



United States  
Department of  
Agriculture

Forest Service  
April 2013

# Notice of Proposed Action

## East Walker Landscape Habitat Improvement Project

**Bridgeport Ranger District, Humboldt-Toiyabe National Forest  
Lyon and Mineral Counties, Nevada**

## COMMENTS WELCOME

The Bridgeport Ranger District, Humboldt-Toiyabe National Forest, welcomes your comments on the proposed East Walker Landscape Habitat Improvement Project.

It is expected that this project proposal would fall within a category of actions listed in the Forest Service NEPA regulations (36 CFR part 220) that are excluded from documentation in an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and that no extraordinary circumstances exist that would preclude use of this category (36 CFR 220.6 (e)(6)). The category is described as “*Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than one mile of low standard road construction.*”

The Forest Service is applying notice, comment, and appeal regulations found at 36 CFR 215 to this project. This document initiates both the scoping process (40 CFR 1501.7) and provides notice of the 30-day comment period pursuant to Forest Service regulations at 36 CFR 215. The purpose of this comment period is to provide an opportunity for the public to provide meaningful input on the proposed action prior to a decision by the Responsible Official. For detailed information on how to provide comments, please refer to the Comment Process section of this document on page 10.

## LOCATION

The project area includes approximately 41,350 acres of National Forest System lands within the East Walker River drainage in both Lyon and Mineral counties (Figure 1). The project area is located approximately 15 miles north of Bridgeport, CA and includes Bi-state sage-grouse habitat within the Desert Creek-Fales and Mount Grant Population Management Units (PMUs) (Figure 2).

### **Inventoried Roadless Areas (IRAs)**

Approximately 83 percent (34,494 acres) of the project area falls within an Inventoried Roadless Area (IRA) (Figure 4). An estimated 64 percent (26,629 acres) is in the Pine Grove South IRA, 13 percent (5,427 acres) in the West Walker IRA, 4 percent (1,815 acres) in the Chinese Camp IRA, and 2 percent (623 acres) is within the Devil’s Gate IRA. An analysis will be completed that will disclose the effects of this project, if any, on the roadless area characteristics and wilderness attributes of the IRAs described above.

### **Proposed Wovoka Wilderness**

On January 28, 2013 a bill was introduced to the U.S. Senate entitled, “A bill to designate the Wovoka Wilderness and provide for certain land conveyances in Lyon County, Nevada, and for other purposes” (S.159). All or a portion of treatment units North 1, North 2, North 3, and North 4 (Figure 3) could potentially be designated as wilderness by Congress in the future. If wilderness designation occurs, all proposed treatments in these areas would be managed according to the wilderness designation legislation.

## **Eligible Wild and Scenic River**

The East Walker River has been identified as having potential for designation as a Wild and Scenic River from the bridge crossing below the confluence with Sweetwater Creek to the bridge crossing near the headquarters unit of the Flying M Ranch. The main recreational activity in the East Walker River area is fishing, and because of the outstanding fishing along this river it was determined to be eligible as a recreational river. The project area includes upland areas adjacent to the East Walker River, but does not include riparian corridors along the river or lands contained within the Rosaschi Ranch boundary (Figure 3).

## **BACKGROUND**

### **Pinyon-Juniper Encroachment**

Since the mid 1800s, the cover, density, and mean age of singleleaf pinyon pine (*Pinus monophylla*) and juniper (*Juniperus* spp. primarily *Juniperus osteosperma*), have increased across the Great Basin at the expense of ecosystems dominated by sagebrush (*Artemisia tridentata*) and other native shrubs, grasses, and forbs. Higher woody fuel loads and associated changes in stand structure alter fire behavior, resulting in a trend away from relatively moderate fires toward infrequent but high severity fires. High severity fires can increase the susceptibility of low to mid-elevation woodlands to cheatgrass (*Bromus tectorum*) and other invasive non-native species. Pinyon-juniper woodland expansion has replaced shrub-steppe vegetation, leading to increases in hazardous woody fuels, loss of sagebrush habitats for wildlife, decreases in species diversity, reduction or loss of seed banks, decreases in aquifer recharge, and increases in soil erosion rates (Koniak and Everett 1982, Wilcox and Breshears 1994, Davenport et al. 1998, West, 1999, Miller et al. 2000).

One of the main concerns with pinyon-juniper woodlands on the Bridgeport District is the conversion of Phase 1 and 2 (low and medium canopy closure) to Phase 3 (canopy closure and loss of understory vegetation). Miller et al. (2008) estimate a 2 percent annual conversion rate of pinyon-juniper woodlands to Phase 3 in the Great Basin. Based on the 2 percent annual conversion rate (approximately 316,384 total acres of pinyon-juniper on the Bridgeport District; 253,107 acres in Phase 1 and 2), approximately 5,062 acres a year are being converted to Phase 3 (D. Dong, Personal Communication, 03/06/2013). As pinyon-juniper woodlands move from Phase 1 and 2 into Phase 3, restoration of sagebrush-steppe communities becomes more difficult and costly. Proactive management can provide positive use of pinyon-juniper fuels while reducing the risk of high severity wildfires, reducing the risk of cheatgrass invasion following high severity fires, and restoring sagebrush-steppe communities. Treating pinyon-juniper on a landscape scale can reduce future fire suppression costs, protect intact sagebrush-steppe communities from high severity wildfire, and improve the likelihood of restoring areas to sagebrush-steppe communities by targeting Phase 1 and 2 pinyon-juniper woodlands for treatment before conversion occurs.

## **Bi-State Sage-Grouse**

The greater sage-grouse is a candidate for protection under the Endangered Species Act. Sage-grouse on the Bridgeport District are part of a distinct population segment (DPS) of the greater sage-grouse. This DPS, called the Bi-state population, was given a higher priority for listing than the greater sage-grouse as a whole due to the presence of more immediate and severe threats. Threats include habitat loss caused by development, grazing, invasive species, pinyon-juniper encroachment, and wildfire. Expansion of pinyon-juniper results in loss and fragmentation of suitable habitat for sage-grouse through removal of understory shrubs, grasses, and forbs needed for adult and chick survival, loss and drying of meadow (brood-rearing) habitat, increases in perching opportunities for raptors (increased predation rate), sage-grouse avoidance of pinyon-juniper stands, and increased risk of high severity wildfire (Bi-State Action Plan, 2012).

The Bi-State Action Plan (2012) identifies pinyon-juniper encroachment and wildfire as high level threats for the Desert Creek-Fales and Mount Grant Bi-state sage-grouse PMUs. The priority conservation strategies identified in the Bi-State Action Plan are as follows:

**Desert Creek-Fales PMU:** *“Treat pinyon-juniper encroachment in potential nesting and connectivity habitats and around historic springs where spring flow may be restored by tree removal; and minimize large scale habitat loss due to wildfire by implementing fuel reduction treatments...”*

**Mount Grant PMU:** *“Treat pinyon-juniper encroachment to increase the availability of nesting habitat especially at lower elevations and to facilitate connectivity within and among populations; and minimize large scale habitat loss due to wildfire by implementing fuel reduction treatments...”*

Approximately 30,704 acres of the project area are within the Desert Creek-Fales PMU and the remaining 10,646 acres are in the Mount Grant PMU (Figure 2). The project area also includes 26,746 acres designated as Preliminary Priority Habitat (PPH) for Bi-state sage-grouse (Figure 2). PPH was identified and designated by the Bi-State Technical Advisory Committee using a modeling approach based on sage-grouse lek locations and telemetry data. Pinyon-juniper treatments are planned both within and adjacent to PPH habitat to improve habitat quality, increase connectivity, and reduce risk of wildfire.

## **Wildland Urban Interface (WUI) Zone**

The wildland urban interface zone (WUI) is an area where human habitation is mixed with areas of flammable wildland vegetation. It extends out from the edge of developed private land into federal, private, and state jurisdictions. Private property is present within and adjacent to the project area. Hazardous fuels reduction treatments adjacent to these properties would help reduce the risk of high severity wildfire.

## **PURPOSE AND NEED FOR ACTION**

The purpose of this project is to improve, enhance, and protect Bi-state sage-grouse habitat, increase habitat connectivity by reducing pinyon-juniper encroachment into sagebrush ecosystems, and reduce the risk of high severity wildfire to sage-grouse habitat and private property. The need for this project is to address the priority conservation strategies for the Desert Creek-Fales and Mount Grant PMUs as identified in the Bi-State Action Plan (2012) and to reduce hazardous fuels in priority sage-grouse habitat, the WUI, and surrounding areas.

## **PROPOSED ACTION**

The Forest Service proposes to remove pinyon pine and juniper using a combination of mechanical methods and prescribed fire on up to 41,350 acres within the project area (Figure 3). Mechanical methods would be emphasized on slopes less than 35 percent and around private lands to reduce the risk of wildfire, improve the health and diversity of vegetation, and improve the quality of wildlife habitat in areas where the use of prescribed fire would not achieve desired objectives or would be difficult to implement.

The majority of trees in the project area are pinyon pine. Treatments would primarily focus on Phase 1 and Phase 2 pinyon and juniper stands (Table 1). Some areas of Phase 3 pinyon may also be treated as necessary to increase habitat connectivity and reduce the risk of wildfire to adjacent sagebrush habitats. Treatments may include the complete removal of trees (all live trees exceeding 1 foot in total height would be completely severed from the stump) or thinning (select trees would be removed from the stand).

Tree removal and cutting would be avoided in true pinyon-juniper woodland ecological sites (pre-settlement trees). No identifiable pre-settlement trees would be targeted for removal. These trees can be identified on the landscape by their flattened, rounded, and or asymmetrical crowns, which stand well above the surrounding younger trees (typically shorter with conical crowns that display a pointed tip).

**Table 1: Description of Woodland Phases. Adapted from Miller et al. (2000, 2005, and 2008).**

<b>Phase</b>	<b>Description</b>
0	No trees present, or the trees present are $\leq 10$ per acre.
1	Small trees are present, but shrubs, grasses, and forbs dominate the vegetation that influences ecological processes (hydrology, nutrient cycles, and energy capture) on the site.
2	Trees co-dominate with shrubs, grasses, and forbs. All vegetation layers influence ecological processes. Trees grow fast (have pointed tops) and bigger trees may produce many berries or pine nuts. Late Phase 2 has more fuel, produces more heat during fire, and has weaker understory vegetation for site recovery.
3	Trees are the dominant vegetation and the primary plant layer influencing ecological processes on the site. Tree growth slow (tops become rounded) while seed production declines. When tree cover exceeds 60% of the total vegetation cover, most understory vegetation is dying or dead.
Pre-settlement	These trees can be identified on the landscape by their flattened, rounded, and or asymmetrical crowns, which stand well above the surrounding younger trees (typically shorter with conical crowns that display a pointed tip).

**Description of Potential Treatments**

**Lop and Scatter** – Hand crews would use chainsaws to fell trees within the treatment unit. Treatments may include complete removal (all live trees exceeding 1 foot in total height would be completely severed from the stump) or thinning (select trees would be removed from the stand). Trees would be left on site to decompose naturally. Depending on the size of the trees, limbs would be lopped and scattered into natural openings on the ground to facilitate decomposition.

**Cut and Pile Burn** – Hand crews would use chainsaws to fell trees within the treatment unit. Slash would be piled by hand and hand piles would be constructed in a tight, compact fashion. Pile diameter would be between 6 and 10 feet. Wherever possible, hand piles would be constructed on top of cut stumps and in openings created by removal of larger trees. Piles would be burned under favorable conditions once the slash has cured, typically the following fall/winter.

**Mastication** – Heavy equipment would be used to remove and grind trees. Heavy equipment may include wheeled or tracked vehicles. Complete removal of trees (all live trees exceeding 1 foot in total height would be completely severed from the stump) or thinning (select trees would be removed from the stand) may be used. Masticated material would be spread and left on site to decompose naturally. Mastication would primarily be used in areas with less than 35 percent slope.

**Prescribed Fire** – Prescribed fire would be used to reduce pinyon-juniper densities and improve structural and age class diversity within sagebrush and mountain brush communities. Prescribed fire treatments would typically be used to treat pinyon-juniper at mid elevations and on slopes greater than 35 percent, but may be used in other areas as appropriate. Prescribed fire treatments may occur during any season of the year within established prescriptions. A prescribed burn plan written by a qualified burn boss would be followed.

Burned openings would typically range from 0.25 to 200 acres in size and would create a mosaic pattern across the landscape. Size of openings may vary depending on the vegetation community and intensity of the burn, some larger openings may be created due to the unpredictable nature of fire and weather conditions.

Prescribed fire treatments may include ground ignition (drip torches and or flares), aerial ignition (helicopter/helitorch and or Plastic Sphere Dispenser (PSD)), and management of naturally occurring wildfires for resource benefits. Ground support staging areas would occur on existing roads or in designated areas. Hand lines may be used on a limited basis to protect archaeological resources, private lands, or other high value resources. Firefighting resources would be present to ensure full containment of the prescribed fire within the project area.

The target areas for prescribed fire treatments include Phase 1, Phase 2, and limited areas of Phase 3 pinyon-juniper stands. No ignition of pre-settlement trees would occur; however, pre-settlement trees adjacent to target areas may be scorched or killed. Prescribed fire would not be used in areas where the risk of cheatgrass increase is high, particularly on steep south facing slopes that have lost herbaceous understory vegetation.

**Commercial and Personal Use Fuelwood Removal** – Personal use fuelwood removal permits and commercial fuelwood contracts would be sold to cut and remove pinyon pine and juniper in designated areas. Slash would be lopped and scattered or piled by hand and burned under favorable conditions once the slash has cured.

**Seeding Native Species** – A native species seed mix appropriate for the site and collected locally when possible may be used if native recruitment is less than desired following treatment. Seeds would be certified “weed free” and seeding would occur through hand, mechanical, or aerial application.

### **Potential Treatments by Unit**

See Figure 3 for unit boundaries and Table 1 for description of woodland phases.

**West 1:** Most of this 603 acre unit is Phase 0 and Phase 1. Treatments may include lop and scatter, cut and pile burn, commercial and personal use fuelwood removal, and mastication.

**West 2:** The majority of this 1,626 acre unit is Phase 2. Treatments may include lop and scatter, cut and pile burn, mastication, commercial and personal use fuelwood removal, and seeding.

**South 1:** Most of this 2,829 acre unit is Phase 0 and Phase 1. Treatments may include lop and scatter.

**South 2:** A majority of this 7,817 acre unit is Phase 2 with some Phase 3 in the southern portion. Treatments may include lop and scatter, cut and pile burn, mastication, prescribed fire, commercial and personal use fuelwood removal, and seeding.

**North 1:** Most of this 6,185 acre unit is Phase 0 and Phase 1. Treatments may include lop and scatter and prescribed fire.

**North 2:** Most of this 10,816 acre unit is Phase 0 and Phase 1. Some Phase 3 is present along the outer edges of the unit. Treatments may include lop and scatter, cut and pile burn, and prescribed fire.

**North 3:** A majority of this 5,659 acre unit is Phase 2. Treatments may include lop and scatter, cut and pile burn, mastication, prescribed fire, and seeding.

**North 4:** A majority of this 5,815 acre unit is Phase 3. Treatments may include lop and scatter, cut and pile burn, mastication, prescribed fire, and seeding.

### **Project Design Features**

To protect resources, the following design features have been identified:

#### **Cultural:**

- An archaeological site inventory would be conducted on potential treatment units prior to treatment.
- Consultation with tribes, the public, and the Nevada State Historic Preservation Office on the adequacy of protection measures for archaeological sites would occur prior to treatment.
- Identified sacred sites and traditional cultural properties would be protected, per consultation with tribes.
- To protect cultural resources, exclusion areas would be identified where project specific archaeological surveys have identified cultural resources that could be negatively impacted by the proposed project work. No project work would be allowed in areas identified for exclusion. Avoidance measures may include temporary marking of the site and monitoring during treatment activities. Most site markers would be removed after treatment.
- If previously undiscovered archaeological resources are encountered during project implementation, operations would be immediately stopped and the Bridgeport District

archaeologist notified. The project would be modified to avoid impacts to any late discoveries of archaeological resources prior to the resumption of work.

- In order to protect sites, hand clearing of vegetation may be done around known historic wood features within the project area.
- If obsidian artifacts are observed in the project area a sample would be collected if necessary for data recovery.

### **Wildlife:**

- When possible, treatments would be timed to avoid potential destruction of migratory bird nests or young birds. If mechanical treatments were planned during the breeding season (May 15-August 31), a qualified biologist would survey the area prior to treatment to determine if nests are present. If nests or evidence of nesting are observed, a protective buffer would be delineated to prevent destruction or disturbance to nests until they are no longer active. If prescribed fire treatments were planned during the breeding season, ignition activities would be less than two weeks in duration to allow migratory birds that may lose their nest to re-nest.
- No treatments would occur during the sage-grouse breeding, nesting, and early brood-rearing season (March 1 – June 30) in areas identified as sage-grouse breeding, nesting, and early brood-rearing habitat. Treatments may occur during this time period in some areas within the project boundary where a biological evaluation determines that treatments are unlikely to result in disturbance to sage-grouse.
- Treatments would not occur in key mule deer areas during the fawning season (June 15 – July 15).

### **Botanical Species:**

- A sensitive plant survey would be conducted in areas identified as suitable habitat prior to treatment. If sensitive plants are found, the area would be flagged and avoided.
- Seeding of native grasses, forbs, and shrubs may be done prior to and following treatment to provide additional seed sources for vegetative recovery. Non-native species would not be included within any seed mixes.

### **Vegetation:**

- Pinyon pine tree thinning and mastication may only occur from July 1 – December 31 in areas where pinyon engraver bark beetle (*Ips confusus*) infestation is identified as a concern.

- In areas adjacent to pre-settlement trees, pinyon pine tree boles and limbs greater than 4 inches in diameter at root collar (DRC) would be bucked into rounds less than 2-feet in length. These rounds and limbs would be moved away from residual pre-settlement trees to reduce the chance of pinyon engraver bark beetle (*Ips confusus*) infestation.
- Prescribed fire ignition would not occur on rocky outcrops to avoid burning pre-settlement trees and rare plant communities.

### **Noxious Weeds/Invasive Species:**

- As needed, control of noxious weeds and invasive species would be done under the Forest's approved treatment program.
- Contract equipment would be washed and inspected prior to entering National Forest System lands to remove any soil and debris that may harbor noxious weed seeds.
- Areas with higher concentrations of cheatgrass and or medusa head would be evaluated prior to any prescribed burning and or mastication activity to determine the risk of spreading these weeds following implementation. If the risk of cheatgrass spread is considered high, the site would be avoided or mitigated with pretreatment and seeding of native grasses.

### **Soils and Water:**

- No trees would be removed from areas where they provide stream bank stability.
- Ground based equipment would only cross at established stream crossings.
- Pile burning would be minimized in riparian areas (ecosystems that occur along watercourses or water bodies that have unique soil and plant characteristics).
- Generally, ground based equipment would operate on slopes less than 35 percent (30% on decomposed granite soils). Ground based operations may occur on slopes up to 50 percent on short pitches of 150 feet or less; these would be designed on a unit by unit basis only after soil stability, soil rock content, and the location of the steep slope in relation to the remaining portions of the treatment unit have been determined to be appropriate by the Forest Service.
- Motorized equipment would not be used when soils are saturated.
- To mitigate ground disturbance during mastication, track equipment operators would avoid making abundant sharp right angle turns. Instead a gentle curved pattern with the least amount of sharp angles would be utilized during implementation to reduce ground disturbance. Different routes would be used to avoid creating the appearance of trails. Debris would be spread and berms shoveled down to retain a natural appearance.

### **Prescribed Fire:**

- All federal, state, and local regulations pertaining to prescribed burning and smoke management would be followed. A U.S. Forest Service (Region 4) burn plan is required to be completed and approved before burning is initiated.
- Roads within the project area may be closed to the public for the brief time that prescribed fire operations are in progress.
- Prior to implementation of prescribed burn treatments, a news release would be distributed to media contacts and public notification would occur to advise the local community and residents of the prescribed burning and any temporary road closures.

### **General:**

- No vegetation treatments would be allowed during periods of high fire danger. Full or partial shutdown days due to high fire danger conditions would be based on the Humboldt-Toiyabe National Forest Project Activity Level (PAL) system.
- No toxic materials or fluids would be used or disposed of on site.
- No new or temporary roads would be constructed.
- Mechanical treatments within the project area may require vehicles to travel off established roads. Following completion of mechanical treatments, any skid trails or locations used by vehicles off established roads would be re-vegetated to ensure that unauthorized roads and or trails do not develop.
- Commercial fuelwood permits may allow vehicles to travel off established roads in the treatment area if determined to be necessary and appropriate for site conditions by the Forest Service.

## **COMMENT PROCESS**

The Forest Service encourages your comments on this proposed action, along with supporting reasons that the responsible official should consider in reaching a decision.

Written, facsimile, hand-delivered, oral, and electronic comments concerning this action will be accepted for 30 calendar days following the publication of the legal notice for this project in the Reno Gazette-Journal. It is the responsibility of persons providing comments to submit them by the close of the comment period. Interest expressed or comments provided after the close of the 30-day comment period will be considered, but will not confer eligibility to appeal a decision to proceed with the project.

**Mailed comments** must be submitted to: District Ranger, Mike Crawley, Bridgeport Ranger District, HC 62 Box 1000, Bridgeport, CA, 93517-1000. The fax number is (760) 932-5899.

**Office business hours** for those submitting written comments in person or providing oral comments are: 8:00 am to 4:30 pm, Monday through Friday, excluding federal holidays.

**Electronic comments** may be submitted by selecting the “Comment on this Project” link on the Humboldt-Toiyabe National Forest website at <http://www.fs.usda.gov/goto/htnf/eastwalker>.

**Appeal Eligibility:**

It is the responsibility of persons providing comments to submit them by the close of the comment period. Those who provide comments during this comment period are eligible to appeal the decision under the regulations. Individuals and organizations wishing to be eligible to appeal must provide the information identified in 36 CFR 215, including:

- Name and address
- Title of the proposed action
- Specific comments (36 CFR 215.2) on the proposed action, along with supporting reasons that the Responsible Official should consider in reaching a decision
- Signature or other verification of identity upon request; identification of the individual or organization who authored the comments(s) is necessary for appeal eligibility
- For multiple names or multiple organizations, a signature must be provided for the individual authorized to represent each organization, or for each individual that wishes to have appeal eligibility
- Individual members of organizations must submit their own comments to meet the requirements of appeal eligibility as an individual. Comments received on behalf of an organization are considered as those of the organization only.

Comments received in response to this notice, including names and addresses of those who comment, will be considered part of the public record for this project and will be available for public inspection and will be released if requested under the Freedom of Information Act.

For additional information please contact Joanne Lowden, Wildlife Biologist, at (760) 932-5853 or via email at [jalowden@fs.fed.us](mailto:jalowden@fs.fed.us).

## REFERENCES

Bi-State Technical Advisory Committee Nevada and California. 2012. Bi-State Action Plan Past, Present, and Future Actions For Conservation of the Greater Sage-Grouse Bi-State Distinct Population Segment. Available at:

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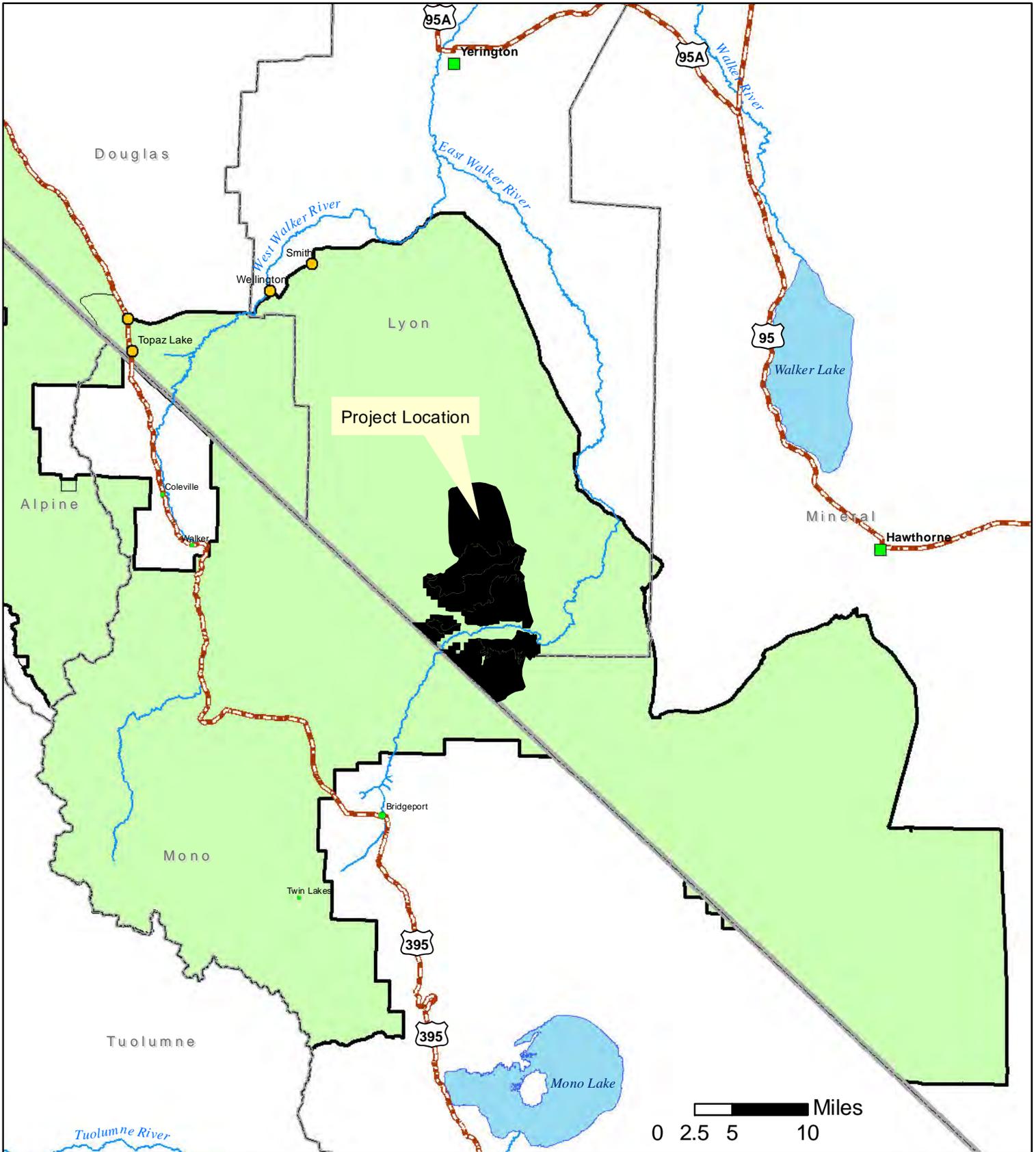
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Figure 1: East Walker Landscape Habitat Improvement Project Location



-  State Boundary
-  County Boundary
-  Ranger District





## Humboldt-Toiyabe National Forest

U.S. DEPARTMENT OF AGRICULTURE

Humboldt-Toiyabe National Forest maps were compiled from multiple sources and may not meet the U.S. National Mapping Standards of the Office of Management and Budget. This data has no warranty as to content or accuracy other than that it represents the best information available to the Humboldt-Toiyabe National Forest.



Figure 2: East Walker Landscape Habitat Improvement Project Sage-Grouse PMUs and Preliminary Priority Habitat (PPH)

## Desert Creek - Fales PMU

PMU Boundary Follows the East Walker River

## Mount Grant PMU

-  Sage-Grouse PMU Boundary
-  Sage-Grouse PPH
-  East Walker River
-  Project Area

0.5 1 2 Miles

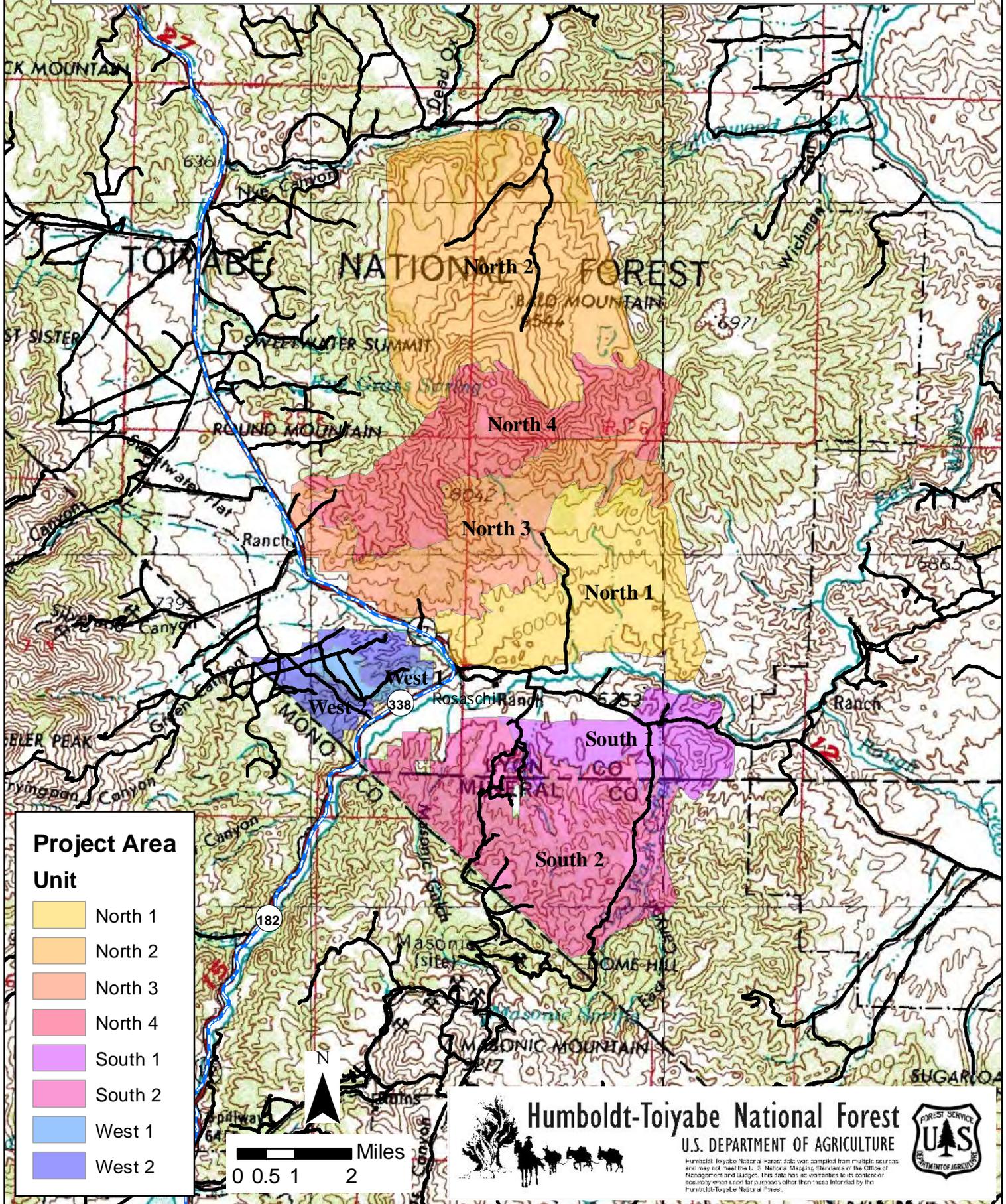


**Humboldt-Toiyabe National Forest**  
U.S. DEPARTMENT OF AGRICULTURE



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Figure 3: East Walker Landscape Habitat Improvement Project Treatment Units



# Figure 4: East Walker Landscape Habitat Improvement Project and Inventoried Roadless Areas (IRA)

Total Project Area = 41,350 acres

Project Area in IRA = 34,494 acres

Approximately 83% of the Project Area is in an IRA

6-04 Pine Grove South = 26,629 acres in Project Area (64%)

6-12 West Walker = 5,427 acres in Project Area (13%)

6-13 Chinese Camp = 1,815 acres in Project Area (4%)

6-14 Devil's Gate = 623 acres in Project Area (2%)

