

ENVIRONMENTAL ASSESSMENT  
LIVESTOCK GRAZING AUTHORIZATION

EA # CA-180-08-76

Engler (0403362)

Folsom Field Office  
August 2008

## 1.0 INTRODUCTION

This Environmental Assessment (EA) is prepared to disclose and analyze the environmental consequences of re-authorizing a livestock grazing permit/lease for 1-year as proposed on the Engler Allotment. The EA is a site-specific analysis of potential impacts that could result with the implementation of one of the alternatives. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in compliance with other laws and policies affecting the alternatives. If the decision maker determines that this project has “significant” impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a grazing decision will be issued along with a FONSI statement, documenting the reasons why implementation of the selected alternative would not result in “significant” environmental impacts.

### 1.1 BACKGROUND

The Engler Allotment, No. 4141, encompasses a total of 1,008 acres of public land, of which approximately 160 acres is grazable. The allotment is located in Tuolumne County, approximately one mile west of Route 49, near Moccasin, California. The legal description is: Township 1 South, Range 15 East, Section 30, lot 4, south ½ of lot 5; Section 31 lots 1 through 5, south ½ of lots 6 and 7, and lots 10 through 18; and Township 2 South, Range 15 East, Section 6, lots 1 through 4, the east ½ of lot 10, and those portions of lots 5, 8, and 11 above the high water line of Lake Don Pedro. The elevation range of the allotment is between 750 and 1,864 feet above mean sea level. Vegetation on the lease includes gray pine, blue oak, interior live oak, California buckeye, toyon, buckbrush, chamise, and common manzanita. Much of the lease area has serpentine geology and a corresponding plant community.

The original lease was permitted to Ida Lurene Kurzi from 1971 to 1978. Ms. Kurzi rented private land, the Eleanor Hughes Ranch, adjacent to the grazing lease. The Eleanor Hughes Ranch lease encompasses approximately 4074 acres. The Eleanor Hughes Ranch lease and the Bureau of Land Management grazing lease were both transferred to Gerald Engler in 1979 after the death of Ms. Kurzi. The lease has since been transferred to Matt Fischer, who leases the base property associated with the lease. The current lease allows fourteen cattle to feed on public lands from October 1 to May 1 (99 AUMs).

**Figure 1** (Regional Location Map) and **Figure 2** (Engler Allotment Map) depict the location of the allotment in a regional and local context.

### 1.2 Need for the Proposed Action

The purpose of the action is to consider whether to authorize grazing on the Engler allotment. If authorized, grazing would be in accordance with 43 CFR 4100 and consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, and Federal Land Policy and Management Act. The purpose of the action is also to ensure that all authorizations implement provisions of, and is in conformance with, the Sierra Resource Management Plan (February 2008), is in conformance with the Secretary Approved Rangeland Health Standards, and meets

other applicable goals and objectives, including protect and manage significant and sensitive resources on BLM lands..

The action is needed to respond to a replacement of appropriation act permit

### **1.3 Scoping and Issues**

Internal scoping identified the following issues: special status plants, an unknown lessee, and ACEC designation. Consultation with the tribes is required, and will be carried out through the cultural study. The EA will be circulated for public review, and circulated to interested public.

### **1.4 Prevention of Unnecessary or Undue Degradation**

In addition to the management prescriptions discussed in this EA, including all terms and conditions, BLM may use its authority to close an area of the allotment to grazing use or take other measures to protect resources at any time, if needed. Therefore, issuance of a grazing lease with appropriate terms and conditions is consistent with BLM's responsibility to manage the public's use, occupancy, and development of the public lands and prevent unnecessary or undue degradation of the lands. (43 USC 1732(b)).

### **1.5 Relationship to Statutes, Regulations and Plans**

#### **1.5.1 Endangered Species**

The Endangered Species Act of 1973 (ESA) requires federal agencies to complete formal consultation with the U.S. Fish and Wildlife Service (FWS) for any action that "may affect" federally listed species or critical habitat. The ESA also requires federal agencies to use their authorities to carry out programs for the conservation of endangered and threatened species.

Since this allotment contains a federally listed species subject to the Endangered Species Act, coordination and consultation with the U.S. Fish and Wildlife Service will be required. This allotment also contains state-listed species. State coordination and consultation may also be required pursuant to a Memorandum of Understanding between the U.S. Bureau of Land Management and the California Department of Fish and Game.

#### **1.5.2**

#### Agreement between State Director and State Historic Preservation Officer Protocol Amendment for Renewal of Grazing Leases

In August 2004, the State Director, California Bureau of Land Management and the California State Historic Preservation Officer (SHPO) addressed the issue of the National Historic Preservation Act (NHPA) Section 106 compliance procedures for processing grazing permit lease renewals for livestock as defined in 43 CFR 4100.0-5. The State Director and the SHPO amended the 2004 State Protocol Agreement Between California Bureau of Land Management

and The California State Historic Preservation Officer with the 2004 Grazing Amendment, Supplemental Procedures for Livestock Grazing Permit/Lease Renewal. This amendment allows for the renewal of existing grazing permits prior to completing all NHPA compliance needs as long as the 2004 State Protocol direction, the BLM 8100 Series Manual Guidelines, and specific amendment direction for planning, inventory methodology, tribal and interested party consultation, evaluation, effect, treatment, and monitoring stipulations are followed.

## 1.6 PLAN CONFORMANCE

### Determination:

The proposed action is in conformance with the Sierra Resource Management Plan (RMP), approved in February, 2008.

### Rationale:

The proposed action would occur in an area identified as available for livestock grazing in the Sierra Resource Management Plan (approved February, 2008). The proposed action is consistent with the land use decisions and resource management goals and objectives of the plan, as described in the RMP on pages 2.24-2.27, 2.43-2.45 and 2.65-2.71. The key decisions, goals, and objectives include: manage livestock to achieve the four fundamentals of rangeland health; change authorized grazing preference and/or season of use to meet or make progress toward meeting standards established by the Central California Standards and Guidelines for Livestock Grazing; protect and manage significant and sensitive resources on BLM lands; and ensure all management activities and BLM authorizations are consistent with the conservation needs for special status species.

## 1.7 RANGELAND HEALTH

The allotment meets all standards of the *Secretary of the Interior Approved Central California Rangeland Health Standards and Guidelines, June 2000*, according to the fiscal year 2000 Grazing Use Management/Rangeland Health Assessment. This information is presented in **Table 1** (Rangeland Health Standards).

**Table 1**  
**RANGELAND HEALTH STANDARDS**

<b>Rangeland Health Standard</b>	<b>Meets Standard Yes/No</b>	<b>Impacts From Livestock Yes/No</b>	<b>Remarks</b>
Soils	Yes <sup>1</sup>	No <sup>1</sup>	Soils are in good condition.
Species	Yes <sup>1, 2</sup>	No <sup>1, 2, 3</sup>	Special status species that occur on the lease include Red Hills roach (BLM-S), Western pond turtle (CA-SSC), Layne's butterweed (FT), Hoover's butterweed (BLM-S), Mariposa cryptantha (BLM-S), and Congdon's lomatium (BLM-S). Elderberry bushes also occur on the lease. Grazing has the potential to impact the three special status plant species. Weeds found within the lease include Italian thistle, tocalote, and small patches of yellow star thistle.
Riparian Habitat	Yes <sup>1</sup>	Yes <sup>2</sup>	A ¼ mile reach of the main drainage on the east side of the Engler lease is in marginal condition. Riparian plants along this reach exhibit variable plant vigor. Grazing may be limiting the extent of riparian vegetation and contributing to non-native vegetation. The road is contributing to sedimentation along the creek. The downstream reach demonstrates very good riparian condition with few non-native plants.
Water Quality	Yes <sup>1</sup>	No <sup>2, 4</sup>	Maintaining existing water quality. Red Hills roach, western pond turtle, and tadpoles were observed along the main drainage on the east side of the Engler lease.

FT = Federally threatened; BLM-S = BLM Sensitive; CA-SSC = California State Species of Special Concern

**Notes:**

1. FY 2000 Grazing Use Management/Rangeland Health Assessment, May 31, 2000.
2. Riparian Health Assessment Standard Checklist (Engler Allotment) May 31, 2000.
3. Data is currently being collected to determine the grazing impacts on the sensitive plant species.
4. Although the allotment boundary borders on Don Pedro Lake, actual grazing does not take place near the water. Therefore there is no impact on lake water quality.

**2.0 PROPOSED ACTION**

The proposed action renews the lease for a one-year period with a slightly revised season of use. The proposed action is to lease the allotment with a season of use from October 1 to April 15. The current season of use extends to May 1. The earlier end period for grazing will give the three plant species of most concern, all perennials, a greater fraction of their growth period to regrow after any defoliation. The number of livestock grazed would increase from 14 to 15 cows. Current management will serve as the current grazing alternative for this proposal. A “no grazing” alternative will also be evaluated. **Table 2** represents the proposed action for the Engler allotment.

**Table 2  
DESCRIPTION OF PROPOSED ACTION GRAZING PERMIT RENEWAL**

<b>Allotment</b>	<b>Number</b>	<b>Type</b>	<b>From</b>	<b>To</b>	<b>AUMs</b>
4141	15	Cattle	10/1	4/15	98

Monitoring

An agreement between FWS and BLM will require that BLM monitor Layne’s butterweed once between March 15 and April 15. This monitoring will be done to ensure that cattle are not grazing the rare plant area and to assess the phenology of Layne’s butterweed plants before April 15.

**2.1 CURRENT GRAZING ALTERNATIVE**

The current grazing alternative is represented in Table 3 as follows:

**Table 3  
DESCRIPTION OF CURRENT GRAZING ALTERNATIVE**

<b>Allotment</b>	<b>Number</b>	<b>Type</b>	<b>From</b>	<b>To</b>	<b>AUMs</b>
4141	14	Cattle	10/1	5/1	98

**2.2 No Grazing Alternative**

This alternative would cancel the permit on the Engler Allotment. As a result, grazing would not be authorized on this allotment. Under this alternative, BLM would initiate the process in

accordance with the 43 CFR parts 4100 and 1600 to eliminate grazing on the allotment and amend the resource management plan.

### 3.0 ENVIRONMENTAL ANALYSIS

The following resources are not present on the allotment, and therefore are not affected by lease renewal: environmental justice; essential fish habitat; farmlands (prime or unique); waste (hazardous or solid); wild and scenic river; wilderness; and wild horse and burro.

#### References:

<http://www.pcouncil.org/salfmp/a14/99efhl.pdf>

Natural Resources Conservation Service, Fresno Area Office, Personal Communication. July 29, 2002 (2:28pm) with Ed Russell.

Natural Resources Conservation Service (NRCS), Status of Soil Surveys California. (Map) July 29, 2002 (11:35am) <http://www.ca.nrcs.usda.gov/mlra/sstatus.html>

The Wilderness Information Network, National Wilderness Preservation System August 2, 2002 (11:38am) <http://www.wilderness.net/>

United States Department of Interior, Bureau of Land Management, Standards and Guidelines for California and Northwestern Nevada, Final EIS, April 1998, Wild Horse and Burro Management Areas Map-6.

### 3.1 Air Quality

#### 3.1.1 Affected Environment

The allotment is within the Mountain County Air Basin. The air basin is currently classified as non-attainment for ozone under NAAQS. For all other criteria pollutants, the air basin is in attainment. A SIP has been prepared for the air basin, which identifies sources of emissions. The areas that are considered to be sensitive for smoke management are Yosemite National Park and the communities of Mariposa and Coulterville.

#### 3.1.2 Environmental Consequences

##### Impacts of Proposed Action

Soil disturbance from the trampling action of the livestock when soil moisture levels are low may result in increased fugitive dust emissions (PM<sub>10</sub>) in the allotment. In addition, vehicles used in association with livestock operations would also generate small additional amounts of PM<sub>10</sub> emissions and various precursor emissions for ozone. Short-term PM<sub>10</sub> emissions would

not exceed standards. Given the relatively small number of animals, the overall long-term effect on air quality is considered less than significant.

Impacts of Current Grazing

Same as proposed action.

Impacts of No Grazing

This alternative would eliminate any and all emissions that would otherwise be associated with grazing in the subject allotment.

References:

United States Environmental Protection Agency (EPA), USA Air Quality Non-attainment Areas: July 26, 2002 (11:31 a.m.) <http://www.epa.gov/airs/nonattn.html>.

**3.2 Areas of Critical Environmental Concern (ACEC)**

3.2.1 Affected Environment

In 2008, with the adoption of the Sierra Resource Management Plan, the area that encompasses the Engler Allotment became part of the Red Hills Area of Critical Environment Concern (ACEC). The Red Hills ACEC consists of approximately 10,000 acres of public land managed to protect sensitive biological resources. These resources include Red Hills roach, Hoover's butterweed, Layne's butterweed, Mariposa cryptantha, and Congdon's lomatium, all of which occur on the allotment. The Red Hills ACEC was designated in 1993 near the historic town of Chinese Camp to protect rare plant species, unusual serpentine soils that provide habitat for unique flora, habitat for the rare minnow known as Red Hills roach, and Bald Eagle wintering habitat.

3.2.2 Environmental Consequences

Impacts of Proposed Action

Impacts to the rare species will be covered in the vegetation and wildlife portions of the document.

Impacts of No Action (Current Grazing)

Impacts to the rare species will be covered in the vegetation and wildlife portions of the document.

Impacts of No Grazing

Impacts to the rare species will be covered in the vegetation and wildlife portions of the document.

References:

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, FY 2000 *Grazing Use Management/Rangeland Health Assessment*, May 31, 2000

California Department of Fish and Game Habitat Conservation Planning Branch, August 7, 2002 (8:48am) [www.dfg.ca.gov/hcpb/species](http://www.dfg.ca.gov/hcpb/species)

United States Department of Interior, Bureau of Land Management, Red Hills Management Area, Final Sierra Planning Area Management Framework Plan Amendment and Environmental Assessment, CA-018-92-37, June 1993.

United States Department of Interior, Bureau of Land Management, Sierra Resource Management Plan and Final Environmental Impact Statement, February 2008.

### **3.3 Cultural Resources**

#### 3.3.1 Affected Environment

Over the years, BLM archaeologists and contract archaeologists have inventoried considerable portions of the area potentially affected by the proposed grazing lease renewal. Several properties have been found within the area of potential effect (APE) for the current grazing lease renewal project. These properties include:

- TM-67 (bedrock mortars)
- TM-68 (bedrock mortars)
- TM-69 (1800s homestead site with rock walls)
- TM-70 (prehistoric occupation deposits with bedrock mortars)
- TM-71 (bedrock mortars with possible prehistoric occupation deposit)
- TM-208 (rock-filled dam)

The two prehistoric bedrock mortars are unlikely to be eligible for the National Register of Historic Places (NRHP). The historic homestead with rock walls and the two prehistoric occupation deposits with bedrock mortars appear to have buried deposits and could have scientific research potential. However, a formal evaluation of eligibility for the National Register of Historic Places has not been conducted for any of these cultural properties. Historical research would be required to determine the eligibility of the rock-fill dam.

#### Impacts of Proposed Action:

In 2000, Dean Decker noted no impacts to these properties, with the exception of TM-70 where there was some trailing through the peripheral portion of the site. None of the properties have been evaluated, though Decker noted that TM-69, TM-70, and TM-71 appear to have buried deposits and could have scientific research potential. During a site visit this year, no new impacts to TM-69, TM-70, and TM-71 were observed. The intensity of grazing is relatively small, and there are few places where cattle would congregate. No new grazing facilities are

proposed. Given the terrain and cultural resource sensitivity of the APE, it is unlikely that the proposed grazing activity would negatively affect any of the known properties, even those with apparent buried deposits like TM-70 and TM-71. It is very unlikely that any yet-to-be discovered properties would be negatively affected.

Native American cultural values were analyzed. Tribes were consulted (see list on Page 20) to determine if they knew of any traditional values, Native American use areas, or sacred sites. In addition, the allotment was surveyed specifically for these values. Native American cultural values were not present on the allotment.

Impacts of No Action (Current Grazing Management)

Same as proposed action.

No grazing

Elimination of grazing on these allotments would not affect cultural resources.

References:

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, Cultural Resources Inventory Report, Report # CA-018-S-TM-00/13, June 5, 2000  
Primary Record BLM, Folsom Office, # CA-018-TM-208.

Barnes, J. 2008. Section 106 compliance for the Engler grazing lease renewal, Tuolumne County. Memorandum to the Field Manager. U.S. Bureau of Land Management, Folsom, California. 14 pp.

### **3.4 Flood Plains**

#### 3.4.1 Affected Environment

The south section of the allotment contains a 500-foot section of the Don Pedro Reservoir shoreline. This portion is within the 100-year flood plain as designated by the Federal Emergency Management Agency (FEMA). A reach above the Don Pedro Reservoir located along Hetch Hetchy Aqueduct Road is the main drainage on the eastern portion of the allotment. A section of this drainage is in marginal condition. The impacts to the drainage and the floodplain associated with it are potentially occurring due to grazing.

#### 3.4.2 Environmental Consequences

Impacts of Proposed Action

Grazing may be limiting the extent of native vegetation and contributing to the spread non-native vegetation within the floodplain along a ¼ mile reach assessed on the allotment.

Impacts of No Action (Current Grazing Management)

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Same as proposed action.

#### No Grazing

Under the no grazing alternative, the potential for spread of non-native vegetation through livestock hairs and scat would decrease throughout the allotment, although non-native populations would not be eliminated without further management efforts. Without grazing, the riparian vegetation would likely expand.

#### References:

ESRI and FEMA Hazards Information and Awareness US Hazard Flood Areas Map July 26, 2002 (3:02pm) <http://mapserver2.esri.com>

Bureau of Land Management, Folsom Field Office, Riparian/Wetland Assessment Standard Checklist, May 31, 2000.

### **3.5 Invasive, Non-native Species**

#### 3.5.1 Affected Environment

Italian thistle is prominent in some drainages. Tocalote is prominent in some upland locations, but the populations are not dense enough to have a large impact on the native plant populations. Small patches of star thistle occur along the main dirt road that goes through the Engler Lease.

#### 3.5.2 Environmental Consequences

##### Impacts of Proposed Action

Livestock grazing could be contributing to non-native vegetation along a ¼ mile reach of the main drainage on the east side of the Engler lease. Yellow star thistle has the potential to spread especially along disturbed areas such as the roadway if unrestricted.

##### Impacts of no action (current grazing management)

Same as proposed action.

#### No Grazing

Under the no grazing alternative, the potential for dispersal of seeds through livestock hairs and scat would decrease throughout the allotment. However, non-native populations would not be eliminated without further management efforts.

#### References:

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, FY 2000 Grazing Use Management/Rangeland Health Assessment, May 31, 2000

United States Department of Interior, Bureau of Land Management, Folsom Field Office,

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Riparian/Wetland Assessment Standard Checklist, May 31, 2000.

### **3.6 Recreation**

#### 3.6.1 Affected Environment

Although the allotment is within the Lake Don Pedro recreation area and abuts the shoreline at the lake, the only public access is by boat because of steep slopes and shrub-like vegetation. The proposed action will not impact recreational activities or facilities.

#### References:

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, California Native Species Field Survey Form, May 10, June 1 and 16, 2000.

The Fish Sniffer Online, Don Pedro Reservoir July 30, 2002 (8:56am) [www.fishsniffer.com](http://www.fishsniffer.com) (map)

### **3.7 Social and Economic**

#### 3.7.1 Affected Environment

The Engler allotment is a small, family-operated ranch and does not contribute a substantial source of income or revenue to the region. The allotment generates approximately \$140 to the federal government. Labor requirements for rangeland improvements are minimal. No significant socioeconomic impacts are associated with the allotment.

### **3.8 Soils**

#### 3.8.1 Affected Environment

Soils on the allotment are dominated by serpentine soils of the Delpiedra and Henneke series. Argonaut, Auburn, Trabuco and Sobrante soil series are located in the southern area of the allotment. Soil maps are not available for Tuolumne County.

Delpiedra soils are a soil series that extends to depths of 20 to 40 inches. The surface soil is slightly acidic reddish-brown loam. The subsoil is neutral to slightly acidic reddish-brown or yellowish-red clay loam. Permeability is moderate and the available water capacity is low. Delpiedra soils are underlain by hard serpentine rock at depths of 10 to 20 inches. The erosion hazard is moderate to severe and the soils occur on nearly level to very steep slopes. The fertility of the soil is low. Henneke soils are also underlain by hard serpentine rock at depths of 10 to 20 inches. The surface soil is neutral reddish-brown very gravelly loam. The subsoil is neutral dark

reddish-brown very gravelly clay loam or very gravelly clay. Permeability is moderately slow and the available water capacity is low. The erosion hazard is moderate to severe. This soil type is generally unsuitable for grazing.

Argonaut, Auburn, Trabuco, and Sobrante soil types are found in the south section of the Engler allotment. Argonaut soils are underlain by metabasic or basic rock at 20 to 40 inches. The surface layer is medium acid brown gravelly loam and gravelly silt loam. The subsoil is medium to slightly acid yellowish red, yellowish-brown, and brown heavy silt loam, clay, and gravelly clay. Auburn soils are underlain by basic igneous rock at 8 to 20 inches. The surface layer is slightly acid brown loam and the subsoil is slightly acid yellowish-red loam or heavy loam. Trabuco soils are underlain by weathered basic rock at 24 to 40 inches. The surface layer is slightly acid reddish-brown clay loam and the subsoil is medium acid reddish-yellow clay. Sobrante soils are underlain by fine-grained metamorphic rock at 22 to 36 inches. The surface layer is medium acid reddish-brown silt loam. The subsoil is slightly acid yellowish-red silt loam and light clay loam.

The soils were identified as being in good condition. There are no apparent grazing impacts and the soils meet the rangeland health standards.

### 3.8.2 Environmental Consequences

#### Impacts of Proposed Action

Livestock overgrazing can modify the soil stability and can increase bare soil areas. This introduces the potential of soil erosion and sedimentation. Increased erosion rates and water runoff rates may occur as a result of this imbalance. Cattle overgrazing has the potential to result in erosion and unsuitable slopes. The FY 2000 Grazing Use and Rangeland Health Assessment, dated May 31, 2000, stated that the soils on the Engler Allotment No. 4141 are currently in good condition, and therefore livestock grazing is not impacting soils on the allotment.

#### Impacts No Action (Current Grazing Management)

Same as proposed action.

#### No Grazing Alternative

Same as proposed action.

#### References:

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, Botanical Resources Inventory Report, September 10, 2001.

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, FY 2000 Grazing Use Management/Rangeland Health Assessment, May 31, 2000.

United States Department of Agriculture, Soil Conservation Service and Forest Service, Soil

Survey of El Dorado Area, California, April 1974 (used for descriptions of Delpiedra, Argonaut, and Sobrante soil series).

United States Department of Agriculture, Soil Conservation Service and Forest Service, Soil Survey of Mariposa County Area, California, October 1974 (used for descriptions of Henneke, Auburn, and Trabuco soil series).

### 3.9 Vegetation

#### 3.9.1 Affected Environment

The vegetation of the northeastern portion of the allotment is typical of the foothills of the western Sierra Nevada. Mixed chaparral consists primarily of toyon (*Heteromeles arbutifolia*), common manzanita (*Arctostaphylos manzanita*) and holly-leaf redberry (*Rhamnus ilicifolia*). There are small areas of oak woodland/chaparral with blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), and California buckeye (*Aesculus californica*). Grasses that occur on the grazable land include red brome (*Bromus rubens*) and foxtail fescue (*Vulpia magalura*). Much of the allotment has serpentine geology. The vegetation in these areas is often dominated by relatively open stands of buckbrush and gray pine, or thick stands of chamise. Perennial grasses in openings include squirreltail and California melic.

Biological field studies begun in May 2000 found that the Engler allotment provides habitat for four special status plant species: Layne's butterweed (*Senecio layneae*), Hoover's butterweed (*Senecio clevelandii heterophyllus*), Mariposa cryptantha (*Cryptantha mariposae*) and Congdon's lomatium (*Lomatium congdonii*).

- Layne's butterweed (*Senecio layneae*) is a federally threatened species and state rare species found on the allotment. This perennial plant occurs in chaparral and cismontane woodland habitats. It is often associated with rocky serpentine or gabbroic areas. Threats include urbanization, road construction, and grazing.
- Hoover's butterweed (*Senecio clevelandii heterophyllus*) is a BLM Sensitive species that occurs on the allotment. This perennial plant occurs in serpentine seeps within cismontane woodland habitats. It occurs only in the Red Hills.
- Congdon's lomatium (*Lomatium congdonii*) is a BLM Sensitive species that occurs on the allotment. This perennial plant occurs in chaparral and cismontane woodland habitats and is associated with serpentine soils. Threats include vehicle use and mining.
- Mariposa cryptantha (*Cryptantha mariposae*) is a BLM Sensitive species that occurs on the allotment. This perennial plant occurs in chaparral and is associated with serpentine soils. Threats include vehicle use and mining.

#### 3.9.2 Environmental Consequences

##### Impacts of Proposed Action

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Layne's butterweed (*Senecio layneae*) might be negatively impacted if grazing activity occurred within the areas of concentration during seasonal periods of vulnerability. Surveys of the allotment found little evidence of grazing in the habitat of Layne's butterweed. And the season of use under the terms and conditions of this lease is being adjusted to avoid a period during which the species is vulnerable to reproductive impacts. Monitoring of Layne's butterweed will also be conducted once between March 15 and April 15. This monitoring will be done to ensure that cattle are not grazing the rare plant area and to assess the phenology of Layne's butterweed plants before April 15. This monitoring adds another layer of protection for this threatened plant species. A full discussion of the impacts of grazing on this species is contained in the Biological Evaluation done for informal consultation with the US Fish and Wildlife Service on this grazing lease renewal.

The three BLM-sensitive plant species that also have been found in the lease area occupy different ecological niches and respond differently to grazers. Congdon's lomatium, an upland perennial species has been shown to be consumed by livestock. It has a storage root, so established plants can survive some occurrences of defoliation. Hoover's butterweed is a riparian perennial that is relatively unattractive to cattle. Because it grows in or near riparian zones, it has a long growing season and can regrow after early-season disturbance. Mariposa cryptantha, an annual, because of its growth form may also be unattractive to cattle. However it is not deeply rooted and it is likely to be uprooted or killed if grazing does occur.

Congdon's lomatium is an upland perennial species. Evidence of grazing impacts for this species was found in a study on BLM land in the Red Hills initiated by John Willoughby in 1985. An analysis of the first two years of this study was published in the proceedings of the first rare plant conference of California Native Plant Society. That paper concluded that Congdon's lomatium was negatively impacted by grazing, reducing plant size, vigor and reproductive output. The author continued monitoring the species from 1987 to 1990. Although an occurrence of Congdon's lomatium was found within the mapped allotment, it is fenced into another (mostly private land) pasture that is grazed by horses. This use is unauthorized and will not be authorized by this grazing lease. It should be noted that numbers of Congdon lomatium plants observed in any year have never been more than single digits.

Hoover's butterweed is a perennial riparian species. At least a portion of the habitat for this species on the lease is consistently grazed. However, the species seems to be unattractive to cattle----often it will be one of the last remaining intact species when the riparian area has been grazed. The earlier season of use proposed for this lease will reduce the concentration of cattle in the riparian area, because water and succulent vegetation are not as confined to riparian zones early in the spring, as they are later in the season.

Mariposa cryptantha is an upland annual species. It is small, wiry, and hairy and produces little foliage. For these reasons it may be less attractive to grazers than other species. On the other hand, it is easily dislodged so whole plants could be consumed. The northwestern corner of the leased public land where the largest area of Mariposa cryptantha habitat was discovered, is

probably not readily available to cattle. No sign of cattle use in this habitat area was observed. However, some Mariposa cryptantha plants were discovered in areas where cattle use is more likely.

Impacts of No Action (Current Grazing Management)

This alternative is similar to the proposed action. However, cattle would remain on the allotment longer, potentially causing more defoliation of the perennial plant species of concern, therefore causing more potential impacts to the special status plants. The longer grazing period would not allow the plants a full growth period of recovery from possible defoliation.

No Grazing

This alternative would eliminate potential grazing impacts to the special status plant species found on the allotment.

References:

United States Department of Interior, Bureau of Land Management, Decision Record, Sierra Management Framework Plan Amendment for the Red Hills Management Area and

Environmental Assessment, NEPA CA-018-92-37, June 1993.

United States Department of Interior, Bureau of Land Management, Bakersfield District, Red Hills Management Area and Environmental Assessment (Draft), June 1984.

California Natural Diversity Database, State and Federally Listed Endangered, Threatened and Rare Plants of California, October 2001.

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, Bakersfield Resource Advisory Council Standards and Guidelines for Rangeland Health.

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, California Native Species Field Survey Forms, May 10, June 1 and 16, 2000.

### **3.10 Water Quality**

#### 3.10.1 Affected Environment

The Engler allotment is located within the San Joaquin River Basin portion of the Upper Tuolumne Watershed (USGS Cataloging Unit Number 18040009). The San Joaquin River is the principal waterway in the basin. Several unnamed streams run through the allotment and drain into Don Pedro Reservoir, which abuts the southern boundary of the allotment.

The Hetch Hetchy Aqueduct runs through the south section of the allotment. Beneficial uses have been designated in The Water Quality Control Plan for the California Regional Water

Quality Control Board for the Central Valley Region for the Upper Tuolumne River. The beneficial uses for the Upper Tuolumne River have been identified as municipal supply, agriculture, industry, recreation, and freshwater and wildlife habitat. The Don Pedro Reservoir has been identified as having a potentially beneficial use for municipal supply. Existing beneficial uses are industry, recreation, and freshwater and wildlife habitat.

### 3.10.2 Environmental Consequences

#### Impacts of Proposed Action

Water quality contamination from cattle grazing (discharge of animal waste in intermittent streams and riparian areas) may potentially occur in the form of surface water runoff into occupied habitat. However, the flows of surface water from cattle grazing areas would likely infiltrate the soil prior to contaminating surface water.

Water quality within the allotment meets standards for grazing management, as stated in the FY 2000 Grazing Use and Rangeland Health Assessment and shows the water quality trend as maintaining existing water quality. The riparian conditions are at levels that indicate better than adequate water quality and meet the State of California numeric water quality standards and objectives. Grazing does not occur along the shoreline of Don Pedro Reservoir or near the Hetch Hetchy Aqueduct.

#### Impacts of No Action (Current Grazing Management)

Same as proposed action.

#### No Grazing

Same as proposed action.

#### References:

United States Department of Interior, Bureau of Land Management, Standards and Guidelines for California and Northwestern Nevada, Final EIS, April 1998.

United States Environmental Protection Agency's Enviromapper for Watersheds August 16, 2002 (4:14pm) <http://map2.epa.gov>

The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region, Fourth Edition, 1998.

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, Fiscal year 2000 Grazing Use Management/Rangeland Health Assessment, May 31, 2000.

Bureau of Land Management, Folsom Field Office, Riparian/Wetland Assessment Standard Checklist, May 31, 2000.

United States Environmental Protection Agency's Total Maximum Daily Loads August 16, 2002

(4:27pm) <http://oaspub.epa.gov>

### **3.11 Wetlands/Riparian Zones**

#### 3.11.1 Affected Environment

Willows, California coffeeberry, western spicebush, and some blue elderberry dominate riparian vegetation. Italian thistle, a noxious weed, is prominent in some drainages. Some riparian communities on the allotment occur on Delpiedra soil. This is a serpentine soil often associated with rare plant species.

Riparian/wetland assessments of two stream reaches indicate that some impacts are potentially occurring due to grazing, but the overall evaluation was that the stream is in proper functioning condition.

#### 3.11.2 Environmental Consequences

##### Impacts of Proposed Action

Grazing may be limiting the extent of wetland vegetation and contributing to non-native vegetation along a ¼ mile reach assessed on the allotment. Sedimentation is also occurring along this section of the drainage due to the Hetch Hetchy Aqueduct Road. The downstream reach was in good condition.

##### Impacts of No Action

Same as proposed action.

##### No Grazing

Riparian vegetation would most likely recover and expand, improving the overall health of the drainage. The noxious weeds would remain and sedimentation from the road would likely continue.

##### References

Bureau of Land Management, Bakersfield District, Folsom Office, Botanical Resources Inventory Report, September 10, 2001.

Bureau of Land Management, Bakersfield District, Folsom Office, Fiscal year 2000 Grazing Use Management/Rangeland Health Assessment, May 31, 2000.

Bureau of Land Management, Folsom Field Office, Engler Allotment No. 4141 Riparian/Wetland Assessment Standard Checklist, May 31, 2000.

### **3.12 Wildlife Habitat**

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### 3.12.1 Affected Environment

Mammals in the area include mule deer (*Odocoileus hemionus*), common gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), and several species of rodents. Common birds in the area include mourning dove (*Zenaida macroura*), California quail (*Callipepla californica*), flycatchers, wrens, finches, red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), great horned owl (*Bubo virginianus*), and prairie falcon (*Falco mexicanus*). Many species of introduced fish, such as green sunfish (*Lepomis cyanellus*) and mosquitofish (*Gambusia affinis*), inhabit the drainages running through the allotment. Reptiles and amphibians include gopher snakes (*Pituophis melanoleucus*) and bullfrogs (*Rana catesbeiana*).

Rare species found in the Red Hills area include Red Hills roach (*Lavinia symmetricus*), western pond turtle (*Clemmys marmorata*), and foothill yellow-legged frog (*Rana boylei*). Elderberry bushes, potential habitat for valley elderberry longhorn beetle, occur on the allotment.

- The Red Hills roach (*Lavinia symmetricus spp.*), a BLM Sensitive species and a California State Species of Special Concern, is found in abundance in several pools of permanent water located along the intermittent streams that drain into Six Bit Gulch and Poor Man's Gulch. During the dry part of the year the fish are confined to these permanent pools surviving in warm shallow water until spring when they move upstream to spawn. The Red Hills roach population is threatened by its isolated nature, habitat degradation, and competition and predation from introduced fish.
- The Western pond turtle (*Clemmys marmorata*), a California State Species of Special Concern, occurs in drainages that run through the allotment. Western pond turtles are found in still or slow-moving waters with aquatic basking sites. Nesting sites must be at the appropriate temperature and moisture for eggs to survive. Nests are commonly found in clay or silt soils. Hatchlings require shallow water with dense emergent vegetation. The populations have been declining as a result of poor recruitment. Habitat degradation has left few areas suitable for nesting sites.
- Foothill yellow-legged frog (*Rana boylei*), a BLM sensitive species, occurs in one drainage that runs through the allotment.
- Elderberry plants were also found on the lease. The plants have no special federal or state status, but they do have the potential to provide habitat for the federally threatened Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

### 3.12.2 Environmental Consequences

#### Impacts of Proposed Action

No negative grazing impacts have been observed. The wildlife in the area does not appear to be affected by grazing. Special status wildlife species are not impacted by cattle grazing on this allotment.

Impacts of No Action (Current Grazing Management)

Same as proposed action.

No Grazing

No impacts.

References:

United States Department of Interior, Bureau of Land Management, Standards and Guidelines for California and Northwestern Nevada, Final EIS, April 1998.

United States Department of Interior, Bureau of Land Management, Decision Record, Sierra Management Framework Plan Amendment for the Red Hills Management Area and Environmental Assessment, NEPA CA-018-92-37, June 1993.

California Department of Fish and Game, Habitat Conservation Planning Branch July 30, 2002 (9:03am) <http://www.dfg.ca.gov/hcpb/species/species.shtml>.

Bureau of Land Management (BLM), Bakersfield District, Folsom Office, Fiscal year 2000 Grazing Use Management/Rangeland Health Assessment, May 31, 2000.

**Cumulative Impacts**

Cumulative impacts are the “incremental impacts of a proposal when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person undertakes them” (40 Code of Federal Regulations 1508.7).

This population of *Packera layneae* may be impacted if Turlock Irrigation District (with the possible partner in Modesto Irrigation District) is granted a FERC license for a pumped storage project they have been planning for this portion of the Red Hills. A portion of the *Packera* population might be inundated by the reservoir for the project, and associated construction activity and ancillary development might further affect the population. The *Packera* population straddles public land that would be affected by the project and private land that the irrigation districts have purchased for the project.

**4.0 Consultation and Coordination**

**Persons, Groups, and Agencies Consulted**

- Amy Fesnock, U.S. Fish and Wildlife Service, Sacramento Field Office
- Brian Hansen, U.S. Fish and Wildlife Service, Sacramento Field Office
- American Indian Council of Mariposa County
- Chicken Ranch Rancheria of Me-Wuk
- Tuolumne Me-Wuk Tribal Council

### **Public Participation**

The EA will be available on BLM's website for a 15-day public review period. It will also be sent to the lessee and those identified as interested publics for this allotment.

### **List of Preparers and Reviewers**

- Peggy Cranston, Wildlife Biologist and Range Program Lead
- Al Franklin, Botanist
- James Barnes, Archaeologist and NEPA Coordinator

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□ *ENGLER ALLOTMENT* □

5.1 BLM Interdisciplinary Team

Reviewers:

Janina Baum  
NEPA Reviewer/Cultural Resources

8/14/08

Albee Franklin  
Botany

8/13/08

Peggy Cranston  
Wildlife

8/14/08

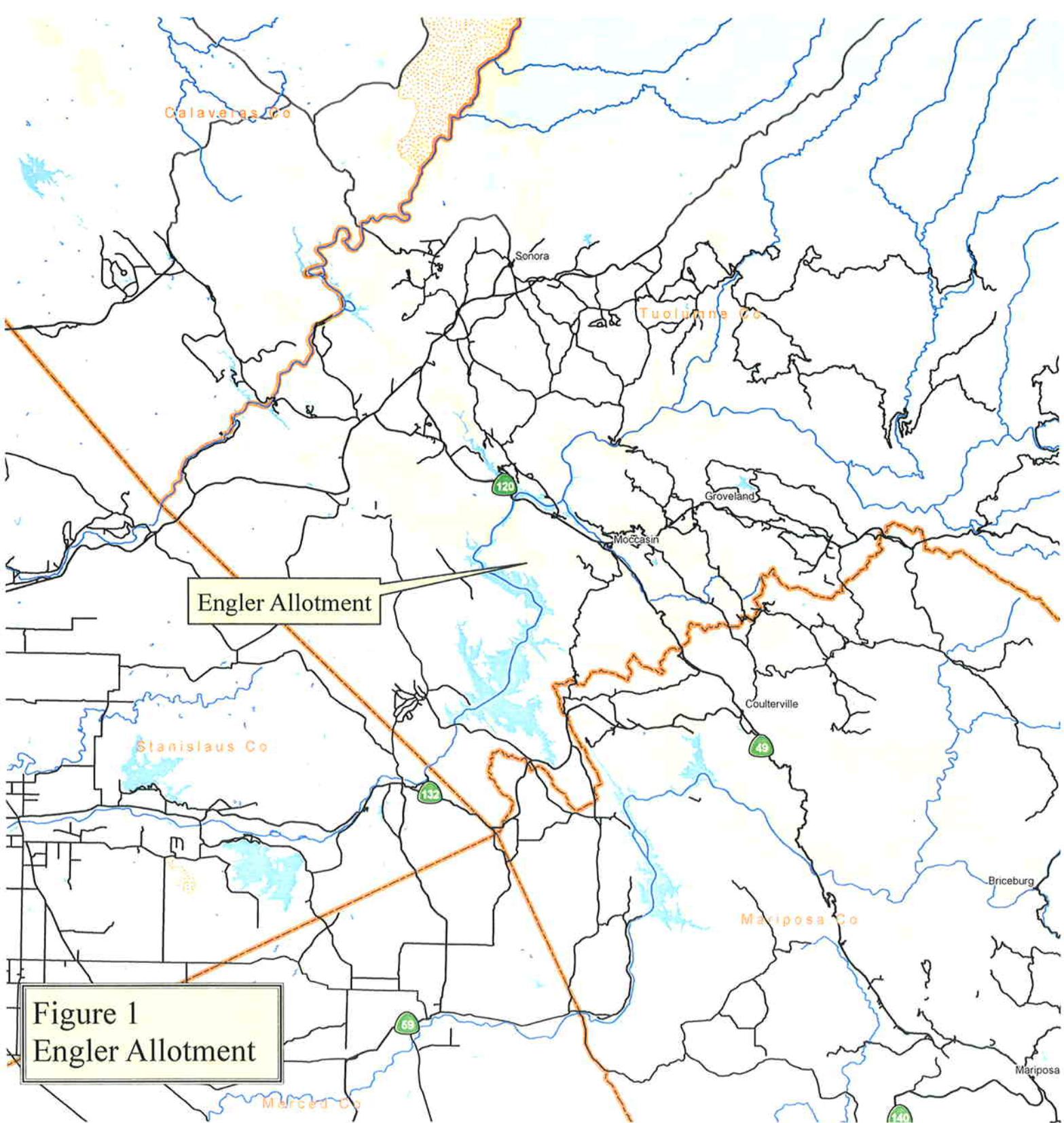


Figure 1  
Engler Allotment

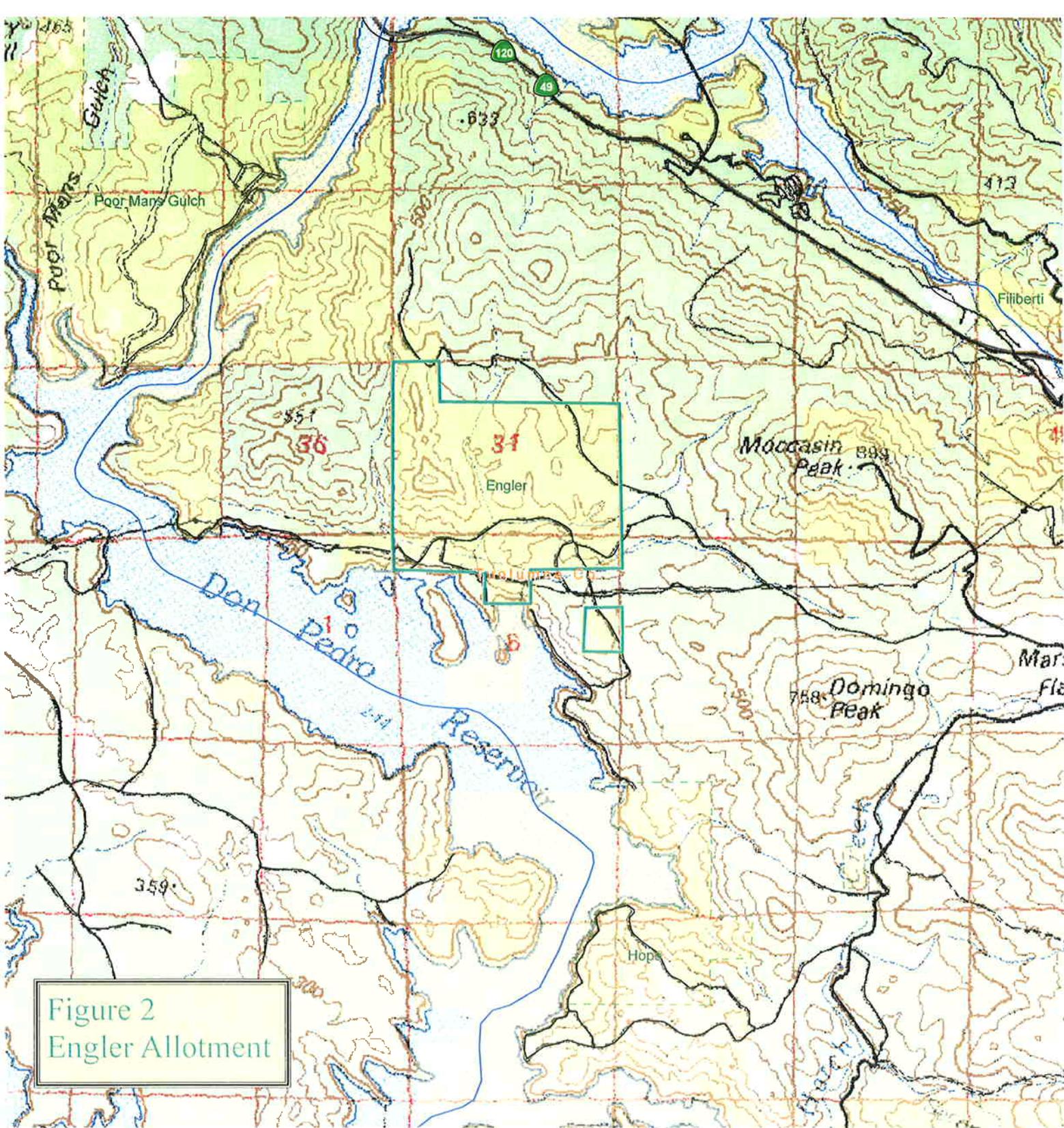


Figure 2  
Engler Allotment

## FY2000 Grazing Use Management/Rangeland Health Assessment

**Allotment number:** 4141      Maps: Oakdale      County:  
Allotment legal location: see file      Acres: 1,008  
**Lessee:** Gerald Engler      Phone: 209-532-4754  
Base property leased: leases adjacent land      Acres:  
Allotment terms:      Animals: 8 cows year round,      AUMs:96      Expires: 5/31/2001

BLM Reviews: 5/31/2000 Al Franklin, Dean Decker, Jane Bardolf for health assessment.

**Access:** There are lots of locked gates. San Francisco water department maintains main road and loans out keys.

**Utilization:** cows are scattered on very large allotment, forage in good condition

### Standards For Rangeland Health

Soils: good condition.

Species: see Al Franklin for write up.

Native Biodiversity: American Dipper seen along the same creek as contained the Red Hills Roach.

Special Status Animals: none-apparent

Special Status Plants:

Noxious weeds (acres) Star thistle along road

Riparian/Wetland: see Al Franklin for write up.

PFC (miles)

Vegetation

Cover

Age/Structure Diversity

Hydrophyllic Plants

Woody Debris

Streambank Stability

Water Quality:

Water Quality Trend: maintaining existing water quality.

Aquatic Special Status Species: 150+ Red Hills roach seen in multiple pools in an unnamed stream within this allotment. Tadpoles assumed to be bull frogs were also seen.

Section 303(d) (Federal Clean Water Act) Status:

### Guidelines For Grazing Management

All guidelines are being met.

Cultural Resources: See Dean Decker's report in allotment file

**Determination:** S & G category: 3 in EIS, currently a 2

Recommendations/Actions:

Recommend continuing lease as is. Star thistle is just starting to come in along the road. It would be a good time to beat it back before it takes over. Also presence of Red Hill roach was confirmed in a creek in this allotment. We may at some point in the future want to consider adding part of the allotment to the Red Hill ACEC.

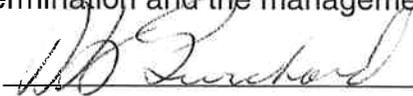
**References**

USDI, BLM June, 1999. Record of Decision, Central California, Standards for Rangeland Health and Guidelines Livestock Grazing Management.

**Concurrence:**

I concur with this determination and the management recommendations provided.

Field Office Manager

A handwritten signature in cursive script, appearing to read "W. D. Luchard", is written over a horizontal line.

Bureau of Land Management  
Bakersfield District  
Folsom Resource Area

## Botanical Resource Inventory Report

**Project name:** Engler grazing lease renewal

**Project description:** Renewal of an existing grazing lease, for up to 10 years. 99 AUM is the amount of forage allocated with this lease.

**Size of disturbance:** 1008 acres leased. Not all of this acreage may be accessible to cattle.

**Project location:** Portions of T1S, R15E, sec. 31; T2S, R15E, sec. 6; T2S, R14E, sec. 1.

**USGS Quads:** Moccasin and Chinese Camp

**County:** Tuolumne

**Geographic area:** Sierra foothills

**Elevation range:** 700'-1864'

**Geology/soils:** Most of the lease area is dominated by serpentine soils of the Delpiedra and Henneke series. At the south margin of the lease, soils of the Argonaut, Auburn, Trabuco and Sobrante soil series occur.

**Land form:** From steep ridges and peaks to valley bottoms. One striking feature is the steep rocky cascade that water descends south into Don Pedro Reservoir after flowing west in the main drainage that crosses the southern portion of the lease.

**Plant community/vegetation:** Two plant communities dominate the landscape of the lease. Dense chamise chaparral dominates many of the slopes, especially on south facing slopes. Buckbrush chaparral, often with scattered gray pine, is dominant over much of the rest of the serpentine soil area. Mixed chaparral has toyon, common manzanita, holly-leaf redberry in addition. There are small areas of oak woodland/chaparral with blue oak, interior live oak and California buckeye. Riparian areas are dominated by willows, California coffeeberry, western spicebush, and large leather-root (*Hoita*), with occasional blue elderberry.

**CNDDDB records:** None very close to the project area. Records to the east include *Allium tuolumnense* and *Lupinus spectabilis*. Records to the west include *Verbena californica*, *Senecio layneae*, *Senecio clevelandii heterophyllus*, *Chlorogalum grandiflorum*, *Lomatium congdonii*, *Allium tuolumnense*

**Inventory description (methodology, problems, reliability, coverage):** Areas for survey were prioritized. Riparian areas and areas supporting buckbrush chaparral were given priority, especially when these communities occurred on Delpiedra soil series soils. In the Red Hills, just to the west, the rare species are all associated with these communities and soils. Areas were walked. Routes were often restricted by thick brush. Even some riparian corridors were impassable without detours up into the less dense upland brush.

**Sensitive species particularly searched for:** Red Hills serpentine species including *Verbena californica*, *Senecio layneae*, *Senecio clevelandii heterophyllus*, *Chlorogalum grandiflorum*, *Lomatium congdonii*, *Allium tuolumnense*, *Brodiaea pallida*.

**Sensitive species or other botanical resources at site:** *Senecio layneae*, *Senecio clevelandii heterophyllus*, *Lomatium congdonii*

**Weeds at site:** Italian thistle is prominent in some drainages. Tocalote is prominent in some upland locations, but its density does not seem sufficient to have a large impact on the native plant

community. Small patches of yellow star thistle were also found.

**Project impacts:** Grazing has the potential to impact all three special status plant species found in the lease area. There is evidence that cattle will consume both *Lomatium congdonii* and *Senecio layneae*.

**Recommendations:** *Senecio layneae* is federally listed as a threatened species and enjoys the protections of the Endangered Species Act. It clearly can be affected by grazing as demonstrated by monitoring in the Red Hills. On the other hand, a very large and apparently healthy population of *Senecio layneae* occurs in this leased area. The area with the greatest concentration of the species is isolated by thick brush and it may not get much grazing pressure.

Before a decision on long-term lease renewal is reached, other information should be gathered:

(1) Additional surveys should be conducted on remaining north and east facing slopes of the highest peak in the lease area. These areas are difficult to access but have high potential—the largest occurrence of *Senecio layneae* was found in this area. Earlier season surveys may find additional occurrences of *Lomatium congdonii*, and possibly *Allium tuolumnense* also.

(2) The amount of grazing activity in the habitat areas of the rare species should be assessed.

**Date of inventory:** 5/10, 5/11 and 5/31/2000; 6/25 and 6/29/2001

**Date of report:** 9/10/2001

**Signature:**



**Title:** Botanist



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Folsom Field Office  
63 Natoma Street  
Folsom, California 95630  
[www.ca.blm.gov/folsom](http://www.ca.blm.gov/folsom)

6840  
CA-018.20

Susan Moore, Field Supervisor  
Sacramento Field Office  
U.S. Fish and Wildlife Service  
2800 Cottage Way  
Sacramento, California 95825

Dear Ms. Moore,

The Folsom Field Office of the Bureau of Land Management (BLM) is requesting concurrence with a determination that the annual renewal of a grazing lease in Tuolumne County, California may affect but is not likely to adversely affect the following listed threatened species: Layne's butterweed (*Packera layneae*).

Based on the attached biological evaluation, BLM has assessed that the proposed action is not likely to adversely impact Layne's butterweed. Little if any sign of cattle grazing in the habitat of the species has been observed. The grazing season has been modified to early spring (ending by April 15) to avoid the most vulnerable time period of bolting and flowering (demonstrated through monitoring of a nearby population that is also subjected to grazing pressure). Earlier grazing would also give Layne's butterweed, a perennial, a greater fraction of its growth period to regrow if any defoliation were to occur.

### Attachment

1 - Biological Assessment

Sincerely,

William S. Haigh, Field Manager

## BIOLOGICAL EVALUATION FOR GRAZING IN THE RED HILLS EAST OF DON PEDRO RESERVOIR, TUOLUMNE COUNTY, CA

### Introduction:

Allotment, No. 4141, encompasses a total of 1,008 acres of public land, of which approximately 160 acres has been classified as grazable. The allotment is located in Tuolumne County, approximately one mile west of Route 49, near Moccasin, California. The legal description is: Township 1 South, Range 15 East, Section 30, lot 4, south ½ of lot 5; Section 31 lots 1 through 5, south ½ of lots 6 and 7, and lots 10 through 18; and Township 2 South, Range 15 East, Section 6, lots 1 through 4, the east ½ of lot 10, and those portions of lots 5, 8, and 11 above the high water line of Lake Don Pedro. The elevation range of the allotment is between 750 and 1,864 feet above mean sea level. Woody vegetation on the lease includes gray pine, blue oak, interior live oak, California buckeye, toyon, buckbrush, chamise, and common manzanita.

The original lease was permitted to Ida Lurene Kurzi from 1971 to 1978. Ms. Kurzi rented private land, the Eleanor Hughes Ranch, adjacent to the grazing lease. The Eleanor Hughes Ranch lease encompasses approximately 4074 acres. The Eleanor Hughes Ranch lease and the Bureau of Land Management grazing lease were both transferred to Gerald Engler in 1979 after the death of Ms. Kurzi. This year, the lease was transferred to a new lessee, Matt Fischer. Mr. Fischer leases the adjacent base property associated with the allotment. In 2003, the lease changed from 8 cattle year-round (99 AUMs) to 14 cattle from October 1 to May 1 (also 99 AUMs). The proposed lease will be for 15 cattle from October 1 to April 15 (98 AUMs).

Fieldwork in the spring of 2000 discovered occurrences of *Packera layneae* (formerly *Senecio layneae*) within the grazing lease, east of Don Pedro Reservoir. This area is due east of the main portion of BLM's Red Hills Area of Critical Environmental Concern (ACEC) established in 1985. The lease area was added to the ACEC in 2008 because the serpentine substrate supports a very similar flora to that found in the main portion of the Red Hills. A California Natural Diversity Data Base Occurrence Report for the *Packera* occurrence is attached.

One grazing lease remains on public land in the Red Hills proper, west of Don Pedro Reservoir. This lease area also supports *Packera layneae*. BLM began monitoring grazing effects to *Packera layneae* there in 1998. The monitored occurrences are approximately three miles from the occurrences in the lease #4141 and the occurrences are similar in terms of substrate, topography, and associated flora.

### Proposed Action:

The proposed action is to renew the lease on an annual basis for 15 cattle to be grazed from October 1 to April 15. In 2003 the lease terms were modified from year-round grazing to early spring grazing (ending May 1) to reduce *Packera layneae* foliage removal by cattle. The new lease terms will make the grazing period even earlier, ending April 15. Cattle will be removed from *Packera layneae* habitat generally before stem elongation and the production of the inflorescence has occurred, minimizing the possibility of foliage removal and direct impacts to reproduction from consumption of reproductive structures. If some defoliation does occur, it will give *Packera layneae*, a perennial, a greater fraction of its growth period to recover.

### **SPECIES ACCOUNTS:**

#### **Listed and proposed species:**

*Packera layneae*, Layne's butterweed:

*Packera layneae* was listed as a threatened species October 18, 1996. In that Federal Register publication the species is described in this way: "*Senecio layneae* is a perennial herb of the aster family (Asteraceae) that sprouts from a rootstock. Its mostly basal lance-shaped leaves are 8 to 24 cm (3 to 10 in) long. The several flower heads are 4 to 6 cm (2 to 3 in) wide each having 5 to 8 orange-yellow ray flowers and numerous yellow disk flowers. *Senecio layneae* flowers between April and June."

This species is mainly known from occurrences in El Dorado County where it co-occurs with a suite of rare species on the Pine Hill gabbro formation. On this geologic substrate that covers approximately 16,200 ha, the species is widespread. In El Dorado County, Layne's butterweed also occurs on serpentine. A single occurrence of the species has been found on the mafic substrate near Brownsville in Yuba County as well.

In Tuolumne County the species is only known from the Red Hills serpentine body. Three populations were found on public land east of Don Pedro Reservoir. (An occurrence on private land was also observed in the course of surveys.) All of the other known occurrences in the county are on BLM managed public land in the Red Hills. The Red Hills and the public land habitat east of Don Pedro Reservoir are designated as an Area of Critical Environmental Concern. None of these occurrences are large in terms of extent. However some are quite dense.

*Packera layneae* occurs at two sites in the grazing allotment #4141. Both sites are located in Section 31. There are four occurrences in Section 25 which is northwest and outside of the lease area. One of the sites in Section 31 contained over 300 rosettes. This site is on a ridge top and there is little evidence of

grazing nearby. The larger population contained 2000+ ramets. This site is on a steep ridge and had thick brush fields around it until the summer of 2006. During the first week of July 2006 the Pedro Fire consumed 2000 acres of vegetation, including most of the lease area. Little evidence of grazing in *Packera layneae* habitat had been observed up to that time. It was thought that the ridge habitat combined with an almost impenetrable brush stand that surrounded this largest stand of *P. layneae*, might together have prevented grazing. With the fire, the brush stand was eliminated. Observations in 2007 and 2008 have not revealed an increase in grazing pressure on *Packera layneae*. Defoliation was not observed, and generally no cattle sign was found in *P. layneae* habitat despite the much more open habitat since the fire. Observations in the spring of 2008 indicate a thriving stand of *Packera layneae* apparently occupying the entire habitat first observed in 2000 and burned in 2006 (Fig. 1).

A complication is a small portion of the allotment as mapped, that is actually fenced into another private pasture. Horses graze this pasture and these animals do graze in *Packera layneae* habitat on public land. Because these animals are not authorized under the grazing lease, they will be addressed separately.

It should be noted that this population of *Packera layneae* may be impacted if Turlock Irrigation District (with the possible partner in Modesto Irrigation District) is granted a FERC license for a pumped storage project they are currently planning for this portion of the Red Hills. The project would involve the construction of a reservoir that might inundate a portion of the *Packera* population. Associated construction activity and ancillary development might further affect the population. The *Packera* population straddles public land that would be affected by the project and private land that the irrigation districts have purchased for the project.

#### *Desmocerus californicus dimorphus*

Four elderberry shrubs/clumps were found in the drainages in the southern portion of Section 31. The shrubs could potentially support the valley elderberry longhorn beetle. No exit holes were observed. Grazing does not appear to be impacting the shrubs.

### **GRAZING IMPACTS:**

#### **Listed and proposed species:**

##### *Packera layneae*:

To ascertain the impacts of grazing on *Packera layneae*, four permanent plots were established in the main portion of the Red Hills west of Don Pedro Reservoir

in 1998. These plots were established in pairs, with the plots of each pair being as similar as possible to each other in environmental characteristics such as aspect, associated vegetation, etc. Paired plots were in close proximity also. Data on plant density was collected for the *Packera layneae* plots. One member of each pair of plots was randomly selected as the fenced plot; the other plot to remain unfenced. This design was chosen to highlight any effects of grazing with the timing and intensity of grazing allowed by the terms and conditions of the one grazing lease in the Red Hills west of Don Pedro Reservoir. Although not identical, grazing intensity and season of use are similar for the two grazing leases in the Red Hills, i.e., the lease monitored (west of Don Pedro Reservoir) and the lease proposed for renewal and analyzed in this document (east of Don Pedro). Data was collected for 7 consecutive years, from 1998 to 2004.

The monitoring showed no strong trends in terms of impacts of grazing (Figs. 2 and 3). In terms of overall density of ramets (apparent individual plants with no above-ground connection; Fig. 2), by 2004 one exclosed plot had an increase in density of *P. layneae* relative to 1998, and one had decreased in density. For the two grazed plots, again one had increased density, and one had decreased density relative to 1998. Paired plots (in close proximity) seemed to follow somewhat similar tracks. Plots #3 and #4 were paired; plots #5 and #6 were paired.

In terms of density of plants producing inflorescences (Fig. 3), again the trend by treatment was ambiguous. There was a definite year-to-year variation, with 1999 and 2001 being banner years for inflorescences. This year-to-year variation is so great that any treatment effects, if they exist, are swamped. Generally there was a little obvious correlation between overall number of plants (ramets) in a plot and number of plants producing inflorescences.

The most interesting result from the monitoring of reproductive individuals was the effects of grazing in 2001. In that year, grazing occurred during the period of bolting of *Packera layneae*. The lessee kept his cattle on the pasture one week past his authorized grazing period. Evidently relative to other years, the phenology of the plants in this population was unusually advanced as well. As can be seen in Figure 4, inflorescences produced by plants in the grazed area were dramatically shortened, and fruiting was dramatically retarded for those plants, relative to plants that were fenced from grazing. (Grazed plot #4 should be ignored because of a tree-fall that landed in the plot that year, inhibiting both the growth of Layne's butterweed and the ability of grazing animals to get to the few plants that did manage to flower there that year.) A clear contrast can be seen between the plants inside the fence at plot #3, and those just outside the fence---the first and last columns of Figure 4. Clipped stems were observed in the grazed area. Apparently bolting and flowering plants became available to cattle in 2001 and the cattle consumed the tops of these plants. The plants were able to return to reproductive growth and flower again. But the inflorescences were much shorter and the timing of fruiting was much later under these circumstances. This was the only year in which this dramatic effect was observed, probably because of the combination of somewhat delayed grazing, and early flowering of *Packea layneae*

in this area. Without intensive demographic monitoring it was not possible to ascertain whether seed output was reduced, or if the timing of seed production affected the survival of the propagules that were produced.

The results of monitoring do not indicate that an early grazing period, before bolting and flowering, produces negative effects to *Packera layneae*. The 2001 results do indicate that a later period of grazing during or after bolting can cause reproductive impacts. For this reason the proposed lease will incorporate the April 15 cutoff date that was used for the monitored pasture west of Don Pedro Reservoir.

*Desmocerus californicus dimorphus*, valley elderberry longhorn beetle. No exit holes were observed on the shrubs. Livestock grazing does not appear to be impacting the shrubs.

#### MITIGATION:

A permanent change to the season-of-use will be specified to not extend beyond April 15 of each year. Earlier grazing will mostly occur during Layne's butterweed's rosette stage when it attracts little interest from cattle. It will also give Layne's butterweed, a perennial, a greater fraction of its growth period to regrow after any defoliation that does occur. It will avoid most instances of the consumption of plants already in reproductive stage, a time period for which reproductive effects have been demonstrated.

BLM will work with the owners of adjacent private land to eliminate unauthorized horse grazing in *Packera layneae* habitat.

#### SUMMARY:

In summary it is believed that this lease renewal is not likely to adversely impact the Layne's butterweed occurrences in the allotment. BLM authorized grazing for approximately 30 years at this intensity (possibly preceded by 100 years or more of unregulated livestock use) has not eliminated this species, and plant densities in the lease are at least consistent, if not higher than, those found in the other habitat for the species in the Red Hills (both grazed and ungrazed). In fact, there is little if any evidence of livestock grazing in *Packera layneae* habitat on the lease. Steep terrain and distance from water may discourage access to this habitat area. Concern that grazing pressure might increase after the Pedro Fire of 2006 has not been realized, at least up to this point. And by adjusting the season of use earlier, i.e., removing cattle from the lease area by April 15, if any grazing of *Packera layneae* were to occur, the grazing would generally precede the period of the plant's demonstrated vulnerability to reproductive impacts.

Lease renewal of the lease will have no impact on valley elderberry longhorn beetle. Exit holes are not present on any of the shrubs observed. Cattle are not using the elderberry shrubs for forage, and no grazing impacts to the shrubs have been observed.



**BLM, Lease #4141**

This area was not checked in 2008.

T1S

T1S

T2S

T2S

R14E

R15E

Lake Don Pedro

**Packera layneae, on BLM lease #4141, 2000-2008**

- Packera layneae 2000-2003
- Packera layneae 2008

Note: 2000-2003 GPS polygons used for mapping. 2008 perimeter points used.



US Department of the Interior  
 BUREAU OF LAND MANAGEMENT  
 Folsom Field Office  
 Folsom, California  
 Project: 7142008  
 Date Prepared: 7/14/2008  
 Project: engler\_area\_5\_03\_and\_5\_08

FIGURE 2

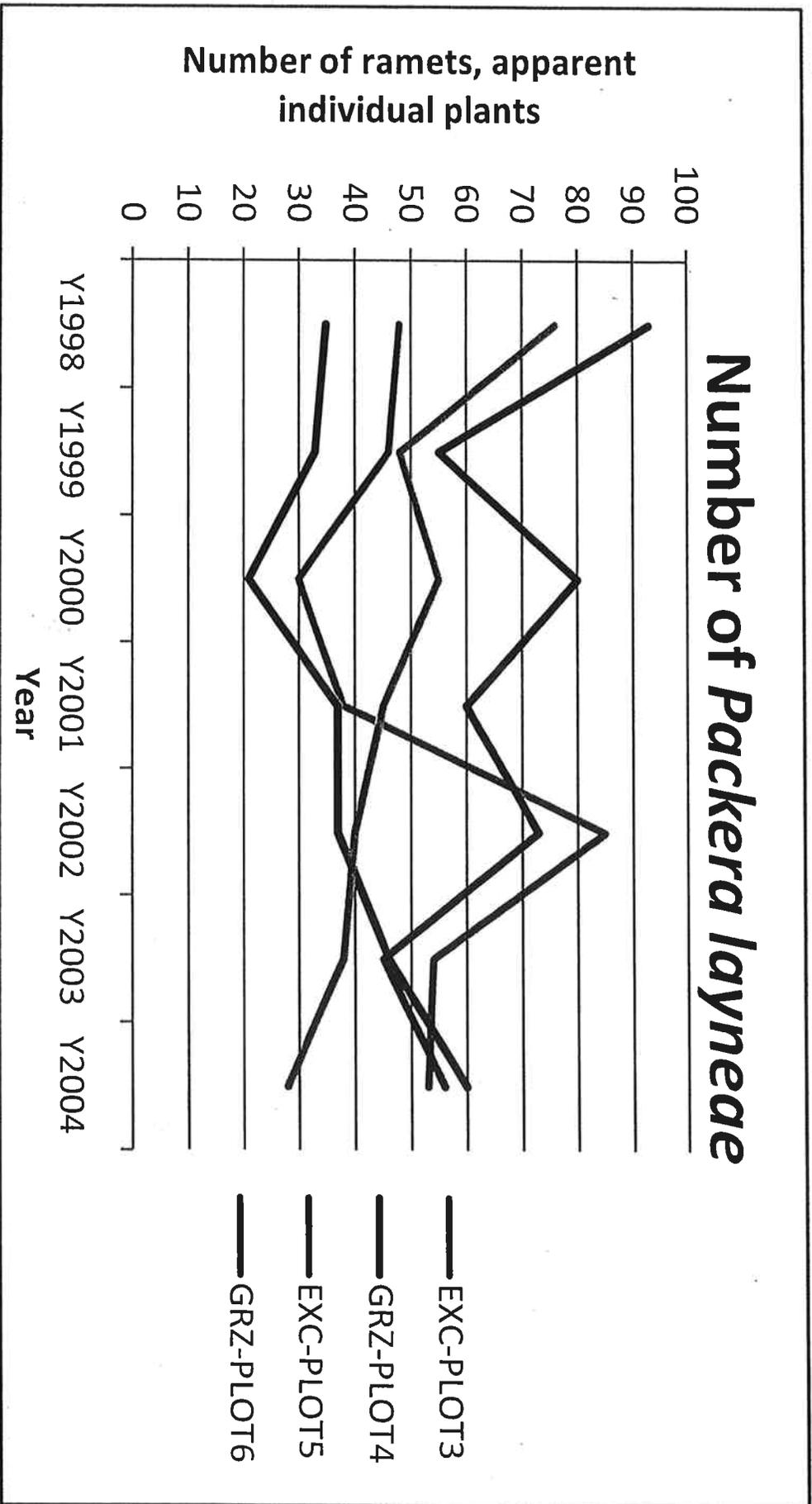


FIGURE 3

# Reproductive plants, *Packeria layneae*

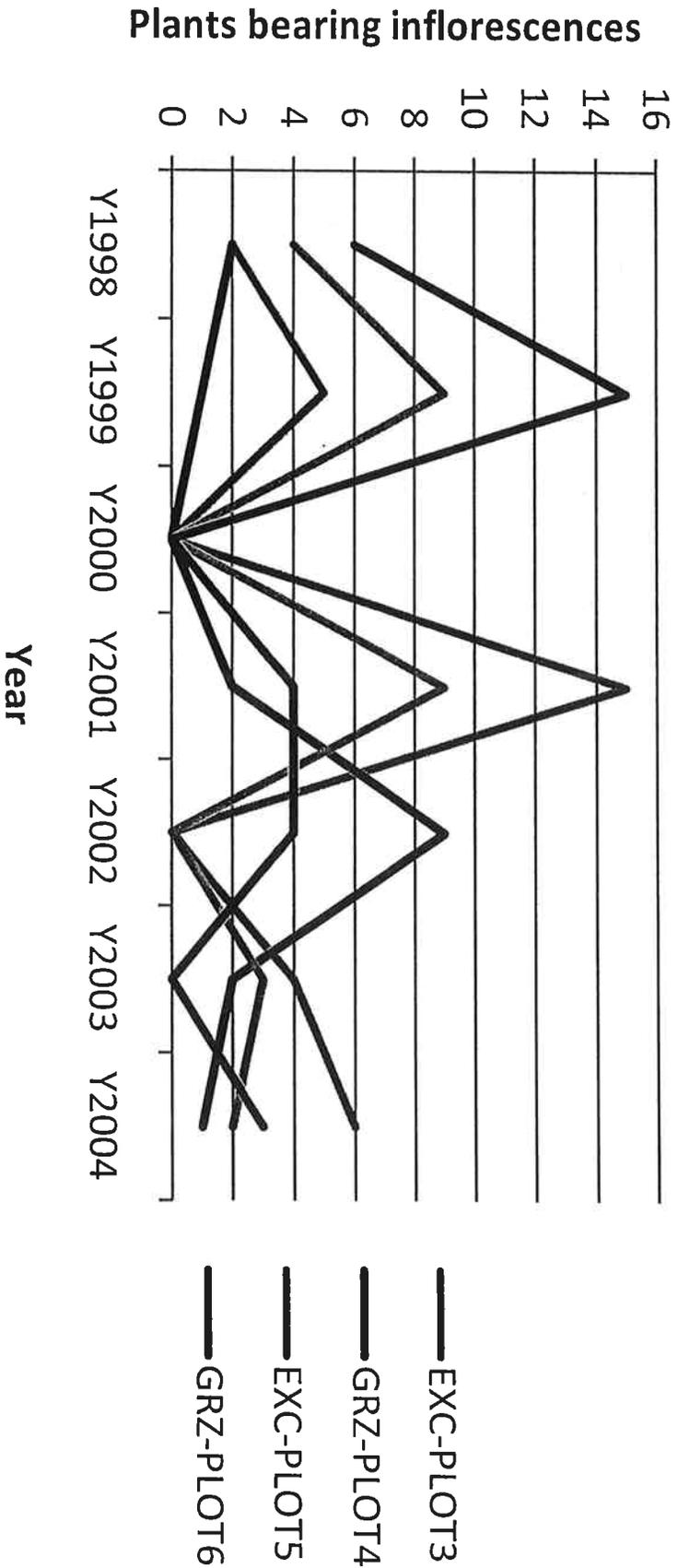
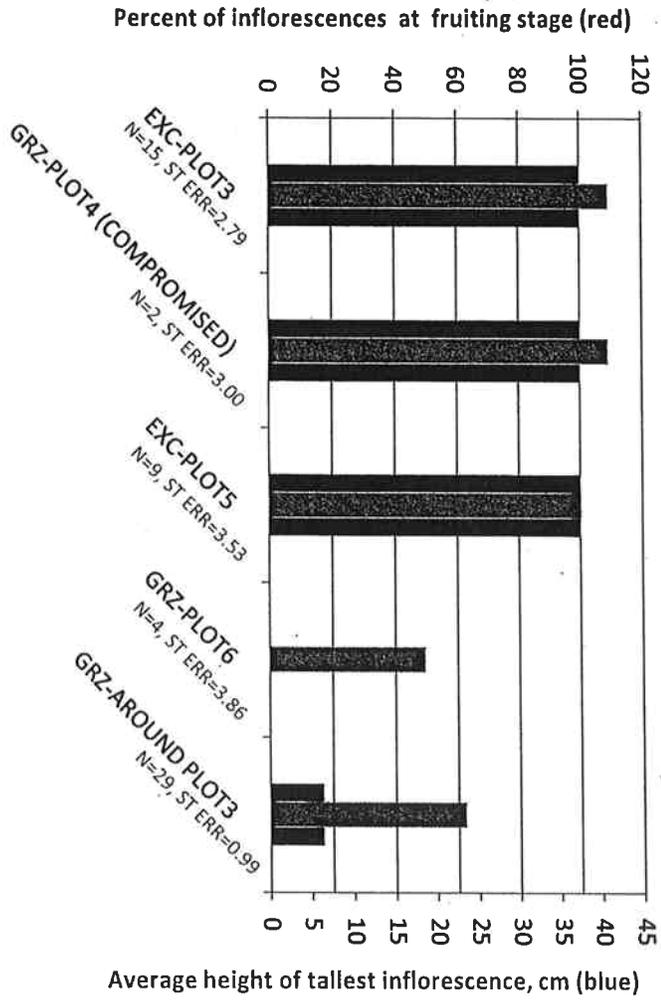


FIGURE 4

### 2001 Inflorescences, height and phenology



NOTES: 1) Grazed plot #4 had a tree fall in it before spring 2001. Only 2 plants produced inflorescences and these were protected from grazing by tree branches.  
2) Grazed plot #6 had zero percent fruit-stage inflorescences, hence no red bar.  
3) GRZ-AROUND PLOT3 indicates grazed area surrounding plot #3, added to replace grazed plot 4 which was compromised by the tree fall (see note #1).

# United States Department of the Interior Bureau of Land Management

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Environmental Assessment CA-180-08-76

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## Finding of No Significant Impact

### Engler Grazing Lease Renewal

**Location:** The allotment is located in Tuolumne County, approximately one mile west of Route 49, near Moccasin, California. The legal description is: Township 1 South, Range 15 East, Section 30, lot 4, south ½ of lot 5; Section 31 lots 1 through 5, south ½ of lots 6 and 7, and lots 10 through 18; and Township 2 South, Range 15 East, Section 6, lots 1 through 4, the east ½ of lot 10, and those portions of lots 5, 8, and 11 above the high water line of Lake Don Pedro.

**Applicant/Address:**

U.S. Department of the Interior  
Bureau of Land Management  
Folsom Field Office  
63 Natoma Street  
Folsom, CA 95630  
Phone: 916-985-4474  
FAX: 916-985-3259

**August 13, 2008**



## **Finding of No Significant Impact Folsom Field Office**

### **FINDING OF NO SIGNIFICANT IMPACT DETERMINATION:**

Based upon a review of the EA and the supporting documents, I find that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27 and do not exceed those effects described in the Sierra RMP/FEIS. Therefore, an environmental impact statement is not needed. This finding is based on the context and intensity of the project as described:

**Context:** The project is a site-specific action directly involving approximately 1008 acres of BLM administered land that by itself does not have international, national, regional, or state-wide importance.

**Intensity:** The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into BLM's Critical Elements of the Human Environment list (H-1790-1), and supplemental Instruction Memorandum, Acts, regulations and Executive Orders. The following have been considered in evaluating intensity for this proposal:

1. **Impacts may be both beneficial and adverse.** The proposed action would impact resources as described in the EA. Mitigating measures to reduce impacts to special status plants were incorporated in the design of the action alternatives. None of the environmental effects discussed in detail in the EA and associated appendices are considered significant, nor do the effects exceed those described in the Sierra RMP FEIS.
2. **The degree to which the selected alternative will affect public health or safety.** No aspects of the project have been identified as having the potential to significantly and adversely impact public health or safety.
3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.** The historic and cultural resources of the area have been inventoried, and it was determined that grazing is not adversely affecting significant cultural resources. In 2008, with the adoption of the Sierra Resource Management Plan, the area that encompasses the Engler Allotment became part of the Red Hills Area of Critical Environment Concern (ACEC). The Red Hills ACEC consists of approximately 10,000 acres of public land managed to protect sensitive biological resources. These resources include Red Hills roach, Hoover's butterweed, Layne's butterweed, Mariposa cryptantha, and Congdon's lomatium, all of which occur on the allotment. The Red Hills

ACEC was designated in 1993 near the historic town of Chinese Camp to protect rare plant species, unusual serpentine soils that provide habitat for unique flora, habitat for the rare minnow known as Red Hills roach, and Bald Eagle wintering habitat. There is little evidence of grazing in the habitat of the Layne's butterweed. The season of use under the terms and conditions of this lease is being adjusted to avoid a period during which the species is vulnerable to reproductive impacts. Furthermore per an agreement with U.S. Fish and Wildlife Service, monitoring of the Layne's butterweed will be conducted once between March 15 and April 15. This monitoring will be done to ensure that cattle are not grazing the rare plant area and to assess the phenology of Layne's butterweed plants before April 15. The following Critical Elements of the Human Environment and Other Resource Issues are not affected because they are not present in the project area: environmental justice; essential fish habitat; farmlands (prime or unique); Native American cultural values; waste (hazardous or solid); wild and scenic river; wilderness; and wild horse and burro.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** There is no scientific controversy over the nature of the impacts.
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The project is not unique or unusual. The BLM has experience implementing similar actions in similar areas. The environmental effects to the human environment are fully analyzed in the EA. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.
6. **The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** The actions considered in the selected alternative were considered by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not predicted. A complete analysis of the direct, indirect, and cumulative effects of the selected alternative and all other alternatives is described in Chapter 4 of the EA.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership.** The interdisciplinary team evaluated the possible actions in context of past, present and reasonably foreseeable actions. Significant cumulative effects are not predicted. A complete disclosure of the effects of the project is contained in Chapter 4 of the EA.
8. **The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** The project will not adversely affect

districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources. A cultural inventory has been completed for the proposed action, and it was determined that renewing the lease, as proposed, would not affect significant cultural properties. The finding of “no effect” completes BLM’s obligations under Section 106 of the National Historic Preservation Act, pursuant to our statewide Protocol Agreement.

9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, or the degree to which the action may adversely affect: 1) a proposed to be listed endangered or threatened species or its habitat, or 2) a species on BLM’s sensitive species list.** Mitigating measures to reduce impacts to Layne’s butterweed, a federally threatened plant species, have been incorporated into the design of the proposed alternative. The season of use under the terms and conditions of this lease is being adjusted to avoid a period during which the species is vulnerable to reproductive impacts. There is also little evidence of grazing in the habitat of this threatened plant. Elderberry bushes which could potentially support valley elderberry longhorn beetle, a federally threatened species, are present in the allotment. There are no grazing impacts occurring to the elderberry bushes, and no evidence of exit holes, an indicator of beetle use, on any of the bushes. No other threatened or endangered plants or animals are known to occur in the area. Informal Section 7 ESA Consultation was initiated on August 4, 2008, and the FWS concurred with BLM’s determination that grazing renewal may affect but is not likely to adversely affect Layne’s butterweed with the stipulation below on August 12, 2008, per phone conversation with Brian Hansen, FWS botanist, Sierra Foothill Region. FWS agreed that the April 15 end date on the lease was sufficient if BLM agreed to monitor Layne’s butterweed once between March 15 and April 15. This monitoring will be done to ensure that cattle are not grazing the rare plant area and to assess the phenology of Layne’s butterweed plants before April 15.
10. **Whether the action threatens a violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements.** The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process. Furthermore, letters were sent to three Native American tribes concerning consulting party status, and there was no response from any of the tribes. Follow up phone calls were initiated with the tribes, and it was concluded and documented that there was no interest in this project by those tribes. In addition, the project is consistent with applicable land management plans, policies, and programs.

James M. Eide  
Authorized Officer

8/14/08  
Date



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Folsom Field Office  
63 Natoma Street  
Folsom, California 95630  
[www.ca.blm.gov/folsom](http://www.ca.blm.gov/folsom)

4160  
CA180

Certified Mail No.  
Return Receipt Requested

A.J. Schneller  
Center for Biological Diversity  
Grazing Reform Program  
P.O. Box 710  
Tucson, AZ 85702-0710

### NOTICE OF FIELD MANAGER'S PROPOSED GRAZING DECISION

Dear Mr. Schneller,

#### INTRODUCTION

The current grazing permit (Authorization Number 0403362) for the allotment (4141) expires October 1, 2008. The lease is being renewed for a 1-year period (2008-2009). The Engler Allotment consists of approximately 1000 acres (100% BLM public lands), located just east of Don Pedro Reservoir approximately one mile west of Route 49, near Moccasin, California in Tuolumne County. The proposed grazing permit would authorize 15 cows from October 1 to April 15 for a total of 99 animal unit months (AUMs) for the Engler Allotment. This is a change from the current lease which permits 14 cows from October 1 to May 1 for a total of 99 animal unit months (AUMS). The season of use was adjusted to avoid a period during which the Layne's butterweed, a federally threatened plant species, is vulnerable to reproductive impacts. Furthermore, monitoring of Layne's butterweed once between March 15 and April 15 will add another layer of protection for this threatened plant species.

#### BACKGROUND

A rangeland health assessment was conducted May, 2000. A determination was made that the allotment was meeting the soils, species, riparian/wetland, and water quality standards for rangeland health per the Central California Standards and Guidelines for Rangeland Health approved in June, 2001.

Results of this assessment and other assessments (cultural, botanical, etc.) were analyzed in an environmental assessment (EA) prepared in August, 2008 (EA CA-180-08-76). A Finding of No Significant Impact (FONSI) was issued for EA CA-180-08-77 on August 14, 2008.



## FIELD MANAGER'S PROPOSED DECISION

My proposed decision is to implement the proposed action described in EA CA-180-08-76 authorization of livestock grazing use on the Engler Allotment #4141 with a term of 1 year, October 1, 2008 to October 1, 2009. This proposed decision constitutes my Record of Decision for this EA.

Grazing will be authorized according to the following:

Allotment Name and #	Number	Kind	Period of Use	%Public Land	Amount of Use (AUMs)
Engler allotment #4141	15	Cow	10/01 – 4/15	100	99

The following terms and conditions for this authorization are made part of your permit.

- Comply with the Central California Standards & Guidelines for Livestock Grazing Management on all allotments.
- Monitoring of the Layne's butterweed will be conducted once between March 15 and April 15. This monitoring will be done to ensure that cattle are not grazing the rare plant area and to assess the phenology of Layne's butterweed plants before April 15.

### RATIONALE

This proposed decision is necessary to authorize issuance of a one year grazing permit in accordance with the grazing regulations of 43 CFR 4100 and be consistent with the Taylor Grazing Act, Public Rangelands Improvement Act and the Federal Land Policy and Management Act.

This allotment has had a Rangeland Health Assessment conducted, which indicates that the soils, riparian/wetland, species, and water quality standards for rangeland health are being met. An EA has been completed which indicates that there are no significant environmental impacts from the proposed grazing use.

I have determined that the terms and conditions for authorizing grazing on the Engler allotment are appropriate to achieve management and resource objectives according to the Sierra RMP and Central California S&Gs.

### AUTHORITY

The authority for this decision includes but is not limited to:

43CFR 4130.2 (a): "Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land Management that are designated as available for livestock grazing through land use plans. Permits or leases shall specify the types and levels of use authorized, including livestock grazing, suspended use and conservation use. These grazing permits and leases shall also specify terms and conditions pursuant to 4130.3, 4130.3-1 and 4130.3-2."

43 CFR 4130.2 (f): “ the authorized officer will not offer, grant, or renew grazing permits or leases when the applicant, including permittees or lessees seeking renewal, refuse to accept the proposed terms and conditions of a permit or lease.”

43 CFR 4130.3: “Livestock grazing permits and leases contain terms and conditions determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part.”

## ADMINISTRATIVE REMEDIES

If you wish to protest this proposed decision, you must do so in accordance with 43 CFR 4160.2. Any applicant, permittee, lessee or other interested public may protest the proposed decision under 4160.1 of this title in person or in writing to the Folsom Field Office Manager, Bureau of Land Management, Folsom Field Office, 63 Natoma Street, Folsom, CA 95630 within 15 days after receipt of such decision. Protests should clearly and concisely state the reason(s) the proposed decision is in error.

In the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision. Should this proposed decision become the final decision, and you or other individuals believe that you are adversely affected by this final decision, you may file an appeal of this grazing decision for the purpose of a hearing before an Administrative Law Judge in accordance with 43 CFR 4.21, 4.470, and Subpart 4160.4. You may also petition for a stay of the decision in accordance with 43 CFR 4.21, pending final determination on appeal. The appeal and petition for stay must be filed with the Folsom Field Office Manager, Bureau of Land Management, Folsom Field Office, 63 Natoma Street, Folsom, CA 95630 within 30 days after receipt of the final decision.

The appeal shall state the reasons, clearly and concisely, why you think the final decision is in error. All reasons for error not stated in the appeal shall be considered as waived and may not be presented at the hearing. Any failure to meet this 30-day appeal deadline will bar you from challenging this decision. If you wish to petition for a stay you must include the stay petition with your appeal. You have the burden of proof to demonstrate why a stay should be granted.

### Standards for Obtaining a Stay

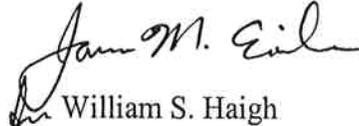
Except as otherwise provided by law or other pertinent regulation, a petition for a stay decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied;
- (2) the likelihood of the appellant’s success on the merits;
- (3) the likelihood of immediate and irreparable harm if the stay is not granted; and
- (4) whether the public interest favors granting a stay.

Attachments

EA for Engler Grazing Lease Renewal  
FONSI for Engler Grazing Lease Renewal

Sincerely,



William S. Haigh  
Field Manager