#### U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT PALM SPRINGS-SOUTH COAST FIELD OFFICE

#### ENVIRONMENTAL ASSESSMENT EA Number CA-660-05-01

DATE:		October 30, 2004	
TITLE / PROJECT TYPE:	Poppet	Prescribed Fire	
CASE FILE / PROJECT NO:			
FUNDING CODE: 2824		PROGRAM ELE	MENT: JW
<b>BLM OFFICE:</b>		Palm Springs-Soutl 690 W. Garnet Ave North Palm Springs	h Coast Field Office enue, P.O. Box 581260 s, CA 92258-1260
<b>APPLICANT / PROPONENT:</b>			
LOCATION OF PROPOSED ACT	'ION:	Г.3 S., R.1 E., Sect Г.4 S., R.1 E., Sect SBBM, Riverside (	ions 34, 35 ions 2,3,4,9,10,15 County, California
PROJECT ACREAGE:	BLM Other Federa State		

#### **USGS TOPOGRAPHIC MAP:**

San Jacinto 7.5 minute quadrangle and Lake Fulmor 7.5 minute quadrangle

#### LAND USE PLAN CONFORMANCE and Other Regulatory Compliance:

**Private** 

**Other (specify)** 

The proposed action conforms with the Fire Prevention requirements as stated in Title 43 Code of Federal Regulations 9212.0-6, Policy. It is the policy of the Bureau of Land Management to take all necessary actions to protect human life, the public lands, and the resources and improvements thereon through the prevention of wildfires. Wherever possible, the Bureau of Land Management's actions will complement and support State and local wildfire prevention actions.

350

150 - Morongo Indian Reservation

In accordance with Title 43 Code of Federal Regulations 1610.5-3, the proposed action and alternatives are in conformance with the approved Bureau of Land Management (BLM) *South Coast Resource Management Plan* (SCRMP) (1994). In addition, the proposed action is consistent with the

terms and conditions for the land withdrawal of the U.S. Forest Service Pacific Southwest Research Station-North Mountain Experimental Area.

The proposed action is in compliance with the SCRMP Biological Assessment (p.461) and conforms to the terms and conditions of the U.S. Fish and Wildlife Service (USFWS) Biological Opinions 1-6-92-F-45 and 1-6-92-F-45R. Pursuant to Section 7 of the Endangered Species Act (ESA), formal consultation with the U. S. Fish and Wildlife Service (USFWS) is not required as no known Federally listed species are present in the proposed project area.

Under the Federal Land Policy and Management Act of 1976 (FLPMA), the BLM is charged with managing public lands in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values.

Section 106 of the National Historic Preservation Act (NHPA), as implemented (36 CFR Part 800), requires Federal agencies to take into account the effects of their undertakings on historic properties. The State Protocol Agreement (2004) between the California State Director of the BLM and the California State Historic Preservation Officer (SHPO) defines the roles and relationships between the SHPO's office and the BLM under the National Programmatic Agreement. The State protocol is intended to insure that the BLM operates efficiently and effectively in accordance with the intent and requirements of the NHPA. The protocol streamlines the Section 106 process by not requiring case-by-case consultation with the SHPO on most individual undertakings.

# NEED FOR THE PROPOSED ACTION

This project would reduce the hazardous fuel loading around the community of Poppet Flat and also initiate maintenance of the North Mountain Fuel Break. The fuels treatment will encompass 1100 acres of public, private, and Indian land. Poppet Flat includes over 400 private parcels many of which contain occupied residences. Silent Valley, a large RV park covering 480 acres and housing 850 campsites, is also directly adjacent to the project area. Poppet Flat is situated in a southwest facing valley ranging in elevation from 3200 to 4000 feet. Numerous fires have started below Poppet Flat to the southwest and burned up to Poppet Flat destroying structures. The location of Poppet Flat makes it vulnerable to fires driven by the normal southwest winds as well as Santa Ana fires from the east. This phase will connect a series of fuel breaks and recently burned areas to encircle the community. This burn is the last phase of an overall project designed to protect the community of Poppet Flat. The BLM managed public land is under a withdrawal to the U.S. Forest Service, Pacific Southwest Research Station to conduct experiments in chaparral ecosystems. The proposed action would support the Forest Fire Lab of the Pacific Southwest Research Station in their studies. The scientists propose to establish plots within the proposed burn perimeter to measure fire spread through live chaparral fuels. Until this opportunity, all of their experiments have been conducted in the lab at small scales. This would benefit the BLM and all wildland firefighting agencies. More accurate fire spread models (which is one of the fire lab's projects) would support more realistic predictions of a fire's potential.

# DESCRIPTION OF THE PROPOSED ACTION and ALTERNATIVES

## Background

The fire history of the area shows numerous large fires have burned near and through the area. Since settlement of the area, these fires have burned numerous structures and private property. The project area includes the oldest remaining fuels in the area, many of which have not burned in 75 years. The BLM proposed prescribed burn would complete an on-going project in which the California Department of Forestry (CDF) and the BLM have been working to reduce the threat of fire to the community of Poppet Flat, by encircling the community with fuel breaks. A goal of the project is to return the vegetation to fire regime condition class 1. The vegetation in its current condition is in fire regime condition classes 2 and 3, varying over the total project area.

Fire Regime Condition Class is a classification of the amount of departure of conditions at a given time period (such as future or current) from the ecological reference conditions. Reference conditions include the amounts for the 5 characteristic vegetation-fuel classes, the fire frequency, and the fire severity in the absence of modern Euro-American influence for the climate of the period being assessed (such as historic, current, or future). Historical conditions are commonly used as a best estimate for the reference conditions. Native American or anthropogenic influences are commonly included. Fire regime condition class is a relatively complete measure of the departure from the natural system. It is named "fire regime" because of the keystone nature of fire.

FRCC 1 is a fire regime that is within its natural or historical range and the risk of losing key ecosystem components is low.

FRCC 2 is a condition in which fire regimes have been moderately altered. Risk of losing key ecosystem components is moderate. Fire frequencies may have departed by one or more return intervals (either increased or decreased). This may result in moderate changes in fire vegetation attributes.

FRCC 3 consists of fire regimes that have been substantially altered. Risk of losing key ecosystem components is high. Fire frequencies may have departed by multiple return intervals. This may result in dramatic changes in fire size, fire intensity and severity, and landscape patterns. Vegetation attributes have been substantially altered.

From the FRCC Glossary of Terms – Version 1.0.5

1. <u>Proposed Action</u>

The BLM Palm Springs-South Coast Field Office proposes to conduct a prescribed burn in the Poppet Flat area located in Riverside County, California. The prescribed burn is planned for the winter and/or spring of 2005 but may be postponed due to weather or other factors.

The proposed project area includes 600 acres of public lands administered by the Bureau of Land Management, 150 acres of Morongo Indian Reservation, and 350 acres of private land that is within the designated CDF State Responsibility Area (SRA). The project area is adjacent to the community of Poppet Flat and supports the goals of the National Fire Plan to reduce hazardous fuels that pose a threat to communities in the Wildland Urban Interface. The Wildland Urban Interface is defined in the National Fire Plan as "the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Often incorrectly referred to as the "interzone" or "urban/wildland interface".

In recent years numerous large wildland fires have burned in the area surrounding the community. This project includes the last of the open, untreated areas that pose a significant threat to the community. The prescribed burn would alter the age and loading of the fuels in a mosaic pattern to reduce the threat to the community.

A variety of methods would be used to reduce hazardous fuel accumulations in the chaparral vegetation west of the community Poppet Flat. Methods to reduce fuel loading would include the use of mechanical equipment (masticators and dozers) and chainsaws to establish control lines. Prescribed fire would then be used to remove 50 to 70% of the vegetation from the treatment area. The project would utilize portions of the existing North Mountain Fuel Break along the North Mountain Truck Trail, the Old Banning-Idyllwild Road, a 100 foot dozer line (constructed as a contingency line during the Canyon Fire, 2003), and a 100-300 foot shaded fuel break as control lines. A shaded fuel break has had the trees limbed up eliminating ladder fuels to allow a ground fire to pass under without burning into the canopy. A portion of the private land behind the homes consists of dense stands of live oaks.

The Old-Banning Idyllwild Road and the North Mountain Truck Trail would require minimal maintenance prior to burning. The 100-300' shaded fuel break planned for the control line on the east side of the project is on private property and will be constructed by CDF. Preparation for the burn could occur at any time during the year but, prescribed burning would occur only during the fall/winter/spring months (November through May). Prescribed burning would be conducted during weather conditions that limit unwanted fire behavior that could result in effects such as scorching of live oaks, soil heating, and high fire behavior.

The proposed project would achieve the following objectives:

1. Reduce the threat of fire to the community of Poppet Flat by reducing hazardous fuels thereby lowering any possible wildfire's intensity and rates of spread. The desired effect will be to alter the age, condition class, and composition of the chaparral from predominantly chamise to mixed chaparral, herbaceous plants, and native grasses. Variances in the arrangement of the fuels would result in areas of less fire intensity during a wildfire creating more opportunities for suppression resources to stop a fire before it reached the community.

2. Reduce effects of wildfire on any potential threatened and endangered species by altering vegetation arrangement and fuel loads to prevent any fires that could start in the Poppet area and burn into known T&E species habitat to the west of the project area.

3. Improve habitat for wildlife by opening up the chaparral to access and forage on new growth. Altering the plant species composition and arrangement could possibly allow for extension of species that inhabit disturbed areas, such as the Stephen's kangaroo rat, that are currently found in disturbed areas near the proposed project site. More sparse fuels with open space would benefit the San Diego horned lizard and Orange-throated whiptail. Least Bell's vireo may populate the area once the predominant chamise is removed allowing for Riversidian sage and willows to become established. The mosaic pattern would also allow for easier movement of larger species through the area for breeding, forage, or hunting.

4. Re-introduce fire into the ecosystem to bring fire frequency and severity back to natural and historic levels. This could allow for re-establishment of species that have been excluded from the area by the effects brought on by fire suppression such as the dense, single species (chamise) dominated chaparral that covers most of the project area.

5. Reduce fuel loading around live oak riparian areas to prevent any possible wildfires from reducing the riparian areas to bare soil with no vegetative cover. This would reduce erosion and protect any possible Least Bell's vireo habitat. Fire will be excluded from the cottonwood/willow dominated riparian area on private land to the east of the project.

6. Support the experiments of the Riverside Forest Fire Laboratory. The fire lab has a withdrawal on the BLM managed land in the project area to conduct experiments such as those to determine factors affecting fire spread in live fuels.

Constraints to the project would be: keeping the fire within the project area; limit scorching of live oaks; avoid negative impacts to sensitive species habitat and cultural resource sites that may be present. Vehicles would be driven only on designated roads, only approved water sources would be used, and no mechanical equipment activity would occur in any sensitive areas. Burning would be done under conditions to minimize smoke emissions such as burning when fuel moistures are at a point which would allow for quick and complete combustion with little smoldering. Burning would be conducted with moderate transport winds from the west-southwest (upper level winds). These winds would lift smoke and disperse to the east-northeast. Under desired conditions the smoke would rise to a level (mixing height) which would not affect the community or Highway 243 and would disperse sufficiently to not affect the airports in the area. If smoke dispersion would not be sufficient or the smoke becomes a problem for any of the sensitive areas burning would be shut down and mop-up would be initiated. It is anticipated that the amount of smoke generated would not be significant to cause a visibility problem. A Smoke Observation Form would be maintained by the Smoke Monitor. Smoke, wind speed, and wind direction parameters would be monitored at the burn site prior to, during, and after burning.

### Prescribed Fire Contingency Plan

Concerns are the community of Poppet Flat to the south and east, scattered structures and Highway 243 to the north, and Soboba Indian Reservation to the south. To the north is the Silent Burn from 2001 which contains light fuels and would enable easy suppression of any possible escaped fire. To the south is the Canyon Fire of 2003. To the east is the highest concern with the community of Poppet Flat directly adjacent to the burn unit. This east side of the burn unit has the least chance of escape unless an un-forecasted wind event occurs. The east perimeter is down-slope from the burn and is on an east facing slope. As the day progresses expected fire behavior should decrease. To the west of the project is predominantly BLM land on a northwest facing slope. To the west are some areas that have burned within the last ten years and could facilitate suppression of any escaped fire.

The burn boss would make the decision that the fire has escaped using the following pre-determined trigger points at which time the contingency plan would be initiated: on scene resources cannot

control any spot fires or slopovers that may occur and/or the fire begins to burn out of prescription and cannot be controlled.

The Incident Commander, in the event of an escaped fire (fire not immediately suppressed by the holding crews in the immediate area), would declare the fire escaped and direct the initial attack efforts and request any additional equipment required. The firing team would assist the holding team, and would be assigned to the initial attack efforts. All suppression efforts would be based on fire behavior and weather conditions observed.

The contingency plan for unanticipated smoke impacts would be initiated if smoke has negative impacts on community, the burn would be terminated and mop-up (extinguishment of burning materials) would occur.

Monitoring during burning would take place to determine if smoke management objectives are being met. Weather observations would be taken on site prior to and during project implementation. Smoke production and dispersal would be monitored and recorded. Observed fire behavior would be recorded and compared to models. Fire effects would be monitored during and after burning to determine whether resource and fire treatment objectives are met. After the project is completed, a report would be completed to document whether the resource and fire treatment objectives have been met.

The fire monitors would document burn conditions including flame height, rate of spread, fire behavior, and fire effects. On-site weather observations would be documented by the Weather Monitor. The Burn Boss would complete a post-burn summary to include the burn conditions, weather conditions, and indicate if the objectives were met.

In the event the fire exceeds the prescription parameters and/or capabilities of the holding forces and cannot be returned to prescription, all ignition operations would cease. Pre-planned contingency resources would be ready to respond to suppress and/or control the incident.

### 2. <u>Mechanical Fuel Reduction Alternative</u>

The Mechanical Fuel Reduction alternative would be to use mechanical equipment such as a dozer or masticator to reduce the fuel loading. Due to a large portion of the area being inaccessible to equipment because of slope, rocks, and soil type this alternative would not be feasible. This alternative would have many negative effects on the ecosystem. The use of mechanical equipment over such a large area could cause major erosion problems, could damage hidden cultural resources, and would cause extensive damage to wildlife and plants. Removing the plant communities by clearing with equipment could result in an extended period of time for re-growth possibly allowing invasive species to become established. Using equipment would remove the root systems requiring re-vegetation from seeds transported into the area. Prescribed fire would remove the above ground portions of the plants saving the roots and bases to resprout. The resource damage that would be caused by using mechanical equipment over such a broad area is counter to the goal of sustaining the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. There are many areas the

equipment could not access. Additional types of work would be required to complete those areas. The cost of treating the entire area mechanically would be approximately \$400,000. Prescribed burning is a natural way to reduce fuel loading and return the area to a safer and more natural state. Recent studies show reintroducing natural fire regimes to areas creates more diversity and supports native species. Mechanical treatment would still leave the accumulated mass of material generated from the equipment. Burning of the piles would still need to be done to dispose of the mechanically cut material.

3. <u>No Action Alternative</u>

The Proposed Action would not be undertaken. Existing management and use of the site would continue subject to applicable statutes, regulations, policy and land use plans.

The fuel loading and condition class would remain the same, along with the potential threat of fire to the community of Poppet Flat. The vegetation would remain in condition classes 2 and 3. Due to the pattern of land ownership, without cooperation from the BLM, the CDF would not be able to carry out planned fuels reduction treatments in their area of responsibility. The BLM, CDF, and the Morongo Band of Mission Indians would not be cooperating on this project to protect a community at risk

Without the reduction of existing condition class 2/3 fuels, air quality would be hazardous during a wildfire event. A wildfire would burn intensely possibly consuming all fuels in its path creating large amounts of hazardous emissions negatively impacting the community, the visual resources in the area, and the nearby class 1 wilderness areas.

# AFFECTED ENVIRONMENT

1. <u>Area Description</u>

The project area is located in the upper end of the Poppet Creek watershed, a fork of the San Jacinto River. The community is located in a relatively flat southwest facing valley. The area is comprised of dense stands of chaparral and Live Oak/Willow riparian areas. The project area ranges in elevation from 3300' to 4000'.

# **Cultural Resources**

A general discussion of cultural resources located on public lands managed by the BLM within the Area of Potential Effect is found in the *South Coast Proposed Resource Management Plan and Final EIS* (1992). Most of the public lands in the South Coast management area are small, isolated tracts averaging about 320 acres in size, the majority of which can be characterized as difficult, mountainous terrain. Only a small percentage, less than 2.5 percent, of the public lands have been surveyed for the presence of cultural properties

Cultural properties on public lands in the vicinity of the APE are predominantly categorized as prehistoric, and primarily include subsistence resource activity areas, which are usually indicated by the presence of bedrock milling features, or lithic quarry and lithic reduction areas.

Prehistoric cultural properties found in the Snow Creek area of the Santa Rosa and San Jacinto Mountains National Monument are primarily associated with the Cahuilla Indians who settled in the Coachella Valley and include sites associated with subsistence resources activities. Property types prevalent in the area include lithic scatters, bed rock mortars, and agave roasting pits. Historic properties on public lands in the area are generally related to ranching, logging, and mining activities that took place primarily in the San Jacinto and Santa Rosa Mountains.

A records search and literature review was conducted utilizing available site records and cultural property data on file in the Palm Springs and Riverside offices of the BLM. Current site information available in the California Historic Resources Information System/BLM inventory was also examined for known and recorded sites and surveyed areas located within the vicinity of the APE.

The literature review indicated that there are no known and recorded cultural properties located on public lands within the APE. There also have been no surveys of public lands within the APE for this project. Adjacent and nearby lands have been surveyed in the past, primarily in support of prior hazardous fuels reduction projects. The Northridge Center for Public Archaeology (California State University at Northridge) conducted a survey of parcels on the east side of Poppet Flats in 1990 as part of the Silent Valley VMP Project. No sites were observed during that survey. Small surveys have also been conducted for a proposed recreational vehicle storage yard in Poppet Flats and transmission line corridors in Poppet Flat (Drover 1978; Wirth Associates 1983). None of the systematic surveys recorded cultural properties. One site, designated 33-Riv-329, a prehistoric milling complex, was recorded in 1966 and is located on private land in Poppet Flat. The site is outside the APE for this project and will not be affected.

BLM, the Bureau of Indian Affairs, and the California Division of Forestry and Fire Protection have each carried out a limited reconnaissance of the APE. The density of the Chamise-Chaparral vegetation cover precluded systematic survey of the APE. Survey efforts were focused on those areas that were accessible and most likely to contain cultural properties. No sites were identified during field reconnaissance.

### **Biological Resources**

The project area is dominated by chamise chaparral with live oak and cottonwood-willow riparian areas. There has been varying degrees of disturbance from human use. Species characteristic of this community include chamise (*Adenostoma fasciculatum*), manzanita (*Arctostaphylus parryana*), hoary leaf ceanothus (*Ceanothus crassifolius*), scrub oak (*Quercus berberidifolia*), and buckwheat (*Eriogonum fasciculatum*). The most common wildlife known to occur in the project area include reptiles such as the granite spiny lizard (*Sceloperus orcutti*), side blotched lizard (*Uta stansburiana*), speckled rattlesnake (*Crotalus mitchelli*), southern pacific rattlesnake (*Crotalus helleri*), rosy boa (*Lichanura trivirgata*), and gopher snake (*Pituophis catenifer*); bird species common to the area include mourning dove (*Zenaida marcoura*), california quail (*Calipepla californica*), red-tailed hawk (*Buteo jamaicensis*), and common raven (*Corvus corax*); and mammal species such as desert cottontail (*Sylvilagus audubonii*), california ground squirrel (*Spermophilus beecheyi*), mountain lion (*Puma concolor*), mule deer (*Odocoileus hemionus*), and coyote (*Canis latrans*).

The proposed project site lies 4.5 miles from recorded habitat for the Federally-listed endangered Stephens kangaroo rat (*Dipodomys stephensi*) (SKR) and 4.1 miles from recorded habitat for the Federally-listed endangered and State designated "Species of Special Concern" San Bernardino kangaroo rat (*Dipodomys merriami parvus*).

The San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) primary populations near the project area are in the San Jacinto River and Bautista Creek in the vicinity of San Jacinto, Hemet and Valle Vista to the south and west of the project area. Data show that the San Bernardino Kangaroo Rat prefers alluvial scrub/coastal sage scrub habitats on gravelly and sandy soils adjoining river and stream terraces and on alluvial fans; and rarely occur in dense vegetation and rocky washes.

The proposed project site is near the federally endangered and state threatened Stephen's Kangaroo Rat (*Dipodomys stephensi*) habitat. *D. stephensi* typically inhabit open areas with slopes <15% at elevations less than 4100'. *D. stephensi* are typically replaced on the steeper, chaparral covered slopes by the Pacific Kangaroo Rat (*Dipodomys agilis*) but may co-exist in isolated areas. Research supporting the Stephen's Kangaroo Rat Recovery Plan has found the home range of *D. stephensi* to be as large as 1600 square meters with a maximum dispersal of 3280 feet.

The Stephens' kangaroo rat is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50% during the summer (e.g., Bleich 1973; Bleich and Schwartz 1974; Grinnell 1933; Lackey 1967; O'Farrell 1990; Thomas 1973). O'Farrell (1990) further clarified this association and argues that the proportion of annual forbs and grasses is important because Stephens' kangaroo rats avoid dense grasses (for example, non-native bromes [Bromus spp.]) and are more likely to inhabit areas where the annual forbs disarticulate in the summer and leave more open areas. He also noted a positive relationship between the presence of the annual forb red-stemmed filaree (Erodium cicutarium), grazing, and the Stephens' kangaroo rat. O'Farrell and Uptain (1987) noted a decline in the abundance of Stephens'kangaroo rat in the Warner Ranch area when the livestock were changed from mixed Hereford stock to Holstein dairy cattle, thus reducing grazing pressure and allowing for the proliferation of three-awn grasses (Aristida sp.). On the other hand, the Stephens' kangaroo rat has been trapped in brittlebush (Encelia farinosa) dominated coastal sage scrub with an estimated shrub cover of over 50% (USFWS 1997). Although there are no confirmatory data, it has been assumed that the Stephens' kangaroo rat historically occupied habitat dominated by native perennial grasses and forbs (e.g., Price and Endo 1989). Soil type also is an important habitat factor for Stephens' kangaroo rat occupation (O'Farrell and Uptain 1989; Price and Endo 1989). As a fossorial (burrowing) animal, the Stephens' kangaroo rat typically is found in sandy and sandy loam soils with a low clay to gravel content, although there are exceptions where they can utilize the burrows of Botta's pocket gopher (Thomomys bottae) and California ground squirrel (Spermophilus beecheyi). Also, Price and Endo (1989) suggest that sandy soils may be necessary for sand bathing, which keeps oils from building up in their fur. Sand bathing also may serve an important social communication function (Randall 1993). As noted by others (e.g., Brown and Harney 1993), kangaroo rats tend to avoid rocky soils. Stephens' kangaroo rats may be found on rocky soils, but population densities generally are much lower. Slope is a factor in Stephens' kangaroo rat occupation; the Stephens' kangaroo rat tends to use flatter slopes (i.e., < 30%), but may be found on steeper slopes in trace densities (i.e., < 1 individual per hectare). Furthermore, the Stephens' kangaroo rat may use steeper slopes for foraging, but not for burrows (Behrends, pers. obs.). In general, the highest abundances of Stephens' kangaroo rats occur on gentle slopes less than 15%. Because open ground is an important habitat factor, the distribution and quality of Stephens' kangaroo rat habitat also is a function of periodic fires, range use by grazing animals (O'Farrell and Uptain 1987), year-to-year weather variations (Price and Endo 1989), and probably longer cycles of dry

and wet periods. Although precipitation is positively related to primary production of food, resources, and breeding activities (McClenaghan and Taylor 1993; Price and Kelly 1994), several years of high rainfall can be detrimental. For example, dense matting of annual grasses, such as ripgut grass (Bromus diandrus), may exclude this species from certain areas after periods of high rainfall (USFWS 1997). Over the short term, however, Goldingay and Price (1997) did not detect seasonal differences in habitat use by the Stephens' kangaroo rat despite seasonal variation in the microhabitat.

The Stephens' kangaroo rat is found at elevations ranging from approximately 180 feet above sea level on Camp Pendleton in San Diego County to 4,100 feet in the Anza Valley (USFWS 1997). Diet: As with other kangaroo rats and most heteromyids, the Stephens' kangaroo rat primarily is a granivore (seed eater) that mostly feeds on the seeds of filaree (Erodium spp.) and annual brome grasses (Bromus spp) (e.g., Thomas 1975). The fact that the two main dietary components of the Stephens' kangaroo rat are non-native taxa indicates that the species is relatively opportunistic and generalist in its diet. Stephens' kangaroo rats also collect and ingest herbaceous forbs when available. Food caches are established within or around burrows. Daily Activity: Like other kangaroo rats, the Stephens' kangaroo rat primarily is nocturnal. Individuals emerge from burrows around dusk to forage and carry out other surface activities. Most surface activity probably is concentrated in the early evening hours, but individuals may be active anytime during the night, as indicated by live-trap captures occurring after midnight (Behrends, pers. obs.). Dudek and Associates."Stephen's kangaroo rat Species Account." Western Riverside County MSHCP. 2001.University of California, Riverside.17 Dec 2004. <a href="http://ecoregion.ucr.edu/full.asp?sp\_num=122>">http://ecoregion.ucr.edu/full.asp?sp\_num=122></a>

The main objective of the burn is to reduce the fuel loading of chaparral species. This would be accomplished by creating a mosaic pattern which would benefit any D. stephensi in the area by creating open areas of less brush possibly creating habitat. The recovery plan refers to habitat occupied by D. stephensi and states that "many areas support sparse habitat as the result of disturbance activities, such as ... fires." The plan also states that D. stephensi habitat is found in areas such as the Badlands and Potrero. These areas are "... generally associated with land disturbance or modified by fire ..." The plan looks at the plant ecology in D. stephensi habitat and the role of fire in the plant ecology. The research noted in the Western Riverside County MSHCP states that the distribution and quality of Stephens' kangaroo rat habitat also is a function of periodic fires. The burn would reduce the chaparral canopy cover to 30-50% in the project area. Currently there is approximately 95% closed canopy chaparral severely restricting the optimal habitat of the kangaroo rat. Meeting the burn objectives would create more open areas of grass, buckwheat, and sage expanding the kangaroo rat habitat. All activity would occur during the daylight hours reducing the effects on kangaroo rats. Burrows and areas suitable for burrowing will be identified and protected from damage. The burn would take place during the winter when Stephen's kangaroo rat surface activity is the least.

### Visual Resources

The visual resource inventory process provides BLM managers with a means for determining visual values. The inventory consists of a scenic quality evaluation, sensitivity analysis, and a delineation of distance zones. Based on these three factors, BLM lands are placed into one of four visual

resource inventory classes. The inventory classes provide the basis for considering visual values in the resource management planning process for all BLM public lands. The Poppet Flat area was assigned as **VRM Class III** in the *South Coast RMP*. The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract the attention, but should not dominate, the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

- 2. <u>Land Status</u>
  - 1. Land Use Classification: In the South Coast RMP the BLM managed lands are identified for retention. The project area is within lands that are part of a withdrawal to the U.S. Forest Service as a fire research study area. The project is within the sphere of the Western Riverside County MSHCP.
  - 2. **Valid Existing Rights:** There are no valid existing rights affected by this proposed action. Existing right of ways include:

CACA-3259 High Valley Water District Water pipeline and storage tankCARI-6969 USFS Road r/wCARI-7601 CA Dept Forestry Storage tank

# ENVIRONMENTAL CONSEQUENCES

A. <u>Critical Elements</u>

The following table summarizes potential impacts to various elements of the human environment, including the "critical elements" listed in BLM Manual H-1790-1, Appendix 5, as amended. Elements for which there are no impacts will not be discussed further in this document.

Environmental Element	Proposed Action	Mechanical Alternative	No Action Alternative
Air Quality	Short term impact on air	Minimal emissions from	Future wildfire may
All Quality	quality mitigated by	equipment	drastically affect air
	burning in prescription		quality
ACEC's	Could prevent spread of		
ACEC S	fire from the east to	No impact	N/A
	Potrero ACEC		
Cultural Descourses		Cultural resources located	
Cultural Resources	No effect	within areas mechanically	No effect
		treated would be	
		irreparably damaged.	
Nation American Company	Local tribal officials and	Tribe has expressed	
Native American Concerns	BIA are involved in burn	concern about equipment	No impact
	and will mitigate any	being likely to cause	_
	concerns on their land and	resource damage	
	coordinate with BLM on		
	BLM land		

Farmlands	N/A	N/A	N/A
Floodplains	N/A Low impact prescribed burn will cause less erosion than future wildfire	Could create major erosion problems	Future wildfire may cause erosion problems
Energy (E.O. 13212)	N/A	N/A	N/A
Minerals	N/A	N/A	N/A
T&E Animal Species	Prescribed burn may create new habitat	Could cause extensive habitat damage	No new habitat opened up in chaparral
T&E Plant Species	Prescribed burn may create new habitat	Could cause extensive damage to vegetation	No new habitat opened up in chaparral
Invasive, Nonnative Species	Prescribed burn could reduce invasive grass and enhance native fire adapted species	Would remove vegetative cover creating disturbance that would support the establishment of invasive species	Invasive grass would remain
Wastes (hazardous/solid)	N/A	N/A	N/A
Water Quality (surface and ground)	Possible short-term low impact erosion	Could create major erosion problems	Potential for severe erosion in case of wildfire
Wetlands/Riparian Zones	Low impact prescribed burn will reduce competing vegetation leaving more water and space for oaks and willows	Equipment could cause extensive damage if used in riparian areas	Potential for wildfire to consume riparian areas
Wild and Scenic Rivers	N/A	N/A	N/A
Wilderness	N/A	N/A	N/A
Environmental Justice	No impacts	No impacts	No impacts
Health and Safety Risks to Children	Same as impacts to air quality	Same as impacts to air quality	Same as impacts to air quality
Visual Resource Mgmt.	Short term blackened areas	Cleared area would take longer to re-vegetate	No impact

# B. <u>Discussion of Impacts</u>

### **1. Proposed Action:**

Air Quality: Smoke generated by the burn may have a short term impact on residents in the Poppet Flat area. Persons with breathing problems may be negatively impacted by drift or residual smoke in the area. It is not anticipated that smoke would cause a problem with visibility along roadways due to the location of the project in relation to the roads. Dispersal winds should lift the smoke and carry it away from sensitive areas.

Cultural Resources: BLM has found that the preferred alternative would result in no

effects to historic properties eligible or listed on the National Register of Historic Places. No known or recorded historic properties are located within the Area of Potential Effect (APE) for this undertaking. Field inspection of the APE noted that the area is densely overgrown with the Chamise-Chaparral vegetation community and that most of the terrain was inaccessible. Cultural properties that would be concealed by the vegetation cover would be subjected to the potential effects of direct fire or heat exposure. Cultural properties on public lands in the vicinity of the APE are predominantly characterized as prehistoric, and primarily include subsistence resource activity areas, which are usually indicated by the presence of bedrock milling features, or lithic quarry and reduction areas. Artifacts and features associated with these types of sites may be affected by fire and heat exposure, which could include spalding of stone milling features or alterations in hydration rates of certain lithic tools. However, the fire history of the area indicates that fire is a part of the natural ecosystem and that numerous large fires have burned near and through most of the land included in the APE at some time in the past. Since the inception of record-keeping, major fires burned over portions of the APE in 1926, 1928, 1932, 1958 (Gilman #2 Fire), 1968 (Poppett Fire), and 2000 (Silent Fire). Cultural properties historically would have been exposed repeatedly to the effects of fire and heat. As such, previous exposure may have already altered any significant values these properties might contain. The burn would remove dense vegetation cover and may reveal new cultural properties. The burn area would be monitored by BLM and other agency cultural resources staff and would be re-examined after the burn for cultural properties exposed by the burn.

Native American Concerns: No Native American issues or concerns have been identified. The Morongo Band of Mission Indians has land involved in the project. Notification letters were sent to the Morongo Band of Mission Indians and the Soboba Band of Luiseno Indians by both the BLM and the California Division of Forestry and Fire Protection. Neither tribe requested formal consultation under the Executive Order of April 29, 1994. BLM Fire staff have had informal discussions with Morongo tribal staff as part of the fire management coordination and cultural resources assessment for the proposed action. BLM has also coordinated with BIA archaeologists for lands on the Morongo Reservation. The Morongo Reservation conducted their own review for cultural resources on Morongo reservation lands. The BIA issued a Categorical Exclusion for the project with a No Effect recommendation for cultural resources.

Floodplains: The low impact prescribed burn would cause less erosion than future wildfires. Less intensive fire activity during the prescribed burn would reduce fuel loading while allowing for quicker re-growth to stabilize soils. The erosion would be significantly higher after a wildfire than after a lower intensity prescribed fire.

T&E Animal Species: There are no records of any Federally listed species in the project area. There are records of *Dipodomys merriami parvus* and *Dipodomys stephensi* in the vicinity but both are typically found in areas of less chaparral cover

and less steep slopes. The burn would take place during the day when both species would be underground in burrows. Potential habitat would be isolated and avoided.

T&E Plant Species: There are no known occurrences of T&E plant species in the project area.

Invasive, Nonnative Species: The prescribed burn would result in short term invasive grasses and herbaceous plants in the burned area. This would be less then after a wildfire. The non-native plant invasions typically occur post fire throughout Southern California. The invasive species often help to stabilize soils until the chaparral and other native species begin to grow back and re-vegetate the site.

Wetlands/Riparian Zones: The low impact burn would reduce chaparral and other plant species encroaching on the riparian areas. This would result in more water and nutrients available to the riparian species. The lower intensity prescribed burn would minimize the threat of a wildfire burning the live oaks and willows in the riparian areas.

Health and Safety Risks to Children: The prescribed burn would generate smoke emissions that may adversely affect children and others in the area. Notifications would be made to advise the local community of the burn allowing any sensitive persons to take precautions to mitigate any impacts.

Visual Resource Mgmt.: Blackened areas would have a short term impact on the visual resources in the area. Impacts would be within VRM Class III objectives.

### 2. Mechanical Fuel Reduction Alternative:

Air Quality: Emissions from the equipment working on such a large a scale, while minimal, could still impact sensitive persons in the area.

Cultural Resources: Cultural resources in the project area, if any, could be irreparably damaged by equipment.

Native American Concerns: The Morongo Band of Mission Indians has land involved in the project and has provided a categorical exclusion for their portion of the burn. The tribe has expressed concern over the areas in which equipment would be planned to work. A swamper working with the equipment to scout for cultural resources has been introduced to mitigate potential resource damage. Equipment working over the entire area would be likely to cause damage to resources.

Floodplains: Equipment would remove all or most vegetation is such a way that could create major erosion problems. Equipment typically removes all parts of the vegetation and portions of the top soil making re-vegetation of the area a longer process thereby delaying the establishment of plants to reduce erosion.

T & E Animal Species: Habitat would take longer to recover from the effects of equipment, reducing any chance of re-population of the area by T&E species in the project vicinity.

T&E Plant Species: Habitat would take longer to recover from the effects of equipment, reducing any chance of re-population of the area by T&E species in the project vicinity.

Invasive, Nonnative Species: Invasive species could possibly become established over the entire project area due to the type and extant of surface disturbance.

Wetlands/Riparian Zones: The equipment, if not carefully supervised could damage riparian areas. Removing all or most of the vegetation in the way equipment does could increase erosion problems.

Health and Safety Risks to Children: The chance of injury to children in the area due to equipment operation is minimal but still present. Children may attempt to play on parked equipment injuring themselves.

Visual Resource Mgmt.: A landscape that has been cleared by equipment would take longer to re-vegetate and soil disturbance would degrade the visual resources in the area. Until the area is revegetated, visual impacts may exceed Class III thresholds.

### 3. No Action Alternative:

Air Quality: Any future wildfires could burn through the area with a much higher intensity, consuming all available fuels and generating much higher emissions.

Cultural Resources: Cultural resources in the project area, if any, would remain undiscovered.

Native American Concerns: The Morongo Band of Mission Indians has land involved in the project and has provided a categorical exclusion for their portion of the burn. No action would leave the vegetation in its current state and still pose a threat to the neighboring community.

Floodplains: With the fire hazard remaining, a high intensity large wildfire could completely burn all fuels and heat the soils. Heating of the soil by a wildfire could cause hydrophobicity. The erosion would be significantly higher after a wildfire than after a lower intensity prescribed fire.

T & E Animal Species: Habitat would remain the same in the climax state of chamise and mixed chaparral. There is the potential for a catastrophic fire to burn through the area reducing habitat for an extended period and resulting in the take of any potential individuals. T&E Plant Species: There are no known occurrences of T&E plant species in the project area.

Invasive, Nonnative Species: The current make-up of plants in the area would remain the same with invasive species established on the disturbed sites.

Wetlands/Riparian Zones: The threat of wildfire would remain. A future wildfire could burn the live oaks and willows and increase erosion problems.

Health and Safety Risks to Children: The threat of catastrophic wildfire to the community would remain. Possibilities of large amounts of smoke emissions and the actual threat of death or injury from any wildfire would remain.

Visual Resource Mgmt.: The area would retain the existing visual characteristics.

#### C. <u>Mitigation Measures</u>

**Air Quality:** Through compliance with the South Coast Air Quality Management District (AQMD), the project would be evaluated for air pollution potential. A Smoke Management Plan (SMP) would be completed and would be submitted for approval. The SMP would be adhered to minimizing the air quality impacts by the burn. The prescription calls for burning conditions that would facilitate smoke dispersal to the northeast away from the community. No burning would take place on No Burn Days. Burning is planned for weekdays to limit the number of persons in the area that may be sensitive to smoke. (There is an RV club located near the project and the number of visitors increases on the weekends.) Notifications would be made to the community and RV club to allow any sensitive individuals to remain indoors or possibly leave during burning to mitigate any potential smoke impacts.

**Invasive, non-native species:** No mitigation actions are planned to limit the invasion of non-native species plants in the project area. On the fuel breaks surrounding the project area non-native species are currently well established. Successional plants would become established after the burn. Some of these would be non-native plants, but many fire adapted native annuals and perennials quickly occupy burned sites. As the chaparral begins to grow back the typical species (that comprise of normal succession in burned areas today) would inhabit the area and be replaced by growing chaparral species. Early growth in the burned areas would help to reduce soil erosion and provide a food source for birds and rodents.

D. <u>Residual Impacts</u>

Air Quality: No residual impacts would exist after burn is completed.

**Invasive, non-native species:** The number and type of non-native, invasive species should not be significantly different than any other disturbed sites in the surrounding area. Some non-native species would help to reduce soil erosion in the early stages of re-growth. This should prove beneficial with possible rainfall after the burn is completed.

#### E. <u>Cumulative Impacts</u>

The Poppet Flats area has been previously modified by fire, both natural and anthropogenic caused. These fires and the subsequent regeneration of vegetation are a part of the ecology of the region and have been going on for centuries. Seventy or more years of fire suppression by humans have modified this cycle of burn and regeneration. Such suppression has had the large cumulative effect of increasing fuel loads to dangerously high levels. When burns do occur, they tend to be catastrophic in scale, much larger than those smaller frequent burns that occur in the absence of human fire suppression.

The proposed burn seeks to reduce the heavy fuel load to prevent such a catastrophic fire event from occurring. This would be achieved by replicating the natural lower temperature, fast moving burns that result when fuel loads are low.

There are no anticipated negative, cumulative impacts resulting from this project. Most of the surface disturbance will occur on previously disturbed areas. The chaparral should begin to grow soon after the burn reducing visual impacts on the community. The burn will be conducted under lower intensity conditions than a wildfire allowing a quicker return to a green state.

Plant and wildlife habitat in the area would be altered in the short term most likely benefiting the sensitive species in the area by opening more areas to suitable habitat. After a period the vegetation would return to its previous state. Current studies show a significant decrease in erosional sediment after the use of prescribed fires due to less consumption of fuels and lower temperatures that support quicker re-growth. The mosaic pattern planned for the prescribed burn would leave patterns of dense brush that is not completely burned and areas that are burned where grasses and herbaceous annuals would grow. This pattern creates a more stable surface area in the event of future wildfires due to diversity of plant species and ages that populate the area. The chance of a catastrophic fire in the area would be reduced limiting the chances of habitat loss and wildlife mortality in the future.

### FREEDOM OF INFORMATION ACT CONSIDERATIONS:

Public comments submitted for this environmental assessment, including names and street addresses of respondents, will be available for public review at the Palm Springs-South Coast Field Office during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your comments. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

### PERSONS / AGENCIES CONSULTED:

Bureau of Indian Affairs provided a Categorical Exclusion with a No Effect recommendation.

U.S. Forest Service Fire Research Station

#### **PREPARED BY:**

James Gannon, BLM, South Coast Fuels Module leader Kristen Allison, BLM, South Coast Fuels Specialist Rolla Queen, BLM, Archaeologist Kevin Doran, BLM, Natural Resources Specialist

#### **REVIEWED BY:**

Environmental Coordinator

Date

### U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT PALM SPRINGS-SOUTH COAST FIELD OFFICE

### DECISION RECORD CA-660-05-01

## NAME of PROJECT: Poppet Prescribed Fire

**DECISION:** It is my decision to approve the proposed action as described in Environmental Assessment (EA) number CA-660-05-01. Compliance with the mitigation measures identified in the EA is hereby required. These measures are incorporated into this decision record as stipulations by reference. A copy of this Decision Record and attendant conditions of approval (stipulations) shall be in the possession of the on-site operator during all undertakings approved herein.

**RATIONALE:** The approved action is in conformance with applicable land use plans and will not cause unnecessary or undue degradation.

**FINDING OF NO SIGNIFICANT IMPACT:** Environmental impacts associated with the proposed action have been assessed. Based on the analysis provided in the attached EA, I conclude the approved action is not a major federal action and will result in no significant impacts to the environment under the criteria in Title 40 Code of Federal Regulations 1508.18 and 1508.27. Preparation of an Environmental Impact Statement to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

**APPEALS:** This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43 of the Code of Federal Regulations (CFR), Part 4, and the information provided in Form 1842-1 (enclosed). If an appeal is taken, your notice of appeal must be filed in the Palm Springs-South Coast Field Office, Bureau of Land Management, U.S. Department of the Interior, 690 West Garnet Avenue, P.O. Box 581260, North Palm Springs, California 92258, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, pursuant to Title 43 of the Code of Federal Regulations, Part 4, Subpart E, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

### **Standards for Obtaining a Stay**

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a 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 the stay.

Field Manag	ger	Date
Palm Spring	s-South Coast Field Office	
USDI Burea	u of Land Management	
690 W. Garr	net Avenue; P.O. Box 581260	
North Palm	Springs, CA 92258-1260	