

Hoskings Ranch

TM 5312, Log No. 03-10-005

Conservation Grazing Management Plan

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1. INTRODUCTION

This Conservation Grazing and Management Plan (CGMP) applies to lots where grazing is conducted in open space areas.

a. Site Description and Ownership

Hoskings Ranch (the Project) is located in the foothills of Vulcan Mountain one mile west of the unincorporated town of Julian. This site consists of rolling hills, open grassland, and steep slopes that descend to Orinoco/Temescal Creek. The site topography is shown on the U.S.G.S. map for the area in Figure 1, "Project on USGS Map". The property is currently used for grazing/cattle breeding and a Williamson Act contract is in effect on the property. There are no residences on the site and the only structures present are fences and a cattle loading corral. The Hoskings Ranch project is proposed by Genesee Partners and is a subdivision as shown on Figure 2, "Site Plan". Assessor's Parcel Numbers for the Project are 289-030-7, 8, & 11; 289-060-34; 289-062-3, 4, & 6; 289-061-1, 3; 289-100-4, 10, & 11; 289-120-32, 40, & 41; and 289-470-18 & 19.

The Project consists of the subdivision of the approximately 1,416.5-acre Hoskings Ranch into 24 parcels, which range in size from 40 to 196 acres. Each new parcel would accommodate a single family home, although home construction is not proposed at this time. Primary access to Hoskings Ranch is from Pine Hills Road on the site's eastern boundary. Secondary access to the site will be off Daley Flat Road to the northwest. Pine Hills Road is a two lane public road and Daley Flat Road is a two lane private road. Figure 2 shows the project and local access points.

The Proposed Project proposes a 1,209.8-acre biological open space preserve to protect sensitive species, riparian and jurisdictional wetlands, wildlife corridors, and nursery sites in perpetuity. The open space design includes 50-foot buffers adjacent to oaks and 50 to 200 foot buffers adjacent to wetland to avoid edge effects. A RMP will be required that will specify management activities and reporting within the open space. This mitigation will provide open space protections that preserve the most sensitive habitats and manage the open space in perpetuity. The preserved area is designed to incorporate large blocks of land, so as to avoid unconnected pockets of open space and habitat fragmentation. The design of the open space promotes, rather than diminishes, the onsite diversity that exists because a large area is protected from external influence. Grazing is expected to benefit native species of vegetation by controlling invasives that are favored by cattle. Such open space preservation contributes to the region-wide efforts to preserve large areas in perpetuity.

This Conservation Grazing Management Plan (CGMP) is designed to address continuing grazing activities on the 24-lot Hoskings Ranch TM 5432 RPL3 Log. No. 03-10-005 project. Additionally, this CGMP would apply to any portion of the 34-lot Consolidated Project Alternative that proposes grazing in Open Space.

The Resource Management Plan (RMP) for the Proposed Project contains a thorough discussion on the entities managing the open space and providing monitoring reports to the County, what activities would be allowed within the biological open space, and how the easement will be enforced. Should grazing throughout the site cease, this plan will no longer be in effect and the area designated as open space on the tentative map will revert to its designated use without grazing.

Approval and implementation of the Project will result in direct and indirect impacts to biological resources due to residential development. Specific impacts are detailed in the biological report for the project and are summarized in the RMP. Protections for the site's most sensitive biological resources are essential in light of the proposed Project grazing, and coordination between the Resource Manager for biology and the Grazing Manager for agriculture are an essential part of this plan.

b. History of Land Use and Management

Low-density livestock grazing is the only current land use onsite. Grazing has been conducted intermittently over many years. The intensity of past grazing is not known due to the gap in time between the current grazing and the last grazing, which is estimated to be approximately 15 years. Virtually all of the property is in a natural state, supporting various types of chaparrals, scrubs, grasslands, woodlands, and riparian habitats. These are found in a mosaic distribution onsite. Land uses on surrounding parcels include rural residential development to the north, east, and southeast and undisturbed areas to the northwest, west, and southwest. The southwestern portion of the property lies, within the Cleveland National Forest. Lands to the northwest, west, and south of the property are also, within the Cleveland National Forest. Lands to the north, northeast, and east are under private ownership. The site burned in the Cedar Fire of 2003 and oak trees on the site were particularly hard hit by the fire and many were lost. Despite this, recruitment is high and most of the oaks are currently regrowing.

Hoskings Ranch is currently under two separate two-year interim grazing contracts that encompass different parts of the site. Both contracts limit grazing density to 140 head over the entire site. This density was set in consultation with local ranchers. It was determined that a higher number of cattle could be accommodated over the two year period of these contracts because the site has not been grazed in many years and grass is plentiful. As part of the contractual arrangement, fencing in key areas of the site has been repaired or replaced and a loading chute and accompanying corral have been repaired.

2. CURRENT CONDITIONS AFFECTED BY GRAZING OR OTHER MANAGEMENT

a. Climate

Julian's climate is generally temperate, however, due to its elevation, highs and lows are a little more extreme than in the coastal regions of San Diego County. Four seasonal changes occur in Julian and they are more distinct than in other areas of the County because of the variation in temperature. The warmest months of summer are usually July and August with average highs around 86 degrees Fahrenheit (°F) and average lows around 59°F. Temperatures steadily drop through the fall months, leading to winters with average highs in December and January of 52°F, and average lows of 35°F. Average annual precipitation in the Julian area is approximately 24 inches and average snowfall is about 24 inches per year.

b. Water Resources

The project will utilize groundwater for its domestic water needs and to support cattle grazing or other types of uses initiated by lot owners. There are 15 new wells on the site. Recent well tests showed that all six newly-drilled wells produced adequate amounts of water to support uses on the site.

The site is not irrigated. Several spring boxes and four ponds occur on the site, which are used to provide water to cattle. These are catchment ponds and do not rely on groundwater.

The existing reservoirs were observed as being filled during the site visit conducted in the winter of 2004-2005, when a number of stock ponds in the area were observed to be overflowing. With an average rainfall of approximately 24 inches per year, a total of 3,600 acre feet of water falls on the Hoskings ranch each year. Capturing even a small portion of this precipitation could provide adequate supplemental water for stock watering.

c. Flora, Fauna, Vegetation, Special-Status Species and Natural Communities

Two hundred and eighty-six (286) species of vascular plant and one hundred and thirty-one (131) species of animals were identified on the Hoskings Ranch site. See site Tables 1 and 2, "Observed Species List – Flora," and "Observed Species List – Fauna". The species observed typify the diversity normally found in mostly undeveloped montane habitats in this part of San Diego County. The site supports six broad categories of plant communities. These are Chaparral, Scrub, Woodland, Herbaceous Upland, Wetland, and Unvegetated habitats. Many of these habitats are also found offsite in the immediate vicinity of the property. Each of these is divisible into generally discrete subcategories, as defined by Holland (1996). Some of the onsite habitats

could be harmed by grazing. These will not be grazed. Other habitats are not expected to be harmed by conservation grazing and many native plant species are actually helped by the grazing because cattle will help control non-native weeds and grasses that have can out-compete native species for space, nutrients, water, etc. Table 3, "Grazing Effects on Habitat Types", shows whether each habitat type is valuable for grazing, and whether grazing is anticipated to benefit, harm, or have no effect on each habitat type.

A second benefit of grazing is that the grazed plant communities will be less of a fire hazard than a thatch of dead, non-native weeds and grasses would be. As such, the grazing program will assist in the control of combustible weeds.

Six sensitive plant species have been observed on the Hoskings Ranch property. These are San Diego Milk-vetch, Banner Dudleya, San Diego Gumplant, Cuyamaca Meadowfoam, Engelmann Oak, and Velvety False Lupine. Twenty-seven species of sensitive animals were observed on the Hoskings Ranch site during the field surveys. These are Grasshopper Sparrow, Golden Eagle, Great Blue Heron, Red-shouldered Hawk, Swainson's Hawk, Green Heron, Turkey Vulture, Northern Harrier, White-tailed Kite, Horned Lark, Blue-gray Gnatcatcher, Western Bluebird, Bewick's Wren, Barn Owl, Mountain Lion, Bobcat, San Diego Desert Woodrat, Mule Deer, Silvery Legless Lizard, Southwestern Pond Turtle, Orange-throated Whiptail, San Diego Ringneck Snake, Coronado Skink, Two-striped Garter Snake, San Diego Horned Lizard, Coastal Western Whiptail, and Monarch Butterfly. A number of additional sensitive species are known to occur in the general vicinity of this property. Conservation grazing will benefit these species by increasing the species diversity in the grazed areas and by removing competing weedy forbs and grasses. Table 4, Grazing Effects on Special Status Species, details whether grazing is anticipated to benefit, harm, or have no effect on Special Status Species. Further details about the biological effects of the Hoskings Ranch project are provided in the Environmental Impact Report (EIR) for the Hoskings Ranch project.

d. Geology, Special Physical Features, Soils, and Erosion

The 1,416.5-acre site is located in the Julian region of the Peninsular Ranges Province, a 300-mile long California geomorphic province with a long and active geologic history. This portion of the province lies near the geographic center of San Diego County and is predominantly composed of rocks of the Southern California Batholith.

Three predominant rock types underlie the site. The first is the pre-Cretaceous metasedimentary Julian Schist, which is an interbedded quartz-mica schist and quartzite, local amphibolite schist and quartz-biotite gneiss. The second and most predominant rock type is a combination of pre-

Cenozoic rocks consisting of strongly foliated migmatites, which is a mixture of igneous and metamorphic rocks. The metamorphic component is the Julian Schist and the igneous component is the Stonewall quartz diorite. The third rock type is a Mesozoic basic intrusive rock called the San Marcos Gabbro, which is a highly variable assemblage of rocks that weathers to deep reddish-brown residual clay (California Division of Mines and Geology, 1992).

On-site elevations range from approximately 3,100 to 4,200 feet above mean sea level (msl) with gradients ranging from nearly level pasture areas along the northeastern portion of the property to steep cliffs along the southwestern side of the property. Residuum, organic-rich topsoil, and minor amounts of alluvium, (which were derived by weathering and erosion of bed rock, exist in the on-site drainages) are found on site.

Ten soil types are found on the project site. The San Diego Soil Survey describes these soil types as follows: 1) Crouch coarse sandy loam (CtE), 5 to 30 percent slopes, 2) Crouch rocky coarse sandy loam (CuE), 5 to 30 percent slopes, 3) Crouch rocky coarse sandy loam (CuG), 30 to 70 percent slopes, 4) Holland fine sandy loam (HmD), 5 to 15 percent slopes, 5) Holland fine sandy loam (HmE), 15 to 30 percent slopes, 6) Holland stony fine sandy loam (HnE), 5 to 30 percent slopes, 7) Holland stony fine sandy loam (HnG), 30 to 60 percent slopes, 8) Loamy alluvial land (Lu), 9) Reiff fine sandy loam (RkC) 5 to 9 percent slopes, and 10) Sheephead rocky fine sandy loam (SpG2), 30 to 65 percent slopes, eroded.

The principal soil types of the subject site with their respective slopes, fertility, erosion potential, and potential for grazing are noted in Table 5, 'Dominant Soil Types'. The project will not cause a significant loss of topsoil as a result of careful management (see Section 4.0).

Some Prime Soil or Soils of Statewide Importance occur on the site. Approximately 23 acres of Prime soils and Loamy alluvial land (LU) occur in the northeast part of the site, as well as in three small isolated places on the site's eastern and southern boundary. Soils classified as Farmland of Statewide Importance include 196 acres of Holland fine sandy loam, 5-15% slope (HmD) and 20 acres of Reiff fine sandy loam, 5-9% slope (RkC). These occur on the western third of the site.

e. Hydrology, Surface Water Drainage, and Water Quality

Thirteen new onsite wells, ranging from 271 to 851 feet deep, have been drilled on the site as part of the hydrogeologic investigation. Driller logs indicate that eleven of the wells were capable of producing from 3 to 130 gallons per minute (gpm) while the other two wells were not capable of producing the required 3 gpm. Since groundwater levels in upland areas are deeper than the

alluvium and/or residuum contact with bedrock, fractured bedrock represents the significant water-bearing unit throughout the basin. Various fractures within this aquifer may be only partially interconnected, thereby restricting the hydraulic connection and groundwater flow. A review of aerial photographs indicates a few lineaments (potential fault and/or fracture zones) within and around the property. These lineaments are centrally located and likely result from faulting along the Elsinore fault zone located approximately three miles to the east.

Surface Water Drainage patterns onsite consist of three types: significant watercourse which cross the southern portions of the site (Oronico Creek and Temescal Creek); deeply incised drainages that form tributaries to the above creeks and others; and broad "wet meadows," where perched water tables keep the surface hydrated to the extent that hydrophytes predominate the habitat. The Montane Meadow habitat areas as well as upper segments of the tributary drainages are suitable for the type of controlled grazing proposed by this plan. The deep canyons and significant creeks are unsuitable for grazing as cattle will pollute the water and damage sensitive riparian habitat.

f. Grazing Capacity

The numbers of livestock to be grazed on the project site is limited by the amount of accessible grazing land. A maximum of eighty head of cattle is to be grazed at any one time on the 1,416.5-acre ranch property. This number was determined in consultation with local ranchers. The number of cattle permitted to graze on the property can fluctuate over time due to evaluations determined in future monitoring, using the Residual Dry Matter (RDM) System and other factors (See section 5c below), including feedback from the assessments made as part of the sites Resource Management Plan. This limit does not apply to the interim grazing contracts that will expire in January of 2014.

g. Fire Hazard

The accumulation of highly flammable herbaceous fuels in Non-Native Grasslands is a well-known problem during the dry seasons. In this case, livestock grazing is the preferred alternative among the common methods of fuel reduction. Mowing is expensive, can spark a wildfire, and is impractical in uneven terrain. Prescribed fire causes smoke pollution, can jump to other lands, and is impractical for repeated treating of large areas.

The grazing of cattle is currently capped at 140 head of cattle, based on a two-year contract that ends in 2014. This is in contrast to the head count of 60 head proposed under this plan, which was arrived at in consultation with local ranchers who have extensive experience grazing cattle in

the Julian area. The actual number of cattle onsite at any given time will be determined based on the Grazing Manager and Resource Manager's assessments of habitat conditions relative to a number of criteria, including rainfall and dry seasons. More rainfall in any given season will likely result in additional biomass in the grazing areas, with the result that cattle will be allowed to graze during more of the year. The opposite effect would be anticipated during dryer years,

The higher cap of 140 head is temporary and was provided to accommodate the reality that there was an excess of feedstock on the site due to the absence of grazing in previous years. No permanent damage is anticipated with a higher head count.

h. Infrastructure

Infrastructure will consist of pads, roads, and driveways for the developed portions of the property. Access in support of grazing will be designated and will consist of unimproved roads using, to the extent possible, existing traveled ways on the site.

i. Special Management Areas and Hazards

Livestock will be restricted from protected habitat areas where special status species occur. Temescal/Orinoco Creek will also be protected. Protections will consist of a 200 foot buffer and fencing along the buffer's boundary with grazing areas. Fencing will be put in place on slopes up to 60 percent in grade, beyond which the steepness of the slope will naturally restrict cattle movement. Maintenance of this fencing and monitoring of the area by the Grazing Manager (GM) and the Resource Manager (RM) will ensure that protections remain in place. Temporary fencing will be a tool available to the management team that will focus grazing on the desired areas, and exclude cattle temporarily from areas needing temporary protections from potential overgrazing effects.

j. Opportunities to Integrate Grazing with the Regional Rangeland-Based Economy

Grazing is currently conducted on multiple properties in the region. Therefore, the Hoskings Ranch project can integrate with an already existing agricultural economic system that can provide markets, transportation, and support systems to the site.

3. MANAGEMENT GOALS, OBJECTIVES, & PERFORMANCE STANDARDS

a. Ecosystem Health

The CGMP works as a component of the larger RMP that covers the site. Grazing management within Hoskings Ranch will be based on:

- Defined biological goals
- Opportunities for management cooperation, and
- Adaptive input from monitoring

This foundation will ensure ecosystem health. Building partnerships with federal, state, local agencies, landowners, and non-governmental organizations will ensure long-term stewardship of the ecosystem. General management goals are as follows:

- Protect and/or enhance the biological values of preserved ecosystems, to be maintained through a program of reporting, on-going maintenance, and management in perpetuity
- Protect and enhance special-status species habitat by using fencing to exclude grazing from the most sensitive wetland areas
- Promote the growth and cover of native plants by preventing the introduction and establishment of noxious invasive weeds through a program of controlled grazing, management, inspection, and removal
- Remove/control existing invasive weed populations in response to monitoring and management goals established by the management team
- Implement a program of long-term monitoring that will allow management decisions to continually evolve by adhering to the meeting and reporting schedules provided in the CGMP and the RMP.
- Manage grazing leases in a manner that contributes to the economic viability of livestock operations on Hoskings Ranch by including grazing lessee(s) on the management team
- Maintain fencing, livestock water facilities, and signage by adhering to the requirements of the CGMP
- Coordinate and oversee removal of trash such as garbage, paper, plastic bags, wood, and metal debris
- Coordinate and oversee thatch removal, invasive non-native plant species control, and native plant revegetation activities
- Review biological/rangeland monitoring data in accordance with the schedule specified in Attachments A and B of the CGMP
- Maintain records of CGMP activities, correspondence, and decisions
- Conduct general inspections of the grazing units
- Recommend and implement corrective actions to attain the goals of the CGMP

- Ensure compliance with regulations protecting resources and coordinate enforcement by coordination between easements holders, regulatory agencies, and the management team.
- Recommend and implement volunteer educational or habitat restoration programs as provided in the RMP

Livestock grazing management is a key tool to prevent both the increase and/or introduction of invasive non-native weeds, and to treat infestations. Invasive plants are defined as those that are not native but can spread into other ecosystems and displace native species, hybridize with native plants and alter biological communities and ecosystem processes. The Grazing Manager will have a minimum of three years of experience in conservation grazing management. A degree in Agricultural Science or a related field can substitute for one year of experience. Experience in field biology is also recommended. The Grazing Manager will report to and work closely with the Resource Manager in carrying out field inspections, setting work priorities and carrying out specified management duties.

b. Special Habitat or Feature Characteristics

Wetland habitats associated with the waterways of Orinoco Creek and Temescal Canyon Creek, which run along the southern portions of the property, support very high-value habitat with only limited signs of disturbance. These areas contain habitat for various special status species, including one State-listed Endangered Species, Cuyamaca Meadowfoam. Grazing of livestock in areas in or near the creeks will not be permitted. Geographic characteristics will also provide limits to gazing. Portions of the property consist of steep cliffs which are not traversable by livestock, forming a natural barrier. The protected areas will be fenced with cattle-exclusive, wildlife-friendly fencing to prevent cattle from entering the sensitive habitats.

c. Cooperation Between Livestock Operator, Neighbors, Management Stakeholders, and Resource Users

Cooperation between parties involved in the management of the property is essential. Periodic meetings between Resource Managers and monitors, range managers, operators, neighbors, and stakeholders will be a required part of the management plan. Meetings will be held quarterly in the first year of operation, and every six months thereafter, according to the schedule provided in Attachment A, "Meeting and Reporting Schedule". Meetings will integrate information from reports provided by the RMP and CGMP, in accordance with the reporting schedule also included in Attachment A.

An agreement between the County of San Diego and the property owner will be put into place and will be legally enforceable. Failure to maintain the meeting schedule would constitute a breach of the agreement. Additionally an easement will be placed over the land to ensure that protective measures for the biological/grazing habitats are legally binding.

4. PREDICTED EFFECTS AND DESIRED CONDITIONS

a. Grazing and Related Management of Special Resources

Grazing provides an environmental alternative to common methods of weed control. Weed conversion results in loss of grasslands, and thus the loss of the native species that occupy them. Mowing can be used on level to gently rolling areas where the soil surface is fairly even. However, it is an extremely labor-intensive method and must be repeated throughout the year for consistent management of grassland canopy height. Because mowing does not usually involve removal of biomass from the site, it often fails to address the problem of thatch accumulation. Grazing effects will be monitored and the number of head grazed will be adjusted based on the results of monitoring. Issues such as over-grazing, which can precipitate erosion, will be a primary focus of the monitoring program. Another focus will be preventing the conversion of chaparral, scrub, woodland, and wetland areas to non-native grassland or disturbed land. Monitoring and controlling the number of head and the grazing areas will prevent effects of overgrazing that could result in erosion or type conversion. See Table 5, Dominant Soil Types, and Figure 3, "Project on Soils Map Highlighting Soils with Very High Erodability," for details about the erosion potential for soils onsite and their geographical locations. Those identified to have High and Very High potential for erosion will be monitored more closely.

Fencing is one of the strategies the Project will rely on to protect open space areas. In areas above 60 percent slope, the placement of a fence is infeasible. However, these areas will also be too steep for cattle to trespass, presenting no danger of grazing impacts. Figures 4A through 4C, "Grazing Plan – East – On Topography Base", "Grazing Plan – Central – On Topography Base," and "Grazing Plan – West – On Topography Base," respectively, show the proposed fencing plan for the Project overlain on a topographic map, indicating those areas where fencing is proposed and where it is not possible or necessary.

Three types of resources requiring protection from grazing are identified on the figures: wetland resources, Velvety False Lupine (located in the southeast area of the site; see Figure 5A), and an

existing open space easement. Figures 5A through 5C, "Grazing Plan – East – On Biology Base", "Grazing Plan – Central – On Biology Base," and "Grazing Plan – West – On Biology Base," respectively, show the grazing overlain on an aerial photograph which clearly shows the resources onsite.

The wetlands require a 200-foot buffer, and are shown outlined in red where fencing is appropriate, and in green where the topography exceeds 60 percent slope and no fence is proposed. Fencing protection for wetlands and the Velvety False Lupine is shown with a red line. Fencing protection for the existing open space areas is shown with a black beaded line.

Grazing represents a cost-effective way to control weeds in combination with providing a valuable land use. Farmers have an interest in maintaining fencing and ensuring their cattle are in appropriate areas. As such, the cost of grazing management is to a great extent absorbed by the rancher in his or her effort to protect and enhance the value of their asset.

Costs will be incurred in the monitoring, coordinating, and reporting that is required as part of this plan. An estimate of costs is provided in Attachment B, "Estimated Costs for Management".

b. Non-Grazing Management of Special Resources

The fencing of areas containing special resources is required to protect them from human intrusion, cattle grazing, mowing, or other types of clearing.

The area incorporating single family home lots on the Hoskings Ranch property can also incorporate grazing at the owner's discretion (see section c below). Any areas included in the grazing operation will be managed by the Grazing Manager subject to the terms of conditions of the grazing management plan. Non-grazed areas associated with residential use will incorporate weed management such as whipping or mowing, in conformance with the approved fire protection plan and current fire safety regulations. Fencing would likely be used to keep cattle out of landscaped or other use areas. Initial fencing shown in red on figures 4a through 4c will be established by the developer. Fencing of the open space boundary will be required when each lot is developed with a home, at the expense of the lot owner. The Site Implementation Permit will be used to enforce the lot-by-lot open space fencing requirement.

c. Alternative Feasible Management Scenarios

Alternatives to cattle grazing would include grazing by other animals, such as horses or exotics such as llamas, mechanical thatch removal, controlled burning, and other operations as needed. No alternative methods are anticipated to be needed for the site. Grazing by other animals such

as llamas, goats, horses, and sheep is not proposed due to the difficulty of assessing the impacts and management requirements of a greatly varied range of animal species. Mechanical removal is not recommended due to the highly variable terrain, existence of numerous rock outcroppings, and complexity of the biological “mosaic” of sensitive habitats. Controlled burning is not recommended due to the fire history of the region, which was affected by massive wild fires on 2003 and 2007 that destroyed numerous homes in the area.

Individual lot owners could opt to terminate the agricultural activity on their land. This “opting out” process would require notification of the Management Team by the property owner. Notice would allow time to move cattle and adjust the overall number of cattle allowed on the site. The overall grazing operation is not expected to be affected by any such “opt-outs” due to the nature of grazing, whereby animals are left in specific areas for specified periods of time and are moved frequently to prevent overgrazing. Individual lot owners could use fencing to exclude cattle from their entire property if they choose to opt out of grazing. Initial fencing will be established by the developer. Cattle-exclusion fencing along the property line of each lot would be at the request and expense of the lot owner, and would require review by the Resource Manager and the County to ensure it is approved wildlife-friendly fencing and that impacts of installation are minimized. The Grazing Manager would distribute and move cattle as needed if the fencing erected by lot owners impeded cattle movement.

d. Timeline of Management Requirements of Special Resources Affected by Grazing

A “Timeline of Management Requirements” is provided in Attachment C, which integrates the meeting and reporting schedule in Attachment A. Attachment C is also included in the Resource Management Plan.

5. GRAZING AND RELATED MANAGEMENT PRESCRIPTIONS

a. Recommended Grazing Alternatives

The grazing plan as proposed will avoid harming special resources by controlling the number of livestock on the site and by fencing special resource areas. As such, alternative approaches are not required. Special resources areas consist of those biologically sensitive areas where grazing is not permitted. A map showing grazing and biology is included as Figures 4A through 4C, which are “Grazing and Fencing Plan – East”, “Grazing and Fencing Plan – Central,” and “Grazing and Fencing Plan – West,” respectively.

b. Grazing and Other Management Units – Special Habitats

The Hosking Ranch will be subject to a RMP that will manage and conserve the site's special habitats and sensitive species. The RMP will integrate the Conservation Grazing Management Plan as a component to protect special resources through various means including fencing, habitat restoration (if needed), seasonal or permanent grazing restrictions in high-value areas, as appropriate, and other appropriate methods. Figures 4A through 4C show where grazing and fencing will be located. No habitat restoration is anticipated at this time because: (1) the site has only been grazed for the last two years after laying fallow for over 10 years, and (2) the number of head grazed has been limited. High value areas on the site are discussed in the following section.

c. Grazing and Other Management Units – General and Special

It is anticipated that a maximum of eighty head of cattle will be grazing the Hoskings Ranch Property at any one time, limited to designated areas of the property, as shown in Figures 4A through 4C. The maximum head of cattle allowed under the current contract (running from 2012 to 2014) will be 140 head of cattle. The higher head count was permitted because the site has not been grazed for over a decade and ample hay stock exists on the site to support this higher number. When the contracts are renewed or re-let in 2014, the allowed number of cattle will be reduced to 60 head. Choice of this level of use was determined in consultation with local grazing operators.

The ongoing carrying capacity of the site will be determined by a scientifically-based monitoring method known as Residual Dry Matter (RDM) monitoring. RDM monitoring is complex, and, as noted in interviews with the nearby Santa Ysabel livestock operators, ranchers in the area are not accustomed to RDM monitoring. It is used to (1) evaluate whether the intensity of use within management unit was within the prescribed range; and (2) as a trigger to move cattle and adjust stocking rates. A variety of factors must be considered when applying RDM monitoring methods, including livestock forage preference, slope, distance to water, and livestock distribution. Other factors such as salting, herding, placement of mineral supplements and the use of yearling animals or bulls will alter the actual use of the range.

RDM shall be monitored annually following current University of California Department of Agriculture and Natural Resources *Guidelines for Residual Dry Matter Management for Coastal and Foothill Annual Rangelands (Guidelines)*, as updated (Appendix B), and the Wildland Solutions RDM Monitoring Procedure (Appendix C) using vegetation clipping in permanently selected areas within each management unit. The locations of permanent monitoring plots should be recorded using a geographic positioning system (GPS) device and the coordinates recorded

and mapped in GIS. At the end of the grazing season, all dry aboveground plant material shall be clipped at each permanent monitoring site within randomly located 1 square foot (0.09 square meter) quadrats (the number of quadrats per management unit shall be determined by a power analysis). The dry biomass will be dried to a constant weight and weighed. A table of RDM within each management unit shall be created for the annual monitoring report, in association with a list of criteria whether the pasture met, exceeded, or stayed below the RDM goal.

After the initial five monitoring years, photo monitoring methods identified by Wildlands Solutions (Wildlands Solution Photo Monitoring Guide, 1998), or equivalent/superior, may be added to or replace RDM clipping if deemed appropriate by the Grazing Manager, Habitat Manager, and reviewing agencies. It takes considerable experience to apply RDM photo monitoring accurately, and without initial physical baseline data on RDM, photo monitoring may potentially yield faulty results. RDM monitoring shall be performed at permanent monitoring stations. A power analysis is recommended to identify the number of permanent monitoring stations needed to yield statistically meaningful results.

RDM monitoring shall be conducted on an annual basis to ensure the appropriate implementation of the prescribed grazing regime. RDM monitoring should be conducted in the fall and early winter when annual plants have senesced (October and January). If possible, RDM monitoring should be conducted by a Certified Range Manager (CRM).

Cattle should be removed from the range when the RDM carrying capacity has been reached. As an initial treatment, the site shall be grazed to an average minimum RDM of approximately 500-750 lbs/acre, which should correspond to a moderate grazing intensity. If RDM levels fall below 500 lbs/acre prior to the typical duration of a season, cattle will have to be removed from the range early.

RDM monitoring will correlate with status and trend monitoring of the open space areas, this will allow for the assessment of the current condition of a population or management unit. Status and trend monitoring schedules and methods are discussed further in the sites RMP. If the number of cattle needs to be adjusted downward, or if areas are in need of specific protections, the Grazing Manager will be responsible for ensuring that required actions are taken. Management recommendations and Grazing Manager actions taken in response to such evaluations will be a part of the reporting record for the project site and will be reviewed at the quarterly meetings (outlined in Attachment A). Enforcement will take place under the provisions of the legally enforceable management agreement between the parties.

Grazing monitoring will be carried out under the supervision of the Resource Manager and in collaboration with the Grazing Manager, as detailed in the RMP. Grazing monitoring over time will provide information for the managers that will allow them to better manage grazing seasons. The grazing monitoring will indicate where modification of grazing activity is needed. As a result, grazing rates may be adjusted up or down. Grazing regiments and stocking rates will be adjusted, based on the monitoring results reported to the management group. Monitoring from a biological perspective is critical to fully understand the effects of grazing on the property. The Resource Manager, whose duties are detailed in the RMP, will be responsible for biological monitoring. The Resource Manager and the Grazing Manager will work together ensure monitoring is carried out periodically. If monitoring determines that there is a concern, the issue will be raised at the quarterly managers' meetings, and remediation will be specified. The appropriate parties, such as the HOA, will be advised of any remediation, and a time-frame will be specified. Critical points throughout the site will be monitored, as discussed in the RMP. Threshold issues such as species composition and species robustness will be determined in accordance with the process outlined in the Habitat Management Performance Criteria of the RMP. Field inspections will be used to determine if detrimental effects are occurring.

d. Infrastructure Conditions and Improvements Needed

Current conditions of the grazing on Hoskings Ranch include large fenced areas containing a limited number of grazing livestock over portions of the property. Minor improvements are needed on the property to sustain an environmentally beneficial conservation grazing plan. These consist of fencing and gating. Fencing and gates are already in place for general grazing, but additional fences and gates will be needed to protect specific biological resources. A locked gate with fire-safe opening mechanisms will be installed across the road leading into Daley Flat to prevent unauthorized encroachments into open space. Fences and gates will be installed in accordance with the Grazing and Fencing Plan (Figures 4A through 4C). In areas where there is a greater potential for human intrusion, signage will also be used to indicate intrusions are not permitted. Buffers and fencing will be used to prevent damage to all areas of riparian forest and riparian scrub and certain populations of special status species. High-tensile, smooth-wire fencing will be used on the property in most areas. A high-tensile wire fence consists of three strands of special wires held in tension along wooden, steel, or poly-plastic posts with battens or stays in between. The top strand will consist of white vinyl-coated high tensile wire at 40-42 inches above the ground that is highly visible to wildlife. The bottom wire will be 18 inches above the ground, with 12 inches between the top two wires. The distance between posts should be 20-25 feet with three vertical stays at equal distance in between. High-tensile wire fencing has several advantages over conventional fencing methods. High-tensile wire is easy to handle, has a neat appearance,

and requires little maintenance after installation. Perhaps most important, high-tensile wire fencing is safer for wildlife because it does not impede their movement, but remains effective in restricting cattle movement. Also, the high elastic limit of high-tensile wire reduces the common stretch and sag problems associated with conventional fence wire.

6. SUSTAINABILITY

a. Integration with Regional Socio-Economic Systems for Long-term Sustainability

Cattle grazing/breeding are a common feature of the Julian region and many opportunities for integration exist. For example, feed and livestock services are readily available in the region. By contracting with local ranchers who have established reputations in the area, the site will benefit from local knowledge of support resources such as feed outlets, fencing repair services, veterinary services, and livestock transportation services.

b. Guidelines, Incentives, and Contingencies for Operations

Supplemental feeding of livestock with alfalfa or hay can introduce invasive non-native plants and will be avoided. Alternative feed stock such as feed pellets will be used instead. The GM will review site feeding areas as part of the regular site patrol per the RMP to ensure that the appropriate feed mix is used. Mineral supplements, salt licks, and molasses/protein supplements are allowable, but locations will be moved periodically and some supplements placed away from water sources to avoid overuse and provide for more even livestock distribution. Grazing use pattern maps will be used to determine optimal supplement locations.

7. MONITORING OF CONDITIONS AND PLANNED EFFECTS ON RESOURCES

a. Monitoring Variables, Methods, and Schedule

Long-term monitoring is required to assess the effectiveness of management actions. The GM will follow the prescribed maintenance schedule as outlined in the Reporting Schedule in the attachments to this CGMP. The GM will visit the site as needed to oversee any issues related to the grazing program on a quarterly basis if not more frequently. The GM monitors the stocking rates, vegetation conditions, invasive vegetation conditions, infrastructure conditions, and oversees site photo-documentation in coordination with the HM. The HM visits the site as needed to oversee any biological issues related to the grazing program, on a quarterly basis if not more frequently, reviews site photographs from the GM and coordinates site inspections accordingly and updates the vegetation mapping on a minimum 5-year cycle. Based on review of the GM's observations, site photographs, and any subsequent site visits, the HM

removes noxious invasive species, monitors feral animals in the area, conducts sensitive species surveys as required, constructs and maintains permanent fencing and signage, maintains access roads to ensure passability, and provides annual review reports to the County of San Diego. The two managers' efforts are closely coordinated to make the best use of resources. This is an adaptive management model (see section 7.c), which relies on feedback from one manager to the other to determine the frequency of onsite interventions and ongoing management strategies that will ensure the permanent protection of the site's resources. The primary management assumption as it relates to grazing is that the removal of annual grass thatch and control of invasive weeds through managed grazing will maintain the populations of native biological resources on the site within a natural range of variability.

The primary management assumption is that the removal of annual grass thatch and control of invasive weeds through managed grazing will maintain the populations of native biological resources on the site within a natural range of variability.

Monitoring will be focused on key management areas in each pasture that represent overall conditions, and will include photo-point documentation in addition to the RDM monitoring described in Section 5c and adaptive management strategies described in Section 7c. Key management areas will be stratified by ecological site. For the sake of consistency, specific photo-point sites will be determined by the Grazing Manager and the Resource Manager based on the adaptive management strategy called for in this plan. Photos will be taken within 45 days prior to the onset of grazing, and will be updated on an annual basis, to be provided in attachment to the annual reporting documentation. The Grazing Manager and the Resource Manager will determine each year if new photo-point locations are needed. All monitoring locations will be mapped and all data will be recorded. Data will be integrated with the RMP, in order to provide effective adaptive management, as prescribed by both management plans.

b. Evaluation Standards and Analysis

The monitoring program will provide a means to measure achievement of the performance standards for biological preservation based on specified variables and methods as outlined in the RMP. The monitoring program will provide an accurate assessment of the balance between forage supply and utilization as well as measures of other resource conditions, to assure that cattle stocking rates, schedules, and other grazing practices are achieving the conservation and livestock production goals. It will provide the basis for adjustment of the estimates of future forage production and utilization, conservation, and grazing practices. Results of monitoring will be incorporated into the periodic reporting, as specified in Attachment A.

c. Adaptation of Management Actions

Should monitoring reveal that the goals and objectives of the CGMP are not being achieved, existing management activities and decisions will be revised as warranted. Potential adaptations include, but are not limited to:

- Changes in stocking rates, types of animal, class of animal
- Change in RDM target
- Replacing the Grazing Manager, Resource Manager, Ranchers, and/or Habitat Operator
- Modification of grazing seasons and regimes
- Termination of grazing
- Improved management of water use through additional water sources, fencing or other range improvements
- Increased site patrols
- Use of temporary fencing to allow areas to recover between grazing periods
- Increased weed abatement activities to remove invasives from sensitive areas.
- Modified fencing locations

All of these activities will take place as part of the regular ranching effort and will be evaluated by the GM for effectiveness. These will be a part of the regular land stewardship effort that is associated with the ongoing grazing. Residential (“development”) areas are included on each lot. These areas are for the use of lot owners and are excluded from the plan.

d. Reporting

The Resource Manager will submit grazing program monitoring reports to the County of San Diego, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service by February 15th of each monitoring year, to describe the prior year’s management activities and the results of monitoring. Attachment A provides the schedule of reporting requirements. The reports will include the following information:

- a summary of grazing actions during the preceding year;
- a summary of all other management actions undertaken during the preceding year;
- a description of the methodology used to conduct the monitoring, including any changes to the methodology, from that described herein;
- the results of the annual monitoring studies;
- copies of all data sheets and monitoring photographs;
- a list of all persons who participated in the monitoring and preparation of the annual report;
- a list of persons receiving the report;

- recommendations for remedial actions and modifications to the CGMP or monitoring plan; and
- photos from photo-documentation points.

8. IMPLEMENTATION SCHEDULE, PERSONNEL, AND RESPONSIBILITIES

Implementation will take place in conjunction with, and prior to, granting a final map for the Hoskings Ranch project.

Personnel involved and responsibilities of each will be:

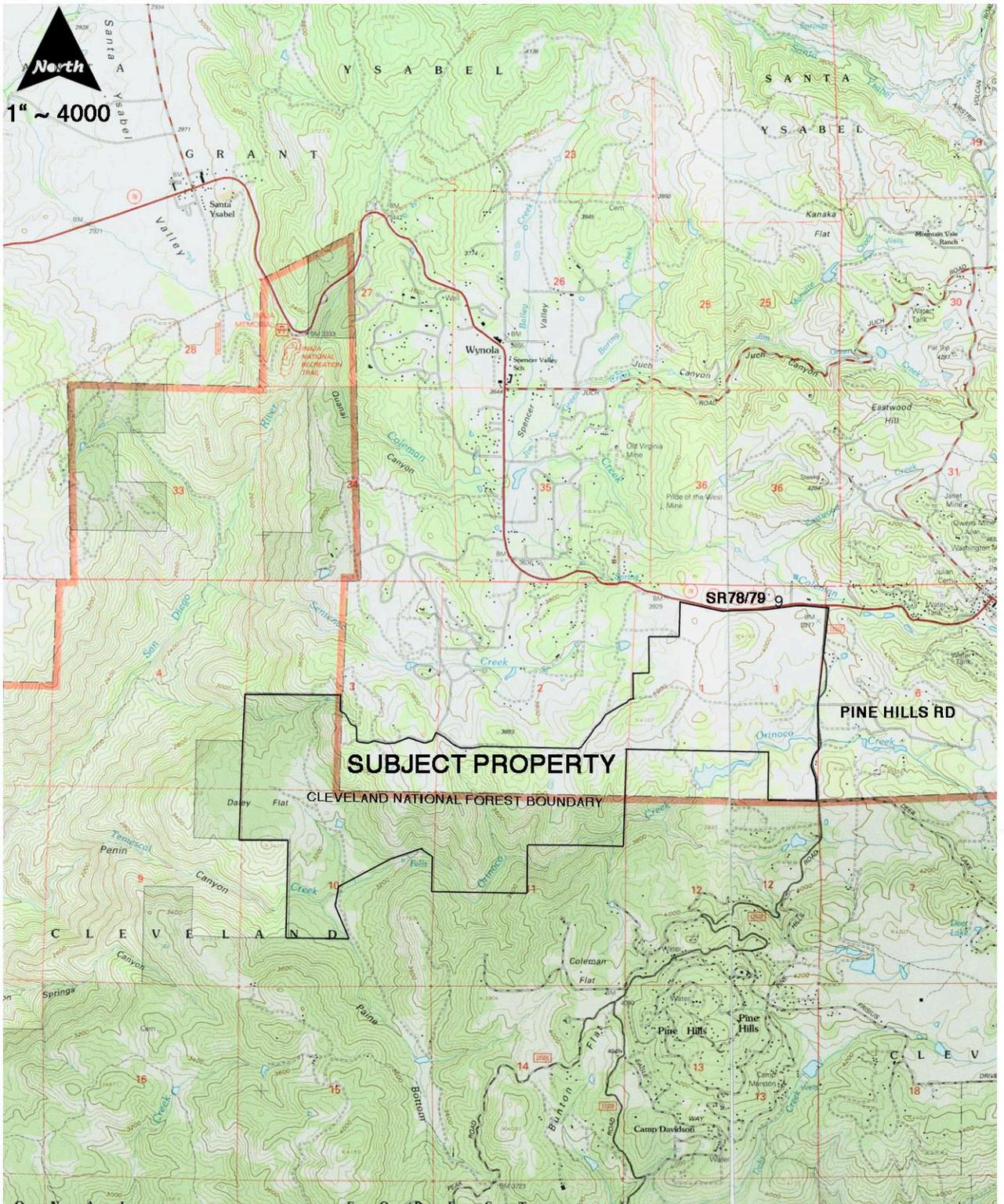
- Grazing Manager – oversight of grazing activities, site visits, attend meetings, report preparation;
- Resource Manager – oversight of all management operations; coordination with Grazing Manager, oversight of biological open space integrity, site visits, organize and attend meetings, report preparation;
- Ranchers – responsible stewardship of land, attend meetings, contribute to reports, as needed;
- Habitat Operator – effectively carry out directives of Resource Manager, attend meetings and assist with report preparation as needed; and
- Agency representatives – site visit as needed, attend meetings, review reports and comment as needed
- Individual lot owners can participate in the management of the grazing areas through participation in the Home Owner’s Association and through attendance at quarterly meeting of the grazing management team.

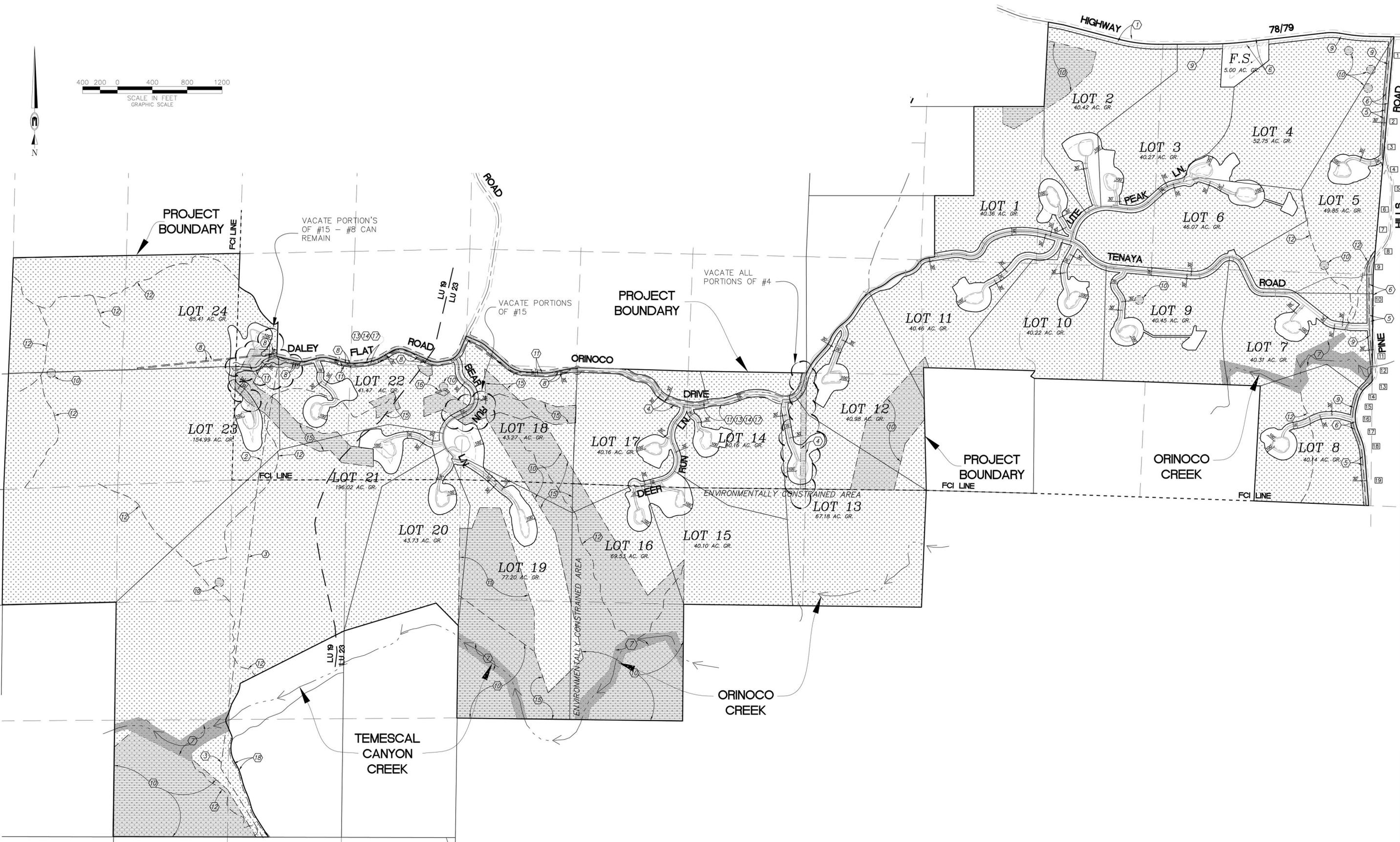
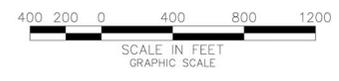
9. ASSUMPTIONS AND RECOMMENDED SUPPLEMENTARY PLANNING

The Grazing Manager will be selected based on experience in grazing management and compliance activities. The Grazing Manager should be familiar with RDM monitoring and should be a Certified Range Manager (CRM) or equivalent, or have a contract with a CRM for RDM monitoring. Continued management is assured by the Conservation Grazing Management Plan Implementing Agreement. Management, meetings, and reporting will be provided for the life of the grazing activity. Should grazing activities cease on a given part of the site due to owner(s) opting out of grazing as an activity, that portion of their lot that was devoted to the grazing/biological open space will become exclusively biological open space. The easement for the grazing/biological open space shall reflect this possibility to eliminate the need to alter easement language should a lot owner opt out. The grazing management plan will be

amended to reflect the change to grazing area. The Resource Manager and Grazing Manger will review potential effects on the remaining grazing, the need for fencing changes, or other factors that could arise from the changes grazing area configuration. These issues will be discussed in the meeting following formal notification of withdrawal by an owner. It should be noted that formal withdrawal from a Williamson Act contract takes 10 years unless an owner opts to pay a penalty and opt out immediately. Any option to discontinue grazing will be accompanied by a statement of which method is being used so the Grazing manager can plan accordingly.

The Grazing Plan will be reviewed annually and changes to performance standards, stocking schedule and other provision and/or will be made accordingly but only with the concurrence of the responsible reviewing agency. The CGMP will remain in effect as long as grazing continues in open space areas.





Site Plan

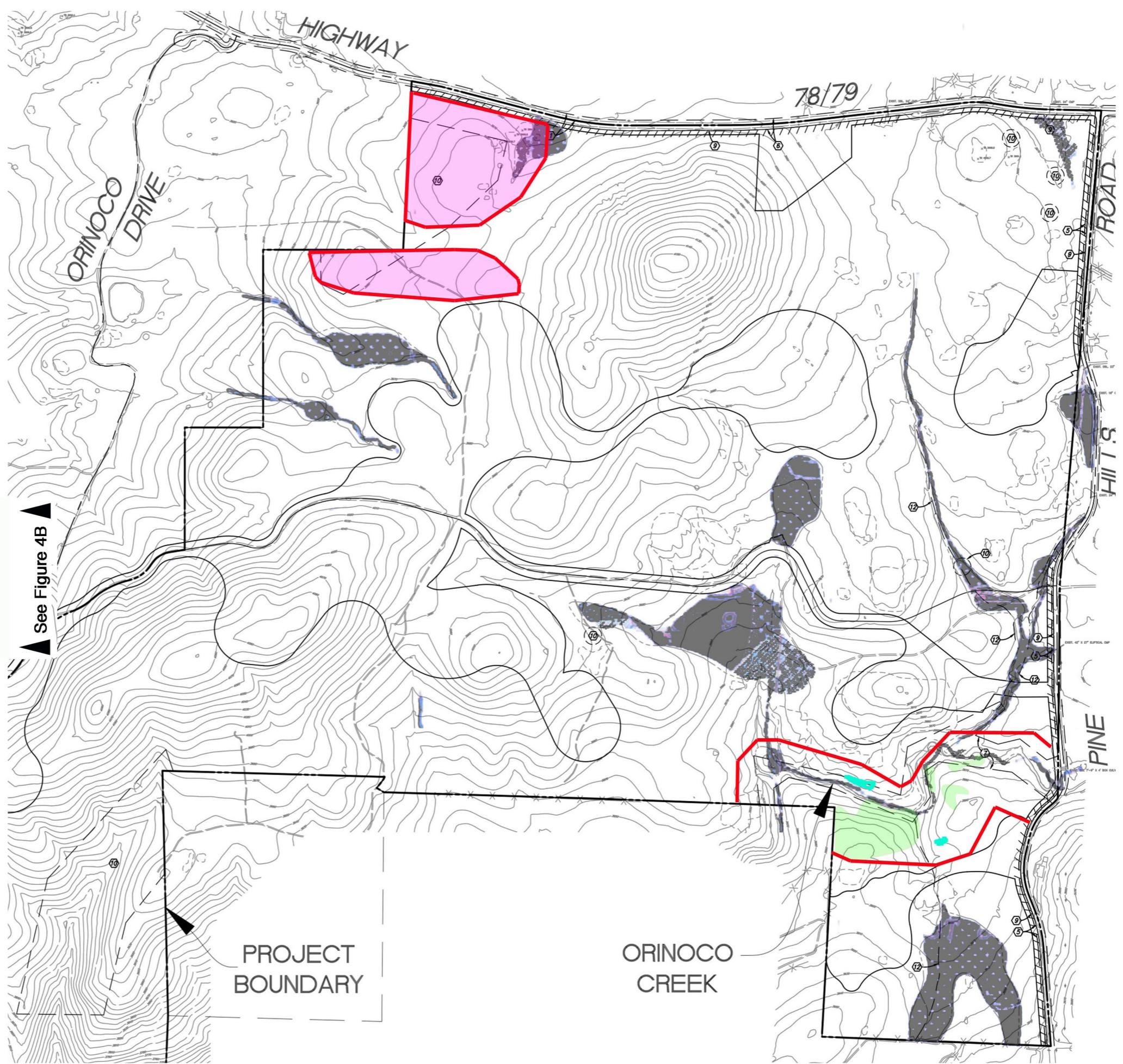
Figure 2

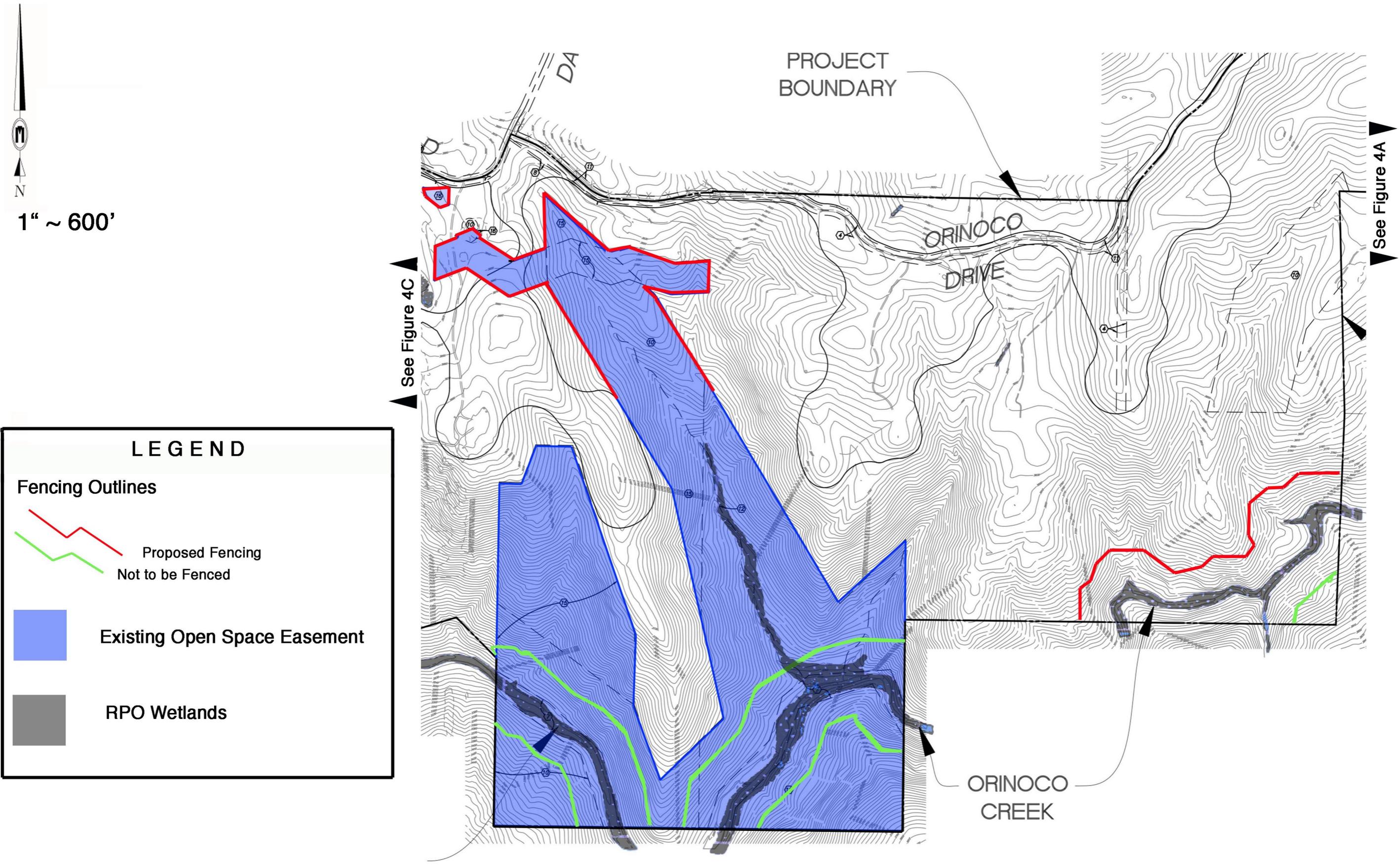
1" ~ 600'



LEGEND

- Fencing Outlines**
 - Proposed Fencing
 - Not to be Fenced
- Existing Open Space Easement
- RPO Wetlands
- Rare Plants to be Fenced**
 - Velvety False Lupine
 - San Diego Milk Vetch
(entirely within proposed wetland buffer fencing)
 - Cuyamaca Meadowfoam
(entirely within proposed wetland buffer fencing)





LEGEND

Fencing Outlines

- Proposed Fencing (Red line)
- Not to be Fenced (Green line)

Existing Open Space Easement (Blue shaded area)

RPO Wetlands (Grey shaded area)

1" = 600'



LEGEND	
Fencing Outlines	
 Proposed Fencing	 Existing Open Space Easement
 Not to be Fenced	 RPO Wetlands

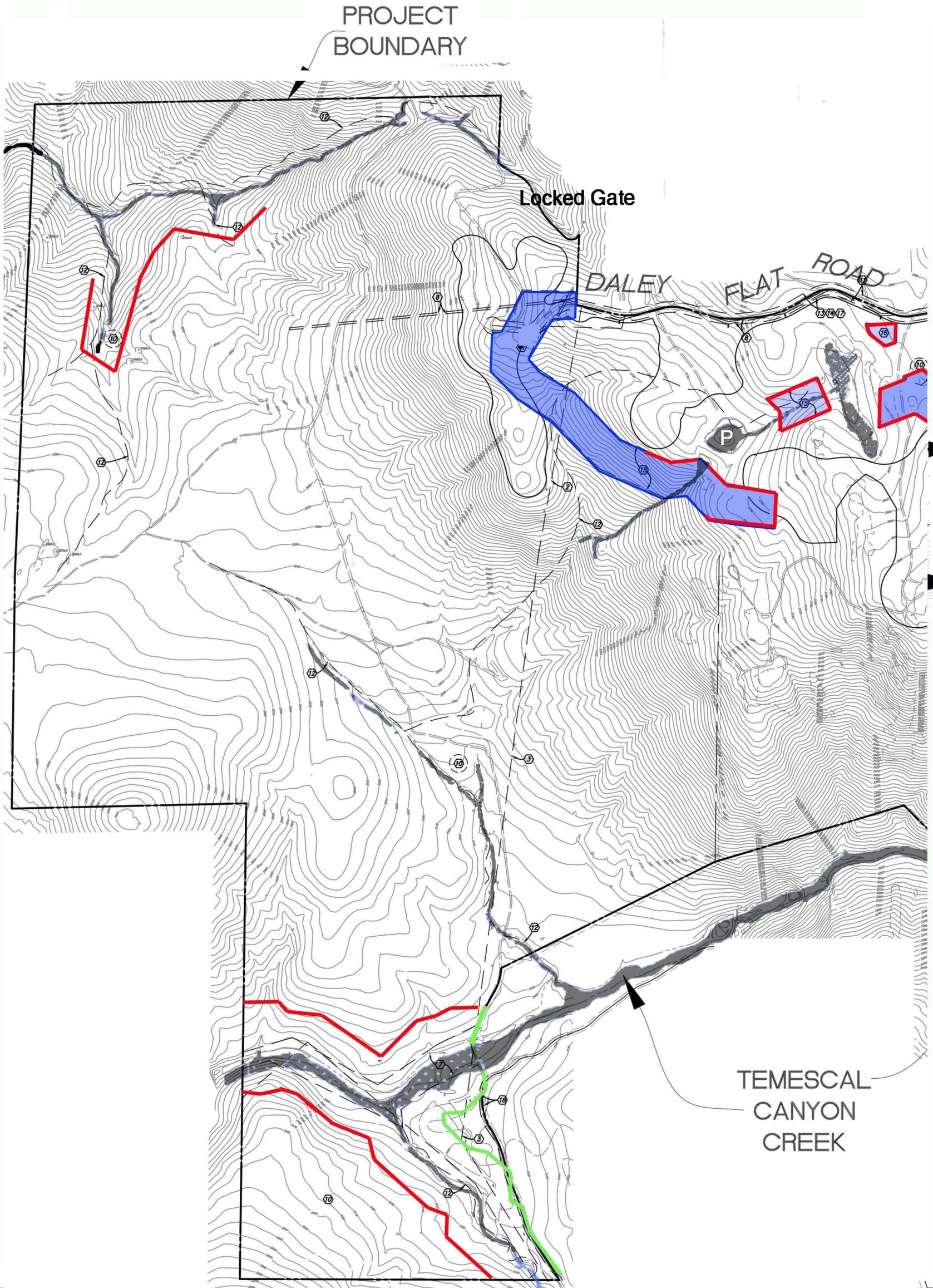


Figure 4C

Grazing and Fencing Plan - West



**Figures
and
Tables**

TABLE 1. OBSERVED SPECIES LIST – FLORA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Vegetation Community</u>
<i>Plagiobothrys</i> sp.	Popcornflower	H
<i>Plantago lanceolata</i> *	Narrow-leaf Plantain	R
<i>Plantago</i> sp.	Plantain	R
<i>Platanus racemosa</i>	California Sycamore	R
<i>Polygonum amphibium</i> var. <i>emersum</i> *	Water Smartweed	R
<i>Polygonum arenastrum</i> *	Yard Knotweed	R
<i>Polypogon monspeliensis</i> *	Rabbitfoot Grass	R
<i>Populus fremontii</i>	Western Cottonwood	R
<i>Potamogeton nodosus</i>	Long-Leaf Pondweed	R
<i>Potentilla glandulosa</i>	Cinquefoil	W
<i>Prunus ilicifolia</i>	Holly-leaf Cherry	C
<i>Prunus virginiana</i>	Chokecherry	W
<i>Pyrus communis</i> *	Common Pear	W
<i>Quercus agrifolia</i>	Coast Live Oak	W
<i>Quercus berberidifolia</i>	Interior Scrub Oak	C
<i>Quercus engelmannii</i>	Engelmann Oak	W
<i>Quercus kelloggii</i>	California Black Oak	W
<i>Rhamnus californica</i> var. <i>californica</i>	Coffee Berry	C
<i>Rhamnus crocea</i>	Redberry	C
<i>Rhamnus ilicifolia</i>	Redberry	C
<i>Rhamnus pilosa</i>	Interior Redberry	C
<i>Rhus trilobata</i>	Squawbush	W
<i>Rosa californica</i>	California Rose	R
<i>Rubus ursinus</i>	California Blackberry	R
<i>Rubus laciniatus</i>	Cut-leaf Blackberry	R
<i>Rumex acetosella</i> *	Sheep Sorrel	H
<i>Rumex conglomeratus</i>	Whorled Dock	R
<i>Rumex crispus</i> *	Curly Dock	R
<i>Rumex salicifolius</i>	California Dock	R
<i>Salix laevigata</i>	Red Willow	R
<i>Salix lasiolepis</i>	Arroyo Willow	R
<i>Salsola pestifer</i> *	Russian Thistle	H
<i>Salvia apiana</i>	White Sage	S
<i>Sambucus mexicanus</i>	Elderberry	S
<i>Sanguisorba minor</i> ssp. <i>muricata</i>	Burnet	H
<i>Sanicula crassicaulis</i>	Snakeroot	H
<i>Scirpus acutus</i> var. <i>occidentalis</i>	Western Bulrush	R
<i>Scrophularia californica</i> ssp. <i>floribunda</i>	Bee Plant	S
<i>Selaginella bigelovii</i>	Bigelow's Spikemoss	C
<i>Sidalcea malvaeflora</i> ssp. <i>sparsifolia</i>	Checkers	H
<i>Silene gallica</i> *	Common Catchfly	H

TABLE 1. OBSERVED SPECIES LIST – FLORA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Vegetation Community</u>
<i>Sisymbrium officinale</i> *	Hedge Mustard	H
<i>Sisyrinchium bellum</i>	Blue-eyed Grass	H
<i>Solidago californica</i>	Western Ragweed	W
<i>Sonchus asper</i> *	Sow Thistle	H
<i>Sonchus oleraceus</i> *	Sow Thistle	H
<i>Stachys ajugoides</i> var. <i>rigida</i>	Hedge Nettle	H
<i>Stellaria media</i>	Common Chickweed	H
<i>Stellaria</i> sp.	Chickweed	W
<i>Stipa pulchra</i>	Purple Stipa	H
<i>Stipa</i> sp.	Stipa	H
<i>Symphoricarpos mollis</i>	Snowbush	W
<i>Symphoricarpos</i> sp.	Snowbush	W
<i>Thalictrum polycarpum</i>	Bush Rue	W
<i>Thermopsis macrophylla</i> var. <i>semota</i>	Velvety False Lupine	H
<i>Toxicodendron diversilobum</i>	Poison Oak	W
<i>Trichostema lanatum</i>	Woolly Blue-curls	C
<i>Trifolium albopurpureum</i>	Indian Clover	H
<i>Trifolium bifidum</i>	Pinole Clover	H
<i>Trifolium ciliolatum</i>	Tree Clover	H
<i>Trifolium microcephalum</i>	Maiden Clover	H
<i>Trifolium tridentatum</i>	Tom Cat Clover	H
<i>Trifolium variegatum</i>	White-tip Clover	H
<i>Trifolium</i> sp. *	Clover	H
<i>Typha domingensis</i>	Slender Cattails	R
<i>Typha</i> sp.	Cattails	R
<i>Urtica dioica</i> ssp. <i>holosericea</i> *	Hoary Nettle	R
<i>Vicia americana</i>	American Vetch	H
<i>Vicia sativa</i> *	Spring Vetch	H
<i>Vicia villosa</i> *	Winter Vetch	H
<i>Vicia</i> sp.	Vetch	H
<i>Viola pedunculata</i>	Johnny Jump-up	C
<i>Vulpia myuros</i> var. <i>myuros</i> *	Foxtail Fescue	S
<i>Wyethia ovata</i>	Mule Ears	H
<i>Yucca whipplei</i>	Our Lord's Candle	S
<i>Zauschneria californica</i>	California Fuschia	R

Total = 286 species of plants detected

* = non-native taxon

bold = sensitive taxon (6 species)

TABLE 1. OBSERVED SPECIES LIST – FLORA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Vegetation Community</u>
Vegetation community codes:		
R – Wetland (SCLORF, RS, DW, OW, EW, CVFM)		
C – Chaparral (SMC, CC)		
S – Scrub (CSS, FTB, CSCS)		
H – Herbaceous Upland (NNG, MM)		
W – Woodland (CLOW, MOW, EOW, MCBC)		
D – Urban/Developed		

TABLE 2. OBSERVED SPECIES LIST – FAUNA

<u>Scientific Name</u>	<u>Common Name</u>
<u>Birds</u>	
<i>Agelaius phoeniceus</i>	Red-winged Blackbird
<i>Ammodramus savannarum perpallidus</i>	Grasshopper Sparrow
<i>Anas platyrhynchos</i>	Mallard
<i>Anthus rubescens</i>	American Pipit
<i>Aphelocoma coerulescens</i>	Scrub Jay
<i>Aquila chrysaetos</i>	Golden Eagle
<i>Archilochus anna</i>	Anna's Hummingbird
<i>Ardea herodias</i>	Great Blue Heron
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<i>Buteo lineatus</i>	Red-shouldered Hawk
<i>Buteo swainsoni</i>	Swainson's Hawk
<i>Butorides virescens</i>	Green Heron
<i>Callipepla californica</i>	California Quail
<i>Carduelis psaltria</i>	Lesser Goldfinch
<i>Carpodacus mexicanus</i>	Housefinch
<i>Cathartes aura</i>	Turkey Vulture
<i>Chamaea fasciata</i>	Wrentit
<i>Chondestes grammacus</i>	Lark Sparrow
<i>Circus cyaneus</i>	Northern Harrier
<i>Colaptes auratus</i>	Common Flicker
<i>Columbia fasciata</i>	Band-tailed Pigeon
<i>Corvus brachyrhynchos</i>	American Crow
<i>Corvus corax</i>	Common Raven
<i>Cyanocitta stelleri</i>	Steller's Jay
<i>Dendrocopos nuttallii</i>	Nuttall's Woodpecker
<i>Elanus caeruleus</i>	White-tailed Kite
<i>Empidonax difficilis</i>	Western Flycatcher
<i>Eremophila alpestris</i>	Horned Lark
<i>Falco sparverius</i>	American Kestrel
<i>Fulica americana</i>	American Coot
<i>Icertus sp.</i>	Oriole
<i>Icterus bullockii</i>	Bullock's Oriole
<i>Junco hyemalis</i>	Dark-eyed Junco
<i>Melanerpes formicivorus</i>	Acorn Woodpecker
<i>Meleagris gallopavo</i>	Turkey
<i>Mimus polyglottos</i>	Mockingbird
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher
<i>Myiarchus tuberculifer</i>	Ducky-capped Flycatcher
<i>Parus inornatus</i>	Plain Titmouse

TABLE 2. OBSERVED SPECIES LIST – FLORA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Vegetation Community</u>
<i>Passer domesticus</i>	House Sparrow	
<u>Birds (cont)</u>		
<i>Pheucticus melanocephalus</i>	Black-headed Grosbeak	
<i>Pipilo crissalis</i>	California Towhee	
<i>Pipilo erythrophthalmus</i>	Rufous-sided Towhee	
<i>Piranga ludoviciana</i>	Western Tanager	
<i>Podilymbus podiceps</i>	Pied-billed Grebe	
<i>Polioptila caerulea</i>	Blue-gray Gnatcatcher	
<i>Psaltriparus minimus</i>	Bushtit	
<i>Sayornis nigricans</i>	Black Phoebe	
<i>Selasphorus sasin</i>	Allen's Hummingbird	
<i>Sialia currucoides</i>	Mountain Bluebird	
<i>Sialia mexicana</i>	Western Bluebird	
<i>Sitta carolinensis</i>	White-breasted Nuthatch	
<i>Stelgidopteryx ruficollis</i>	Rough-winged Swallow	
<i>Sturnella neglecta</i>	Western Meadowlark	
<i>Tachycineta thalassina</i>	Violet-green Swallow	
<i>Thryomanes bewickii</i>	Bewick's Wren	
<i>Troglodytes aedon</i>	House Wren	
<i>Turdus migratorius</i>	American Robin	
<i>Tyrannus verticalis</i>	Western Kingbird	
<i>Tyrannus vociferans</i>	Cassin's Kingbird	
<i>Tyto alba</i>	Barn Owl	
<i>Wilsonia pusilla</i>	Wilson's Warbler	
<i>Zenaida macroura</i>	Mourning Dove	
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	
<u>Mammals</u>		
<i>Dipodomys</i> sp.	Kangaroo Rat	
<i>Felis concolor</i>	Mountain Lion	
<i>Lynx rufus</i>	Bobcat	
<i>Mephitis mephitis</i>	Striped Skunk	
<i>Microtus californicus</i>	California Vole	
<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat	
<i>Odocoileus hemionus</i>	Mule Deer	
<i>Peromyscus</i> sp.	Deer Mouse	
<i>Spermophilus beecheyi</i>	California Ground Squirrel	
<i>Sylvilagus audubonii</i>	Desert Cottontail	
<i>Thomomys bottae</i>	Valley Pocket Gopher	

TABLE 2. OBSERVED SPECIES LIST – FAUNA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Vegetation Community</u>
<u>Reptiles</u>		
<i>Anniella pulchra pulchra</i>	Silvery Legless Lizard	
<i>Cnemidophorus hyperythrus beldingi</i>	Orange-throated Whiptail	
<i>Cnemidophorus tigris multiscutatus</i>	Coastal Western Whiptail	
<i>Clemmys marmorata pallida</i>	Southwestern Pond Turtle	
<i>Coluber constrictor mormon</i>	Western Yellow-bellied Racer	
<i>Crotalus viridis</i>	Western Rattlesnake	
<i>Diadophis punctatus similis</i>	San Diego Ringneck Snake	
<i>Eumeces skiltonianus interparietalis</i>	Coronado Skink	
<i>Gerrhonotus multicarinatus</i>	Southern Alligator Lizard	
<i>Masticophis flagellum</i>	Red Racer	
<i>Masticophis lateralis</i>	Striped Racer	
<i>Phrynosoma coronatum blainvillei</i>	San Diego Horned Lizard	
<i>Pituophis melanoleucus</i>	Common Gopher Snake	
<i>Rhinocheilus lecontei</i>	Long-nosed Snake	
<i>Sceloporus occidentalis</i>	Western Fence Lizard	
<i>Thamnophis hammondi</i>	Two-striped Garter Snake	
<i>Uta stansburiana</i>	Side-blotched Lizard	
<u>Amphibians</u>		
<i>Bufo boreas</i>	Western Toad	
<i>Hyla cadaverina</i>	California Treefrog	
<i>Hyla regilla</i>	Pacific Treefrog	
<i>Rana catesbeiana</i>	Bullfrog	
<u>Fish</u>		
<i>Gambusia affinis</i>	Mosquito Fish	
<i>Lepomis cyanellus</i>	Green Sunfish	
<i>Micropterus salmoides</i>	Largemouth Bass	
<u>Butterflies</u>		
<i>Adelpha bredowii californica</i>	California Sister	
<i>Anthocharis sara</i>	Sara Orangetip	
<i>Apodemia mormo virgulti</i>	Behr's Metalmark	
<i>Artogeia rapae</i>	Cabbage White	
<i>Brephidium exile</i>	Pygmy Blue	
<i>Charidryas gabbii</i>	Gabb's Checkerspot	
<i>Coenonympha californica</i>	California Ringlet	
<i>Colias eurytheme</i>	Orange Sulphur	
<i>Colias harfordii</i>	Harford's Sulphur	
<i>Danaus plexippus</i>	Monarch	

TABLE 2. OBSERVED SPECIES LIST – FAUNA

<u>Scientific Name</u>	<u>Common Name</u>
<u>Butterflies (cont)</u>	
<i>Erynnis funeralis</i>	Funereal Duskywing
<i>Erynnis propertius</i>	Propertius Duskywing
<i>Glaucopsyche lygdamus</i>	Southern Blue
<i>Hemiargus ceraunus gyas</i>	Edward's Blue
<i>Icaricia acmon</i>	Acmon Blue
<i>Incisalia augusta</i>	Brown Elfin
<i>Junonia coenia</i>	Buckeye
<i>Leptotes marina</i>	Marine Blue
<i>Limenitis lorquini</i>	Lorquin's Admiral
<i>Junonia coenia</i>	Buckeye
<i>Papilio eurymedon</i>	Pale Swallowtail
<i>Papilio rutulus</i>	Western Tiger Swallowtail
<i>Papilio zelicaon</i>	Anise Swallowtail
<i>Philotes sonorensis</i>	Sonoran Blue
<i>Phyciodes mylitta</i>	Mylitta Crescent
<i>Pontia protodice</i>	Common White
<i>Pyrgus communis</i>	Common Checkered Skipper
<i>Speyeria coronis semiramis</i>	Semiramis Fritillary
<i>Speyeria sp.</i>	Greater Fritillary
<i>Vanessa annabella</i>	West Coast Lady
<i>Vanessa atalanta</i>	Red Admiral
<i>Vanessa cardui</i>	Painted Lady

Total = 131 animals (64 birds, 11 mammals, 17 reptiles, 4 amphibians, 3 fish, and 32 butterflies) detected
bold = sensitive taxon (27 species)

Table 3. Grazing Effects on Habitat Types

Habitat –Type	Holland Code	Grazing Value	Effect of Grazing Harm/ Neutral/ Benefit	AC
<u>Chaparral</u>				
Southern Mixed Chaparral (SMC)	37120	-	H	117.4 ac
Chamise Chaparral (CC)	37200	-	H	96.8 ac
<u>Scrub</u>				
Diegan Coastal Sage Scrub, Inland Form (CSS)	32520	-	H	40.6 ac
Flat-top Buckwheat (FTB)	37K00	-	H	71.3 ac
Coastal Sage – Chaparral Scrub	37G00	-	H	38.3 ac
<u>Woodland</u>				
Coast Live Oak Woodland (CLOW)	71160	yes	N	175.8 ac
Engelmann Oak Woodland (EOW)	71180	yes	N	246.0 ac
Mixed Oak Woodland (MOW)	77000	yes	N	115.8 ac
Mixed Oak/Coniferous/Bigcone/Coulter (MCBC)	84500	yes	N	8.7 ac
<u>Herbaceous Uplands</u>				
Non-native Grassland (NNG)	42200	yes	B	375.8 ac
Montane Meadow (MM)	45100	yes	B	76.3 ac
<u>Wetlands</u>				
Southern Coast Live Oak Riparian Forest (SCLORF)	61310	-	N	49.6 ac
Open Water (OW)	13100	-	N	0.07 ac
Coastal and Valley Freshwater Marsh/Emergent	52410/	-	H	0.85 ac
Riparian Scrub (RS)	63000	-	H	3.21 ac
Disturbed Wetland (DW)	11200	-	H	0.07 ac
<u>Unvegetated</u>				
Urban/Developed Habitat (U/D)	12000	-	N	0.9 ac
Total				1,416.8 ac

Table 4. Grazing Effects on Special Status Species

Special Status Species	Effect of Grazing <u>H</u>arm/ <u>N</u>eutral/ <u>B</u>enefit
San Diego Milk-vetch	N
Banner Dudleya	H
San Diego Gumplant	N
Cuyamaca Meadowfoam	H
Engelmann Oak	N
Velvety False Lupine	H
Grasshopper Sparrow	N
Golden Eagle	B
Great Blue Heron	B
Red-shouldered Hawk	N
Swainson's Hawk	N
Green Heron	N
Turkey Vulture	B
Northern Harrier	B
White-tailed Kite	B
Horned Lark	B
Blue-gray Gnatcatcher	N
Western Bluebird	B
Bewick's Wren	N
Barn Owl	B
Mountain Lion	B
Bobcat	B
San Diego Desert Woodrat	H
Mule Deer	B
Silvery Legless Lizard	H
Southwestern Pond Turtle	N
Orange-throated Whiptail	N
San Diego Ringneck Snake	H
Coronado Skink	H
Two-striped Garter Snake	N
San Diego Horned Lizard	H
Coastal Western Whiptail	B
Monarch Butterfly	N

Table 5. Dominant Soil Types

Name	Slopes (percentage)	Fertility	Erosion Potential	Grazing Potential	Approximate Area within 1,416.5-Acre Site (acres)
Crouch Rocky Coarse Sandy Loam (CuE)	5 – 30	Low to Medium	Moderate to High	Yes	150
Crouch Rocky Coarse Sandy Loam (CuG)	30 -- 70	Low to Medium	Moderate to Very High	-	
Crouch Coarse Sandy Loam (CtE)	5 – 30	Medium	Moderate	Yes	300
Holland Fine Sandy Loam (HmD)	5 – 15	High	Slight to Moderate	Yes	300
Holland Fine Sandy Loam (HmE)	15 – 30	High	Moderate to High	Yes	
Holland Stony Fine Sandy Loam (HnE)	5 – 30	Medium	Moderate	Yes	275
Holland Stony Fine Sandy Loam (HnG)	30 – 60	Medium	High to Very High	-	
Loamy Alluvial Land (Lu)	Flat to Gently Sloping	Medium to High	Slightly Sloping	Yes	23
Reiff fine sandy loam (RkC)	5 – 9	Medium to High	Slight to Moderate	Yes	20
Sheephead Rocky Fine Sandy Loam (SpG2)	30 – 65	Low	High to Very High	-	350
Total					1,418

Attachment A

Schedule of Meetings and Reporting

Meeting Schedule

Purpose	Meeting Deadline	Meeting Parties	Frequency
Annual Review	On or before - January 15 th	All	Annually
Quarterly Review	On or before April 15 th July 15 th October 15 th and January 15 th (1)	Resource Manager, Grazing Manager, Habitat Manger as needed	Quarterly for the first year only
Biannual Review	On or before July 15 th and January 15 th (2)	All	Every other year from year 2 forward
Issues Management	Flexible	Resource Manager, Grazing Manager, Habitat Manger as needed	As needed

Note 1: Fourth quarterly meeting may be combined with an annual review meeting.

Note 2: Second biannual meeting may be combined with an annual review meeting.

Reporting Schedule

Monitoring Requirements	Responsible Party	Report Deadline	Frequency	Report To
Stocking Rates	Grazing Manager	Jan.15th Included In Annual Report	Annually	Permitting Agencies
Monitor Vegetation Conditions	Habitat Manger	Jan.15th Included In Annual Report	Annually	Permitting Agencies
Invasive Vegetation Conditions	Habitat Manger	Jan.15th Included In Annual Report	Annually	Permitting Agencies
Infrastructure Conditions	Grazing Manager	Jan.15th Included In Annual Report	Annually	Permitting Agencies
Annual Monitoring Report	Resource Manager	Jan.15th Included In Annual Report	Annually	Permitting Agencies
Meetings	All	Jan.15th Included In Annual Report	Quarterly for the first year, biannual each subsequent year after	Permitting Agencies
Recommended Grazing Alternatives	Grazing Manager	Jan.15th Included In Annual Report	Annually	Permitting Agencies

Attachment B

Estimated Costs for Management

Estimated Costs for Management

CATEGORY	SPECIFICATION	UNIT	UNIT COUNT	UNIT COST	ON YEARS	Unamortized ON COST	CATEGORY TOTAL
Site Maintenance/							
Maintenance Management	Manage repairs	L.Hours	16	50	1	800	
Fence & Signage Repair	Replace signs, barriers	L.Hours	25	40	1	1000	
Fence & Signage	Materials (signs, wire, posts)	Item	1	200	1	200	
Road Maintenance	Maintain access	Item	1	500	1	500	
Category Total							\$2,500
Monitoring							
Monitoring Management	Manage patrols, coordinate with Habitat Manager	L.Hours	24	50	1	1,200	
Equipment	Shovels, binoculars, camera	Item	1	360	3	120	
Patrols	Security and patrol	L.Hours	48	40	1	1,920	
Oversight Review	Site visits, coordination, annual	L.Hours	20	50	1	1,000	
Category Total							\$4,240
Biological Surveys							
Project Biologist	Field surveys & reports	C.Hours				See RMP	
Project Biologist, sens.sp.	Protocol surveys	L.Hours				See RMP	
Administration & Management							
Management	Coordinate all on-going activities	L.Hours	40	50	1	2,000	
Meetings	Quarterly, and as needed	L.Hours	12	50	1	600	
Administration	Data maintenance, record keeping	L. Hours	20	40	1	800	
Reporting	Complete required reports	L. Hours	20	50	1	1,000	
Professional Services	Audit, Legal, Insurance	Item	1	2,000.00	1	2,000	
Category Total							\$6,400
Subtotal							\$13,140
Contingency @ 10%							\$1,314
Total							\$14,454

Attachment C
Timeline of Management Requirements

Timeline of Management Requirements

The Hoskings Ranch Conservation Grazing Management Plan (CGMP) is anticipated to take 12 to 18 months to implement from the time of formal project approval at the Board of Supervisors. The timeline below provides a hypothetical schedule based on an approval date in Fall of 2013. This schedule assumes continued grazing on the site.

Time Frame	Task
Fall 2013	Hoskings Ranch project approved with CGMP
	Initial meeting of CGMP managers
	Identification of tasks: Baseline assessments established Assignment of personnel duties Fencing plan initiated
Winter 2013 – Spring 2014	Implementation of CGMP monitoring
	Reporting begins in accordance with CGMP schedule
	Completion of fencing
Summer 2014 – Winter 2014	Continued implementation of CGMP
	Baseline data incorporated into CGMP, carrying capacity limits determined
	Monitoring continues
	Contracts let for grazing in accordance with CGMP grazing limits
Winter 2014 – Spring 2015	Cattle introduced to the site