwood plugs due to their ease of planting, relatively high success and suitability in the area, and their eventual value as a potential harvest crop. Select alternative species can be interplanted along with redwood, although they may not be as successful. Examples of alternative species include but are not limited to California hazelnut, California nutmeg, or Douglas-fir, and we are happy to discuss species composition as the time to plant nears. Tree watering is not planned and is not desirable, it is not necessary for redwood plugs to be watered when planted in appropriate locations and soils.

Tree/Shrub Planting is planned for canopy gaps identified within the timber harvest area. We anticipate this is approximately 20% of the planned harvest area.

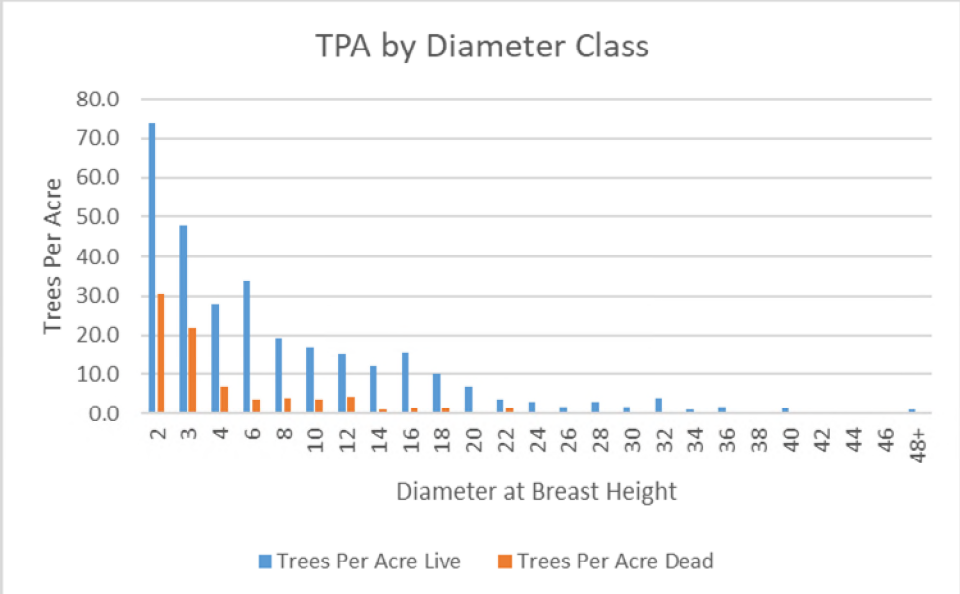
Timber Harvest: The project proposes harvesting redwood and Douglas-fir to improve spacing, increase heterogeneity of sizes and age classes in the forested canopy, and reduce vertical fuel continuity. The Forest Health Grant Guidelines require that:

> *Commercial harvesting activities focus on promoting carbon storage in remaining trees and must be compatible with achieving resilient forests with stable carbon storage that provide co-benefits such as fish and wildlife habitat, increased*

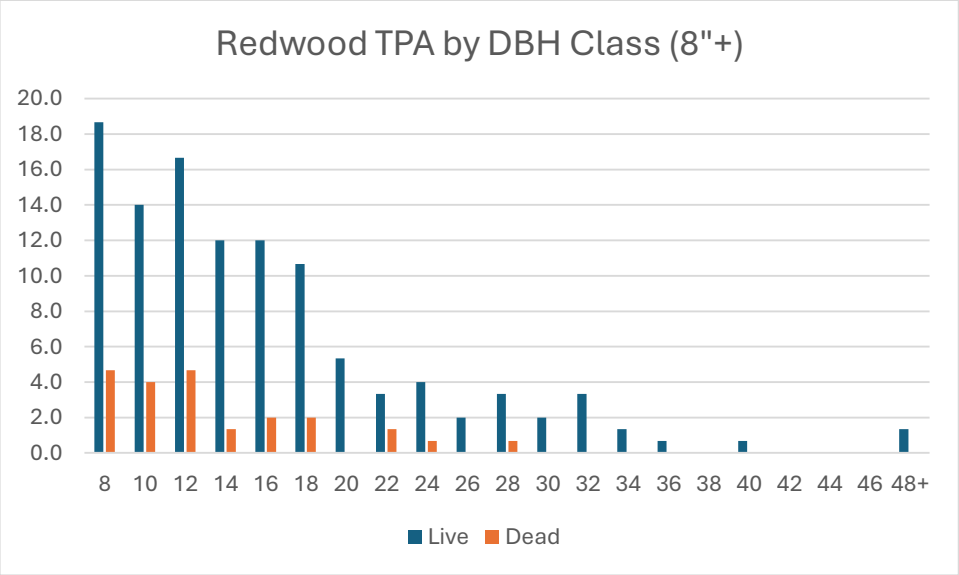
biodiversity, and wildlife adaptation to climate change. All revenues collected as a result of activities paid for, in full or in part, with Forest Health Program grant funds must be tracked and re-invested into the project to further grant objectives.

Timber harvest in California requires a permit from CALFIRE, which generally involves a CEQA functional-equivalent process. As with CEQA, there are exempt activities that the Board of Forestry and Fire Protection have approved due to their routine nature and relative simplicity for permitting. We are proposing to use one of these exemptions called the (FFPE) Forest Fire Prevention Exemption (14CCR§1038.3) The basic synopsis of this exemption is that activities designed to remove trees for the purpose of eliminating vertical continuity of vegetative fuels, and the horizontal continuity of tree crowns for the purpose of [moderating fire behavior] are exempt from the requirement of preparing a timber harvest plan. The exemption has a long list of requirements, the most important being that treatments must be designed to increase the mean diameter of residual trees in excess of 8" diameter at breast height (DBH), meaning that large tree removals are limited mathematically by what exists in the stand prior to the harvest. Additionally, there are size limitations to what can be harvested; no tree larger than 30" diameter at 8" above the ground (stump height) may be removed, which generally refers to trees of roughly 26" DBH.

The following graph from the St.Dorothy's Rest Forest Management Plan shows the estimated existing trees per acre by diameter across the property:



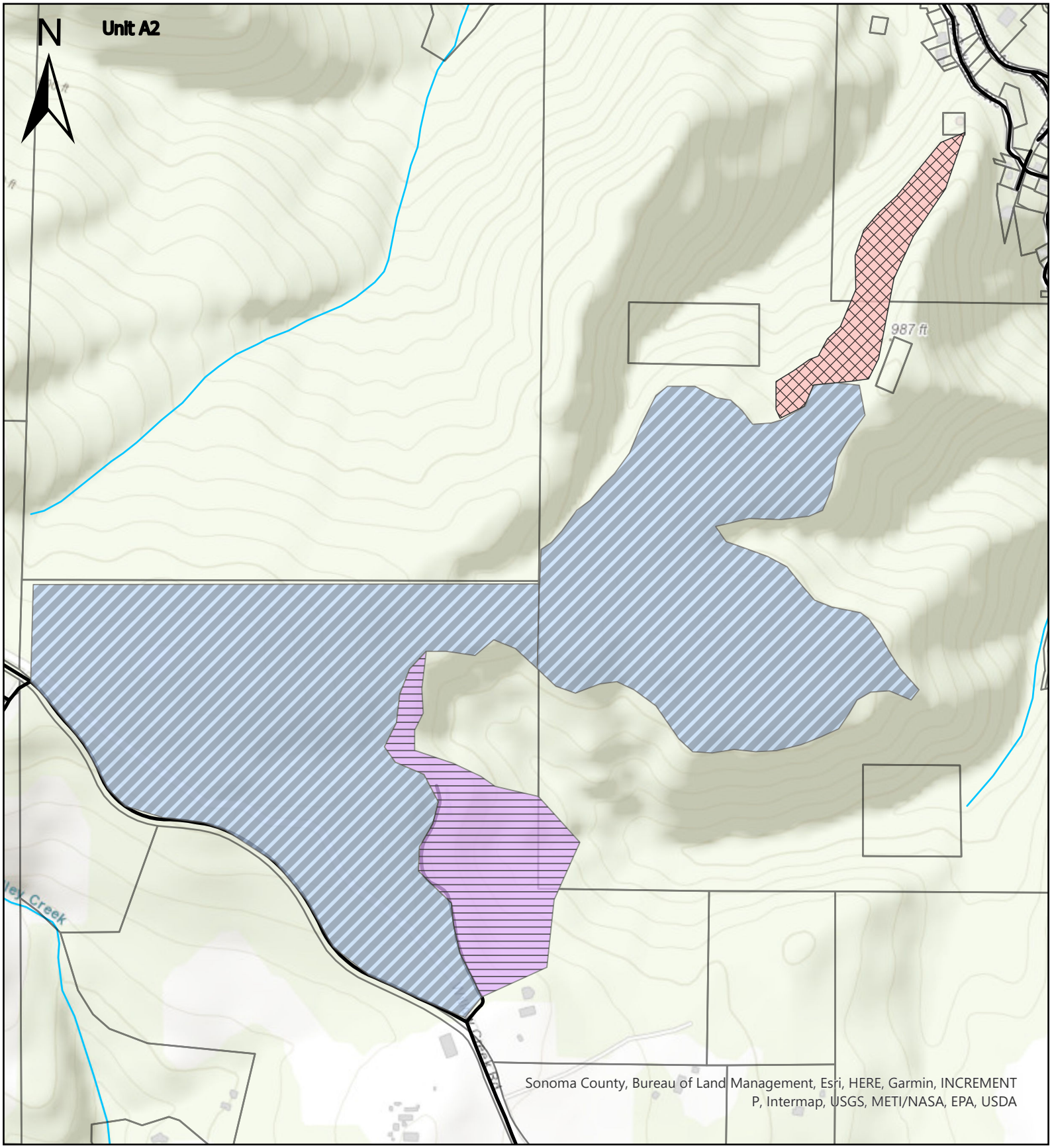
Using inventory data from the area planned for harvest, the following chart shows the breakdown of redwood trees by size class for trees larger than 8" DBH, which are the size of trees that the statutory requirements of the FFPE focus on.



Generally trees under 10”DBH aren’t expected to have any board feet, because they are too small of a diameter to get dimensional lumber from. The Green Valley Mill and Farm is accepting materials of this size to create alternative forest products from small diameter materials. We would make these materials available to them for pickup, otherwise these materials would likely be piled and burned as part of our fuel reduction activities. For the purpose of a commercial sale, we will focus on trees between 10”DBH and 24-26”DBH. There are approximately 23,190 board feet per acre in the harvest area with 3,141 board feet per acre in trees between 10 and 24” DBH. The disparity in this board foot value and the number of trees in larger size classes is because due to the cylindrical nature of logs, and the fact that boards are squared, an exponentially larger board foot value is assigned to larger trees. The 26” DBH size class by itself has an estimated 1,344 board feet per acre within the planned harvest area, but we don’t expect to remove many of these trees at all.

Our goal is to use this exemption to thin fairy ring redwoods and dense stands of Douglas-fir. Douglas-fir harvest values would not pay for their removal and will be supplemented by redwood sales. Independent redwood over 10”DBH will be prioritized for retention unless removal is necessary for harvest operations. Due to the fact that our targets for removal are so limited, we are basing estimates on the notion that we would only be removing approximately 1,000 board feet per acre, however we could likely double this without the average person noticing the difference.

CALFIRE grant staff verified that certain costs associated with the harvest can be withheld from “matching funds” toward the grant. Those costs include necessary road improvements and taxable income from the harvest. The specifics of how money will be held for this process remains to be determined, the RCD has been a fiduciary of funds in other projects but this will require further discussion with our financial staff and our grant partners at Conservation Works. One of the benefits to utilizing the harvest exemption is that we anticipate we will be able to fix at least three watercourse crossings on planned haul routes, and we will be able to modernize the road design to reduce future sediment loss into Dutch Bill Creek. Road work is not generally an allowable expense with this grant, but is a necessary component to the timber harvest permit.



Sonoma County Forest Health Improvement Project
Bohemian Highway Project Areas

0 500 1,000 2,000 US Feet

Legend

- Watercourses
- Streets

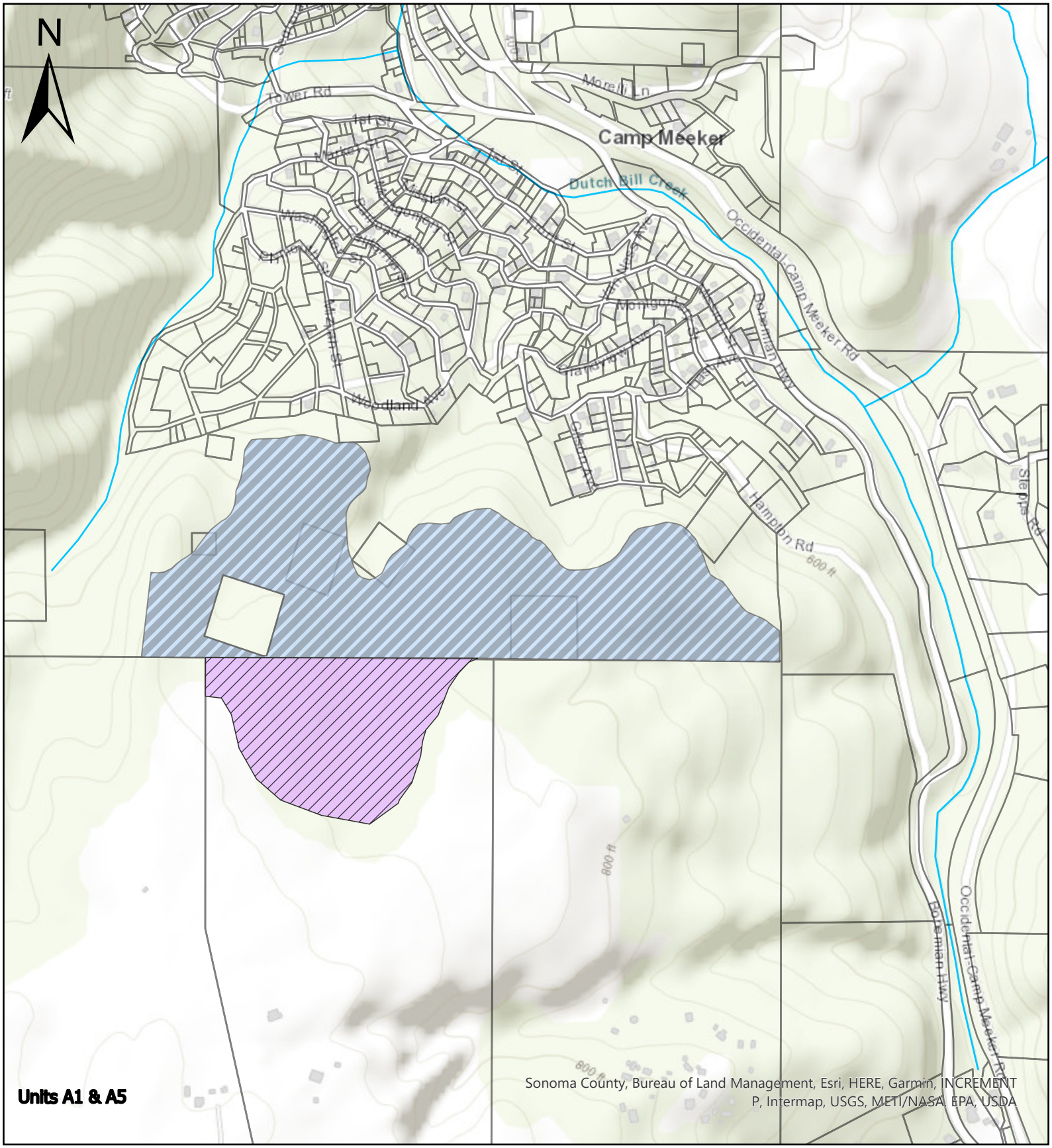
Project Area

Initial Treat

- Burn Prep
- Harvest, Masticate
- Thin

Followup

- Broadcast Burn
- Pile Burn
- Site Prep & Plant



Sonoma County Forest Health Improvement Project
Bohemian Highway Project Areas

Legend

- Watercourses
- Project Area
- Initial Treat
  - Harvest, Masticate
- Thin
- Followup
  - PileBurn
  - Site Prep & Plant

0 500 1,000 2,000 US Feet

December 12, 2024

California Department of Forestry and Fire Protection
Forest Health Program

Re: *Sonoma County Forest Health Improvement Project*
Proposal #71281457

To Whom It May Concern:

As a landowner with real property within Sonoma County, I confirm my commitment to participate in the CAL FIRE Forest Health Grant *Sonoma County Forest Health Improvement Project* over the five (5) year period of the grant award.

Sincerely,

John Mc Daniel
Secretary Treasurer
Camp Meeker Recreation and Park District