



DECISION MEMO

West Carson Habitat Improvement and Fuels Reduction Project

USDA Forest Service
Humboldt-Toiyabe National Forest, Carson Ranger District
Carson City, Nevada

I. PROJECT BACKGROUND AND PURPOSE AND NEED FOR ACTION

A. PROJECT LOCATION

The project is located within Carson City, Nevada. The legal description is T.15N., R.19E., sections 2, 13, 14, 23, 24, 25, 26, 35, and 36 and T15N, R20E, sections 18, 20, and 30, Mount Diablo Meridian. Figure 1 is a vicinity map of the project area.

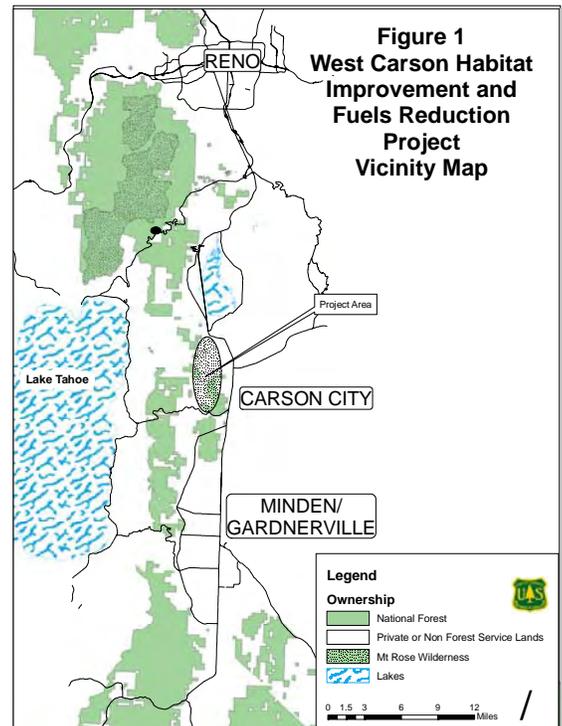
B. BACKGROUND/PURPOSE AND NEED FOR ACTION

Between 1980 and 2004 approximately 17,155 acres have burned within the Carson City municipality, including the 8,799 acre Waterfall Fire in 2004, which also burned 66 structures.

Following the Waterfall Fire, the Burned Area Emergency Response (BAER) team completed an emergency assessment of the burned area and recommended 4,111 acres of treatments, including aerial and drill seeding, straw mulch, log erosion barriers and straw waddles. In August 2005, Resource Concepts, Inc. evaluated the seeding success of the BAER treatments and recorded the approximate fuel loading in the treated areas. In many areas some of the perennial grasses had germinated and established in the first growing season. However, even where perennial grasses had established, cheatgrass was often present in equal or greater densities. Other areas were dominated by cheatgrass and tumble mustard with little to no perennial grass establishment.

Invasive annual grass species in the project area include cheatgrass and medusahead. Non-native perennial grasses include intermediate wheatgrass.

Cheatgrass is an aggressive, non-native, invasive winter annual grass that was first introduced into the United States in the mid 1800's and now occurs in all states. Cheatgrass is a poor quality forage for



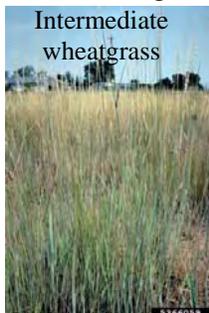


wildlife and has the potential to completely alter the ecosystem it invades and alter fire regimes. Cheatgrass-dominated sites result in reduced forage on critical winter rangeland for mule deer and other game animals (Ypsilantis *et al* 2003). Cheatgrass turns from green to purple as it matures and eventually dries out to a wheat color, becoming extremely flammable. Cheatgrass also matures and dries out weeks before native vegetation, potentially lengthening the fire season. The roots of cheatgrass are less extensive than the roots of typical native shrubland plants, providing a weak anchor for the soil and promoting erosion. (USDA RMRS 2008).

Medusahead is another aggressive non-native annual grass also present in some sections of the project area. Medusahead is less palatable than cheatgrass and has a narrower window of acceptability for consumption; however, consumption will occur when it is green for a few weeks in early spring before the seed is mature. Livestock treatments are very effective if consumed repeatedly and seed production is prevented (Davison *et al* 2006). When the seeds of this annual grass mature, they become armed with stiff barbs and awns that reduce palatability and repel consumption. Medusahead normally contains large amounts of silica, allowing the dead plants to remain in place longer than other annual grasses, providing additional fuel for wildfires for a longer period of time (Launchbaugh *et al* 2006).



Intermediate wheatgrass is an introduced cool season perennial grass used to stabilize disturbed soils. This grass is a desirable feed for domestic stock and wildlife and may provide good nesting cover for game birds. However, this grass may become weedy and displace desirable vegetation (Ogle *et al* 2003). Intermediate wheatgrass was seeded subsequent to the Waterfall fire for soil stability and erosion control. This seeding was successful; however, in some areas this grass has prospered to the detriment of native vegetation. This area is critical deer winter range; bitterbrush and sagebrush are the primary feed utilized for mule deer. In some areas, intermediate wheatgrass is displacing or restricting bitterbrush and sagebrush establishment or growth.



Annual grasses reproduce by seed; therefore, invasive annual grasses can be suppressed when targeted consumption limits the production of viable seed. Seed heads of invasive grasses must be consumed while they are still green and unviable, therefore timing of consumption is important and must occur in the early spring months. Early Intense flash consumption (consumption for a short period of time) of these introduced grasses by domestic animals will remove biomass, decrease plant density and suppress flowering. Cheatgrass may require a second or third grazing in the spring because it can re-grow and produce new seed heads three to four weeks after the first defoliation. Domestic animals will readily consume cheatgrass, medusahead and intermediate wheatgrass when it is green. Cheatgrass populations crash when cheatgrass plants do not produce viable seed for two or more successive years, leaving only scattered, thin populations. Domestic sheep and goats are especially effective because their consumption and movements can be closely controlled and they get a full bite of the grass more easily (Launchbaugh *et al* 2006).



Once highly flammable cheatgrass is established, infrequent natural fires are supplanted by fires of far greater intensity that occur at intervals of only three to five years and can be catastrophically destructive to habitats and humans alike (RMRS 2008). The fire regime condition class in this area is classified as condition class three, which means the vegetation composition, structure, and fuels have a high departure from the historic regime and predispose the system to a high risk to loss of key ecosystem components. Removal of invasive grasses such as cheatgrass and medusahead and replacement with native perennial grasses and shrubs will move this area towards a more historic vegetation structure and fire return interval.

Cheatgrass has been identified as the C3 species most positively responsive to increased CO₂ and thus capable of benefiting from global atmospheric trends (*Ypsilantis et al 2003*).

Collaboration and cooperation with Carson City, State of Nevada, and private land owners will reduce the overall densities of these invasive grasses by suppressing seed production over a larger area. Continued consumption of cheatgrass is desired until densities indicate this invasive grass has low densities or is non-existent.

The purpose of this project is:

- Improve critical deer winter range.
- Reduce the frequency and risk of a fast moving wildland fire.
- Move the fire regime condition class from a high departure from the historic regime towards a more historic regime.

C. DECISION

It is my decision to reduce invasive grass densities, such as cheatgrass and medusahead on approximately 3,750 acres on National Forest System lands within the wildland urban interface of Carson City. Domestic sheep will be utilized to accomplish this. In some areas where cheatgrass completely occupies the site, seeding with native grasses will occur.

Timing and Duration

- Domestic sheep will be utilized during the late winter or early spring months when invasive grasses such as cheatgrass and medusahead are green and seed heads can be consumed. Some intermediate wheatgrass will also be consumed.
- Sheep will be excluded from any areas recently planted or seeded and any other designated exclusion areas, such as archeological sites.
- Sheep will be excluded from any aspen sites.
- Sheep will be excluded from Borda meadows, located in township 15 North, range 19 East, section 23.
- Sheep may not graze all acres of the project area in any one season, but will be utilized where dense areas of invasive grasses exist, however, the entire project area will be positively affected.
- To avoid damage to desirable perennial plants, consumption will be monitored and the sheep will be removed when utilization is at 80%.



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- Browsing of mature shrubs will be limited to 25% utilization in non-bedding or watering sites.
- Consumption of cheatgrass may occur twice within the spring months.

Bedding and Stock Watering Sites

It is likely that bedding and watering sites will be impacted more than the typical treatment area due to concentrated use.

- Watering sites will be located according to accessibility for water tenders to deliver water to troughs and may be located on Forest Service, Carson City, or other lands.
- Bedding and watering sites will be approved by Forest Service personnel prior to use.
- Bedding and watering sites will have archeological surveys completed prior to Forest Service approval.
- Bedding and watering sites will not be located on known or identified cultural resource sites.
- To minimize impacts to browse and soil resources, bedding sites will be used for a maximum of three consecutive days.
- Bedding sites will not be located within 100 feet of any live stream or riparian areas.

Monitoring

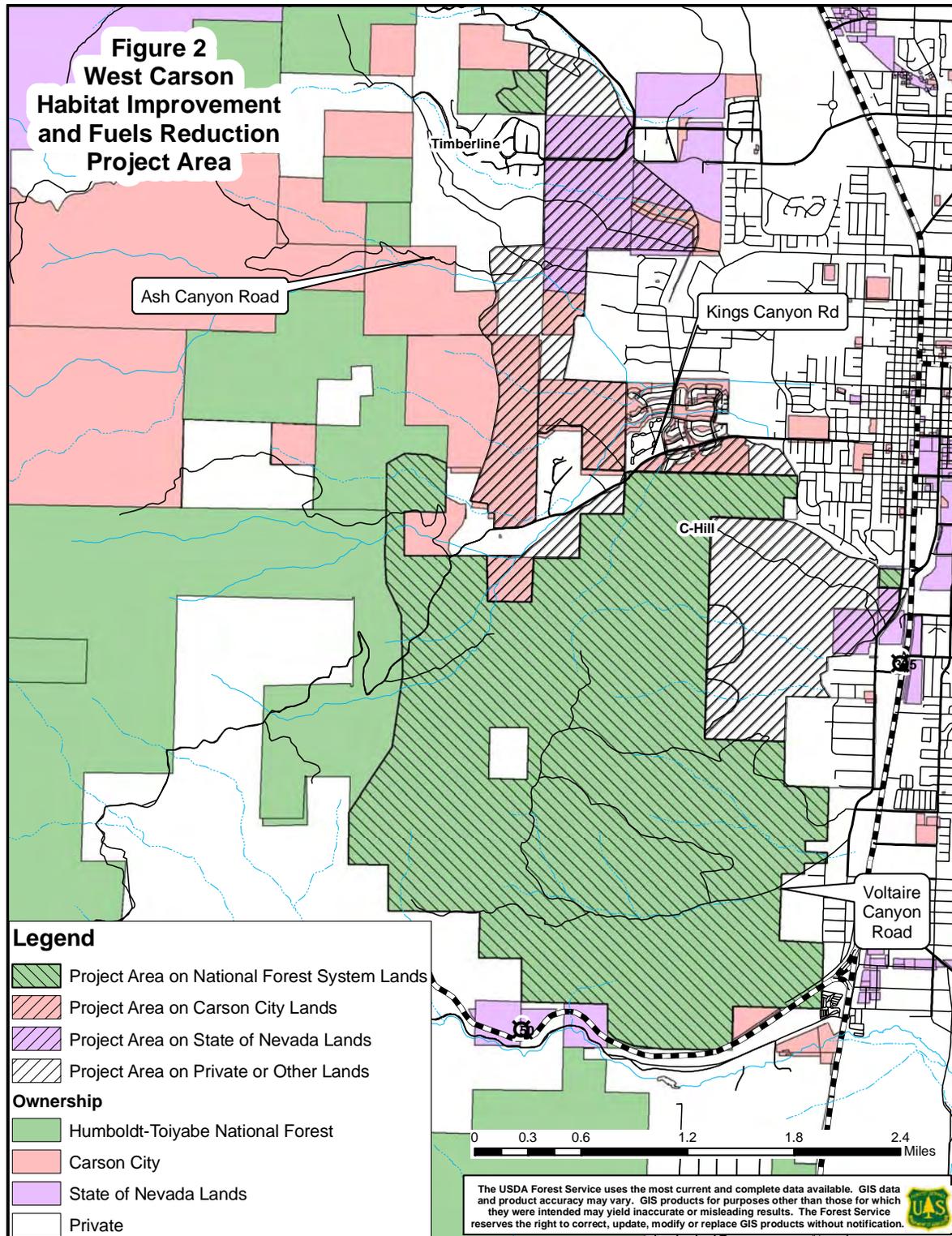
Monitoring will determine if objectives are being met. To determine if this project is altering the vegetation in a positive manner, the vegetation densities will be compared each year. Photo points will be established and maintained to make this determination. Continued consumption of invasive grasses will be based on monitoring results.



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Figure 2 is a map of the project area on Forest Service, Carson City, State of Nevada, and private lands.





My decision is based on several factors including the contents of this Decision Memo, site-specific resource information, and supporting documentation. My conclusion is based on a review of the record that shows a review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk. Relevant scientific information includes recommendations from archeologists, wildlife biologists, fuels specialist, hydrologists and foresters. A literature review of cheatgrass reduction was completed; these documents are available in the project file located at the Carson District office.

II. REASONS FOR CATEGORICALLY EXCLUDING THE DECISION

Decisions may be categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA) when conditions of one of the categories identified by the U.S. Department of Agriculture are met. These categories can be found in 7CFR par 1b, or as identified in the Forest Service Handbook (FSH) 1909.15, section 31. To be categorically excluded there must not be extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

I have concluded that this decision is appropriately categorically excluded from documentation in an EIS or EA as it is a routine activity with a category of exclusion and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

A. CATEGORY OF EXCLUSION

This decision qualifies for the following exclusion under FSH 1909.15, Chapter 31.2, Category, 31.2(6) – *Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standard road construction.*

B. FINDING OF NO EXTRAORDINARY CIRCUMSTANCES

Extraordinary circumstances include, but are not limited to: Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species. Flood plains, wetlands, or municipal watersheds. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas. Inventoried roadless areas. Research natural areas. American Indians and Alaska Native religious or cultural sites. Archaeological sites, or historic properties or areas. The mere presence of one or more of these resource conditions does not preclude the use of a categorical exclusion. It is the degree of the potential effect of a proposed action on these resource conditions that determines whether extraordinary circumstances exist (FSH 1909.15 Chapter 30.3).

The categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects which may significantly affect the environment. I have determined this based on the following analysis:



A. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species.

The Endangered Species Act (ESA) requires that federal activities do not jeopardize the continued existence of any species federally listed and candidate, proposed, threatened, or endangered, or result in adverse modification to such species' designated critical habitat. In accordance with this Act, the district wildlife biologist analyzed and documented the potential effects of this project on species and critical habitat listed under the ESA. The information indicated that there is no critical habitat for any federally listed species in the project area. As required by this Act, potential effects of this decision on listed species have been analyzed and documented in a Biological Assessment/Evaluations (available in the project record). Biological Evaluations were also completed for Forest Service Sensitive Species.

B. Flood plains, wetlands, or municipal watersheds.

Floodplains: Executive Order 11988 is to avoid adverse impacts associated with occupancy and modification of floodplains. Floodplains are identified by this order as, "...the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent (100-year recurrence) or greater chance of flooding in any one year."

Not Present, No Effect – Due to the location of the project areas, there are no floodplains present or involved with the proposed treatment area. This decision will not affect floodplains.

Wetlands: Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, "... areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated condition for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

Not Present, No Effect – The project area does not have wetlands and the decision will have no affect on wetlands.

Municipal Watersheds: Municipal watersheds are managed under multiple use prescription in land and resource management plans.

Not Present, No effect – This project is not within and will have no effect on any municipal watersheds. The project is adjacent to the Carson City municipal watershed, but due to the limited impacts of consumption of cheatgrass, will have no affect on this watershed.

C. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas.

Wilderness:

Not Present, No Effect – This project is not within and the decision will not affect any wilderness areas. The closest wilderness area, the Mt. Rose Wilderness, is located approximately 20 miles north of the project area. This decision, with impacts limited to the immediate area of activity, will not affect any wilderness areas.

Wilderness Study Areas

Not Present, No Effect – This project is not within and the decision will not affect any wilderness study areas.



National Recreation Areas

Not Present, No Effect – There are no National Recreation Areas on the district. This decision will not affect National Recreation Areas.

D. Inventoried roadless areas.

Not Present, No Effect – This project is not within and does not affect any inventoried roadless areas. (IRA's).

E. Research natural areas.

Not Present, No Effect – This decision does not affect Research Natural Areas (RNA's). The project is not in or adjacent to the one designated RNA on the district. The closest RNA, the Babbitt Peak RNA is located approximately 40 miles northwest of the project area. This decision, with impacts limited to the immediate area of activity, will not affect RNA's.

F. American Indians and Alaska Native religious or cultural sites, archaeological sites, or historic properties or areas.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object this is included in, or eligible for inclusion in the National Register. Section 106 of the National Preservation Act also requires federal agencies to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered on federal lands. It affords lawful protection of archaeological resources and sites that are on public and Indian lands. The Native American Graves Protection and Repatriation Act covers the discovery and protection of Native American human remains and objects that are excavated or discovered in federal lands. It encourages avoidance of archaeological sites that contain burials or portions of sites that contain graves through “in situ” preservation, but may encompass other actions to preserve these remains and items. This decision complies with the cited Acts. Surveys were conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this decision. A “no properties affect” determination was made. Consultation on this finding occurred with the Nevada State Historic Preservation Office.

Additionally, the Federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes reserved rights are protected. Consultation with tribes helps insure that these trust responsibilities are met. Consultation with potentially affected tribes occurred prior to scoping, in addition, tribes were mailed the request for comments letter. No comments were received and no tribal concerns were identified for this project.

III. PUBLIC INVOLVEMENT

The proposal for this project was provided to the public and other agencies for comment during scoping. A scoping letter was mailed out to 20 interested persons and organizations on March 10, 2008. The project was also included in the April 1 to June 30, 2008 Schedule of Proposed



Actions (SOPA). In response to public scoping, two comments were received, both were in support of the project.

IV. FINDINGS REQUIRED BY OTHER LAWS

This decision is consistent with management direction, including standards and guidelines, in the Amendment to the Humboldt-Toiyabe National Forest Land and Resource Management Plan (1986), as amended by the Sierra Nevada Forest Plan Amendment Record of Decision (January, 2004), which were developed in accordance with the National Forest Management Act of 1976, 16 USC 1604(i) and 36 CFR 219.10(e) and with the National Environmental Policy Act.

V. ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

Pursuant to 36 CFR 215.8 (a) (4), this decision is not subject administrative appeal.

VI. IMPLEMENTATION DATE

This decision may be implemented immediately. Project implementation will most likely occur in the spring of 2009.

VII. CONTACT PERSON

For further information concerning this decision, please contact: Amanda Brinnand, Carson Ranger District, 1536 So. Carson Street, Carson City, NV 89701, 775-882-2766.

/s/ Genny Wilson
GENNY WILSON
District Ranger

August 11, 2008
Date

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