

ENVIRONMENTAL ASSESSMENT

Crossbar Management Area: Cholla Cactus Grubbing Project



**U.S. Department of the Interior
Bureau of Land Management
Amarillo Field Office
Amarillo, TX**

DOI-BLM-NM-060-2012-001

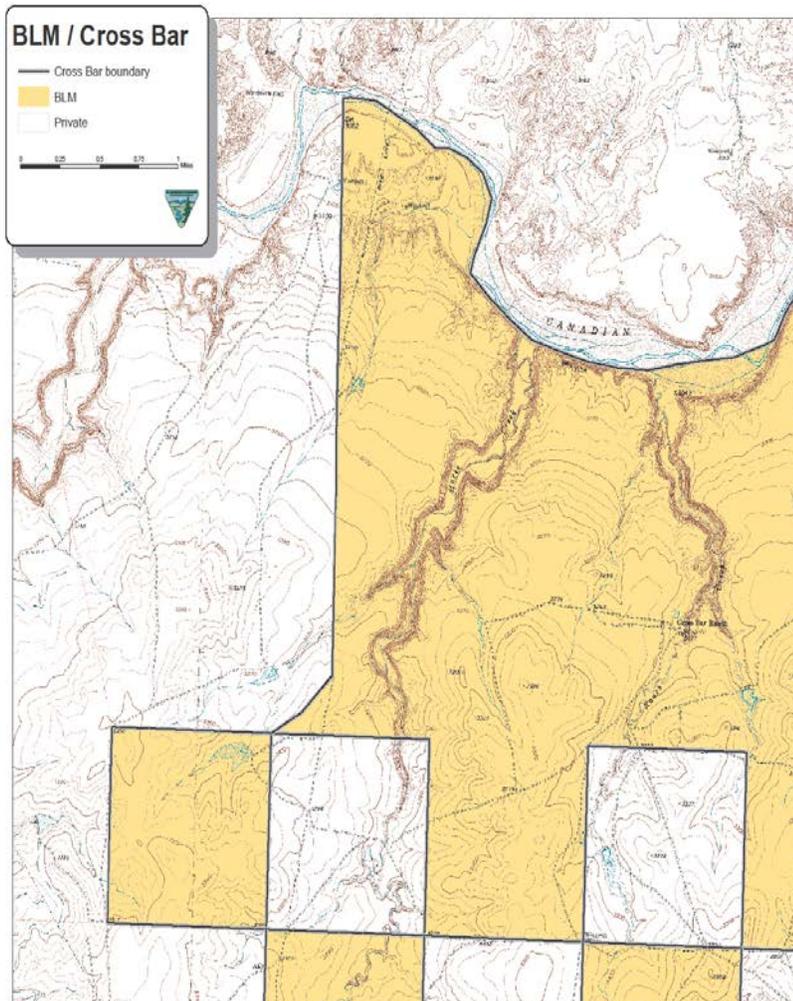


Fig. 1 Crossbar Property: Proposed area is highlighted in yellow. The surrounding areas are privately owned. The eastern most creek is W. Amarillo Creek which maintains a perennial stream. The Canadian River is our northern most boundary which is owned and maintained by the State of Texas and the NPS.

A. Purpose and Need for the Proposed Action

The purpose of this proposed action is to decrease percent species composition, as measured by crown cover of cholla cactus (*Opuntia* spp.) within the Crossbar Management Area boundaries on approximately 12,000 acres. This treatment will be administered via mechanical grubbing. The treatment is also designed to study the effects of cholla cactus treatment on birds and small and large mammals in a short grass prairie environment. With the decrease in cholla cactus, there will be some increase in the basal cover of the key herbaceous species. Range ecological status is expected to improve on all range sites within the treatment areas as the invasive woody species densities will be drastically reduced. An improvement will likely increase the populations of mule deer (*Odocoileus hemionus*) and pronghorn antelope (*Antilocapra americana*). This grubbing is part of a multi-year project to restore the Crossbar to the ecological conditions of a short-grass prairie that existed prior to the turn of the last century (1900).

B. Conformance with Land Use Planning and other Environmental Documents

The BLM, as a Federal agency within the Department of the Interior, is required to conduct land use planning and development according to the requirements of the Federal Land Policy Management Act of 1976, as amended. The removal of cholla cactus is addressed in the BLM land use plan. Furthermore, the BLM is dedicated to assist the US Fish and Wildlife Service where necessary. Removing this invasive species aids in the development of the necessary habitat for the short-grass prairie species. This proposed action complies with the Resource Management Plan (2000) for the Crossbar Management Area. This EA is tiered to the Federal Land Policy Vegetation Treatments Using Herbicide on Bureau of Land Management Lands in 17 Western States Programmatic Impact Statement (PEIS; BLM 2007).

1. Ecological Site Description:

Natural Resource Conservation Service (MLRA 77C) Southern High Plains, Southern Part (see attached)

C. Statutes and Regulations

The following laws, acts, plans, manuals, and policies provide a foundation for weed management by the BLM:

1. Federal Land Policy and Management Act of 1976, as amended, Public Law 94-579 (43 U.S.C. 1701 et seq.);
2. Public Rangelands Improvement Act of 1978, Public Law 95-514 (43 U.S.C. 1901 et seq.);

3. Reclamation Act of 1902, 32 Stat. 388 (43 U.S.C. 391);
4. The "Carlson-Foley Act," Public Law 90-583 (43 U.S.C. 1241 et seq.), providing for the control of noxious plants on lands under the control or jurisdiction of the Federal Government;
5. Federal Noxious Weed Act of 1974, Public Law 93-629, as amended (7 U.S.C. 2801 et seq.);
6. Halogeton Glamoratus Control Act, 66 Stat. 597 (7 U.S.C. 1651 et seq.), providing for the control of halogeton on lands under the Department's jurisdiction;
7. Endangered Species Act, Public Law 93-205, as amended by Public Law 100-478 (16 U.S.C. 1531, et seq.);
8. National Park Service Organic Act, 39 Stat. 535, as amended (16 U.S.C. 1 et seq.); and
9. Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 136 et seq.).

In addition to the aforementioned authorities, the following Public Laws, Executive orders, Federal regulations, and the Departmental Manual influence application of IPM for the control of undesirable plants.

10. National Environmental Policy Act (NEPA), Public Law 91-190 as amended (42 U.S.C. 4321 et seq.);
11. The Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500, as amended;
12. Noxious Weed Regulations, 7 CFR Part 360;
13. Pesticide Programs, 40 CFR Subchapter E;
14. Interagency Cooperation, 50 CFR Part 402;
15. Departmental Manual, Pesticide Use Policy, 517 DM 1;
16. Executive Order 11514--Protection and Enhancement of Environmental Quality, as amended by Executive Orders 11541 and 11991 (March 5, 1970);
17. Executive Order 11738--Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans (September 10, 1973); and
18. Executive Order 11987--Exotic Organisms (May 24, 1977)

1. PROPOSED ACTION AND ALTERNATIVES

A. Alternative 1: No Action

Under this alternative, no treatment using grubbing would occur.

B. Alternative 2: Proposed Action

The Proposed Action is to eradicate or control the infestation of unwanted cholla cactus plants wherever found and control their spread. BLM staff would operate under federally granted grubbing practices. All grubbing treatments and methods would be BLM approved.

C. Stipulations and Conditions of Approval

In addition to the SOP's in the 2007 EIS, the following measures and conditions of approval would be applied to all grubbing applications at the BLM under this EA:

- 1) The machine operator will follow the design described in the Scope of Work (SOW).
- 2) The operator must have all appropriate licenses, permits, and training to operate needed equipment at the CMA.
- 3) A Class III Cultural Resources inventory of the area proposed to be cleared will be conducted and ample time will be allowed for the Section 106 process to be conducted prior to any ground disturbing activities. Any cultural resources that are identified will not be cleared using the proscribed grubbing treatment. Only non-ground disturbing clearance methods will be allowed within defined site boundaries.
- 4) The operator will manage and store all lubricants and fuels and equipment at an approved location.
- 5) The grubbing application will cover each section on the CMA and will be conducted annually during the early spring through early summer season, and winter. Prior to initiating application, the applicator will contact the appropriate BLM representative to insure that the appropriate areas of application are identified.
- 6) Applications in wetlands and riparian zones will use appropriate methods to avoid wetland and riparian degradation.
- 7) Open bodies of water (rivers, streams, ponds, stock watering facilities, water wells for example) will be buffered from treatment.
- 8) Post-treatment monitoring by BLM Crossbar staff will be conducted to evaluate the effectiveness of treatments.
- 9.) Every cut plant will be left to dry in piles and in the heat. After drying, a prescribed fire will be applied through each section to reduce the decedent fuel level (dead trees). Clearance must be given by the zone archeologist to use heavy equipment and other machinery. This process will be evaluated by the zone archeologist for approval.

Resources	Not Present On Location	No Impact	Potentially Impacted	Mitigation necessary	Comments included in EA text	BLM Evaluator Initial & Date
Riparian Zones/Wetlands	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GT 4/12/2012
Wildlife	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GT 4/12/2012
Special Status, T & E Species	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GT 4/12/2012
Cultural or Historical	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	REH 4/16/12
American Indian Religious Concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	REH 4/16/12
Paleontology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	REH 4/16/12
Air Quality	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Water Quality (Surface/Ground)	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Soils (Watershed/Hydrology)	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Floodplains	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Caves and Karst	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Hazardous or Solid Waste Materials	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Mineral Resources	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Farmlands, Prime or Unique	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Livestock Grazing	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Wild Horse and Burros	X		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Vegetation, Forestry	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Invasive, Non-native Species	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Visual Resources	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Recreation	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Transportation and Access	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
Land Tenure, ROW, Other Uses	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12

Environmental Justice	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AE 4/26/12
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Table 1: Resource Impact Evaluations

2. DESCRIPTION OF AFFECTED ENVIRONMENT

This section describes the environment that would be affected by implementation of the alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Certain critical environmental components require analysis under BLM policy. These items are included in Table 1. Following the table, only the aspects of the affected environment that are potentially impacted are described.

A. General Topography

The treatment encompasses the entire area of the Cross Bar CMA where these invasive/undesirable plant species are found. The area is comprised of rolling topography with some minor draws running through the area. Precipitation averages 19 inches annually with the majority arriving as spring and fall thundershowers. Soils are dominated by clay/loam types. The treatment areas fall within Visual Resource Management (VRM) Class IV.

B. Riparian Zones and Wetlands

Several natural wetlands occur on the CMA. These wetlands include Horse Creek, Ranch Creek, and West Amarillo Creek. Both Horse Creek and Ranch Creek remain ephemeral and only hold water and have water movement during significant thunderstorms or other precipitation events. West Amarillo Creek contains within it a perennial creek. On the northern boundary of the CMA lies the Canadian River. While stream activity is low, this river is perennial and is used for hunting, fishing and recreational use. The Canadian River is managed by the State of Texas. (Figure 2).

C. Wildlife

Wildlife habitats on the CMA are comprised of gently sloping pastureland primarily consisting of a vegetative cover composed of blue grama grass (*Bouteloua gracilis*), buffalo grass (*Bouteloua dactyloides*), sideoats grama (*Bouteloua curtipendula*), little bluestem (*Schizachyrium scoparium*), vine mesquite (*Panicum obtusum*) and other herbaceous plant species. Species of Texas's wildlife common to this area that one would expect to encounter would include, but not limited to, coyotes (*Canis latrans*), bobwhite quail (*Colinus virginianus*), mourning doves (*Zenaida macroura*), scissor-tailed flycatchers (*Tyrannus forficatus*), cottontail rabbits, mule deer, white-tailed deer, and pronghorn antelope. Other species of insects, mammals, birds, reptiles and amphibians which would occur are too numerous to list in this document.

D. Special Status, Threatened & Endangered Species

The group of species referred to here, and in the attached biological evaluation, as special status species (SSS) includes Federal and State listed threatened or endangered plant or animal species, species proposed for listing and species under review by the U. S. Fish and Wildlife Service (FWS) or the Texas Parks and Wildlife Department (TPWD). The authority for this policy and guidance regarding the evaluation of SSS comes from the Endangered Species Act of 1973, as amended; the Federal Land Policy and Management Act (FLPMA) of 1976; and Department of Interior, Bureau of Land Management, Special Status Species Management (Manual 6840). There are no Wilderness Study Areas (WSA's) or Special Management Areas (SMA's) within the subject treatment area.

E. Cultural or Historical

There are dozens of known archaeological and historic sites on the Crossbar Management Area. Most of these are small, un-datable lithic scatters but sites are known to date to the Antelope Creek Phase (1200 to 1450 AD). The Antelope Creek phase is characterized by semi-subterranean, multi-room compounds or single-family homesteads made of dolomite slabs. Near exclusive use of the color-banded chert from nearby Alibates Quarry is also a defining characteristic of this period.

Historic cattle-ranching was common throughout the area and items associated with such activities are likely present.

F. American Indian Religious Concerns

Traditional Cultural Prosperities (TCPs) are places that have cultural values that transcend the values of scientific importance that are normally ascribed to cultural resources such as archaeological sites. Native American communities are most likely to identify TCPs, although TCPs are not restricted to those associations. Some TCPs are well known, while others may only be known to a small group of traditional practitioners, or otherwise only vaguely known.

There are several pieces of legislation or Executive Orders that should be considered when evaluating Native American religious concerns. These govern the protection, access and use of sacred sites, possession of sacred items, protection and treatment of human remains, and the protection of archaeological resources ascribed with religious or historic importance. These include the following:

- The American Indian Religious Freedom Act of 1978 (AIRFA; 42 USC 1996, P.L. 95-431 Stat. 469).
- Executive Order 13007 (24 May 1996).
- The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA; 25 USC 3001, P.L. 101-601).

- The Archaeological Resources Protection Act of 1979 (ARPA; 16 USC 470, Public Law 96-95).

For the Proposed Action, identification of TCPs was limited to reviewing existing published and unpublished literature. The Cherokee Nation and the Wichita and Affiliated Tribes of Oklahoma will be sent notification of areas proposed to be cleared and given 30 days to comment on the proposed project prior to beginning clearing.

G. Paleontology

There are no known Paleontological Resources on site, and a very low probability of any occurring in the area.

H. Air Quality

Not Applicable

I. Water Quality: Surface and Groundwater

1. Surface Water

No riparian areas or wetlands have been identified as threatened within the project area where grubbing would be applied, and the proposal does not occur on or cross Army Corps of Engineer jurisdictional waters.

2. Groundwater

The Ogallala Water Aquifer is identified as underlying Potter County, TX.

J. Soils – Watershed and Hydrology

Soils are dominated by clay/loam types.

K. Floodplains

The CMA is located outside of city limits and is not located in a floodplain. There are, however; tributaries that drain into the Canadian River. These tributaries will not be affected by the proposed actions.

L. Caves and Karst

No known cave or karst areas exist within the project area.

M. Hazardous or Solid Waste Materials

BLM Instruction Memorandum WO-93-344 requires that all NEPA documents list and describe any hazardous and/or extremely hazardous substances that would be produced, used, stored, transported or disposed of as a result of the proposed project. As a BLM facility,

the CMA must comply with the Federal Facility Compliance Act. This act essentially requires the facility to be in compliance with all environmental laws. The CMA is regularly audited as part of the BLM's Compliance Assessment -Safety, Health, and Environment (CASHE) Program. All findings, including those classified under the hazardous waste (HWGEN) category are required to be corrected.

N. Mineral Resources

There are no mineral resources at the CMA to consider for impact analysis.

O. Farmlands, Prime or Unique

No farmlands, prime or unique are located within this project area.

P. Livestock Grazing

Livestock grazing does not occur on the CMA.

Q. Wild Horse and Burros

There are no wild horse or burro programs in effect on the CMA.

R. Vegetation and Forestry

The natural vegetation is a mixture of short-grass species and shrub species which is distinct to the Southern Great Plains. Vegetation on, and surrounding the CMA is derived from gently sloping pastureland with a vegetative cover composed of buffalo grass and blue grama, and dense stands of mesquite and cholla cactus.

S. Invasive and Non-native Species

Honey mesquite, cholla cactus, salt cedar, bull thistle and various other grass and woody species occur on the CMA. However, one of the most invasive species is cholla cactus that is being targeted in this proposal.

T. Visual Resources

The Proposed Action would be most visible from the Canadian River. Recreationists utilize this river and would be able to see the northern boundary of the CMA. Highway 287N is approximately 2 miles east of the eastern most boundary of the CMA. This highway is used by all manner of vehicles.

U. Recreation

Recreational activities are conducted at the CMA. They include, hiking, photography, walking and hunting. However, these activities are limited to approximately 350 individual visit days per year. Vehicle traffic is prohibited on the Crossbar.

V. Transportation and Access

The only roads at the CMA are two-track pasture roads in which access is restricted via locked gates. The CMA roads are not accessible to the public.

W. Land Tenure, Rights-of-Way (ROWs), Other Realty Uses, Issues, or Concerns

ROW's are provided to adjacent farmers. There are no other realty concerns.

X. Environmental Justice

This annual grubbing application project would be conducted on the existing Crossbar which is absent of minority or impoverished areas.

3. ENVIRONMENTAL CONSEQUENCES: DIRECT AND INDIRECT EFFECTS

A. Alternative 1: No Action

Not grubbing the CMA would allow cholla to continue to invade the property. These plants are invasive and continue to increase in their densities. If no action is taken the herbaceous plant density will continue to decline. Further, if no action is taken to eliminate these plant species, endangered species initiatives will be further challenged on the CMA.

B. Alternative 2: Proposed Action

The Proposed Action would effectively protect the CMA from unwanted plant species while sustaining a lucrative wildlife habitat for all species occurring on the CMA. Benefits of the Proposed Action are an increase in sustainable *natural* wildlife forage and shelter and decreased erosion and resultant improved watershed conditions. An alternative to this proposed action would be to spray the cholla cactus with herbicide.

1. General Topography

Annual grubbing and cutting of the target species is not anticipated to have a significant impact on the general topography of the CMA.

2. Riparian Zones and Wetlands

Annual grubbing at the CMA should not adversely impact any wetlands or riparian zones.

3. Wildlife

The species composition and population levels of the wildlife using these lands would go through seasonal and year-to-year fluctuations directly related to vegetation condition factors on the facility. These adjustments would be exhibited by the wildlife populations present. Further, the actions should improve habitat and increase wildlife species and diversity. Grubbing would not occur during the optimal breeding and nesting periods for avian species.

4. Special Status, Threatened & Endangered Species

A Biological Evaluation (BE) was completed in April 2012 for the use of grubbing equipment and resulted in a biological determination of "No Significant Effect" for the biological resources discussed in the BE. No further biological evaluation is necessary regarding this project at this location.

5. Cultural or Historical

Removal of cholla cactus with the grubbing procedure causes a ground disturbance that is one to two feet in diameter and five to ten inches in depth. This activity will not be allowed on currently known cultural resources within the Crossbar Management Area.

It is probable that grubbing will adversely affect currently unknown historic properties (i.e. those archaeological sites where survey has not yet been conducted and have yet to be recorded) through its ground disturbing activities.

6. Native American Indian Religious Concerns

For the Proposed Action, identification of TCPs was limited to reviewing existing published and unpublished literature. The Cherokee Nation and the Wichita and Affiliated Tribes of Oklahoma will be send notification of areas proposed to be cleared and given 30 days to comment on the proposed project prior to the beginning of clearing.

No site specific TCPs or other areas of traditional religious and cultural importance has yet been identified.

7. Paleontology

The proposed action would have no effect on any paleontological findings.

8. Air Quality

There would be no adverse impact to air quality as a result of this project.

9. Water Quality: Surface and Groundwater

A. Surface Water

Grubbing will have no effect on surface water.

B. Groundwater

Annual grubbing would not adversely affect the groundwater. Removing this succulent plant species has the potential to enhance groundwater.

10. Soils

Since the application will be via grubbing treatment there will be a potential for negative soil impacts as there will be some surface disturbance. It is anticipated, however; that the soil disturbance will be mitigated through natural processes of wind and water phenomena.

11. Floodplains

No significant effect.

12. Caves and Karst

No known cave or karst areas exist within the project area.

13. Hazardous or Solid Waste Materials

There are no significant direct or indirect effects regarding annual grubbing applications regarding hazardous or solid waste materials for the CMA. The operator would manage all the products (lubricants, fuels, etc.) for this project, and store the products and product applying equipment at a BLM approved location.

14. Mineral Resources

Not Applicable.

15. Farmlands, Prime or Unique

Since there are no prime or unique farmlands in the vicinity of this project, annual application of grubbing would not have an impact on any prime or unique farmlands within the area of the BLM.

16. Livestock Grazing

Livestock grazing does not occur on the CMA.

17. Wild Horse and Burro Grazing

No wild horse and burros occur on the CMA.

18. Vegetation and Forestry

There would be no direct or indirect effect to the vegetation and forestry of the area outside of

the area at the CMA.

19. Invasive and Non-native Species

Grubbing would be beneficial to control and manage the undesirable plant species for this specific project. In the long term, the removal of cholla cactus will provide more open foraging ground for all native wildlife species. The removal of such plant species is expected to aid in the sustainability and increase in both mule deer and pronghorn antelope populations.

20. Visual Resources

The proposed action would not be out of character with current and past land use patterns.

21. Recreation

There would be no direct or indirect effects to recreation at the CMA.

22. Transportation and Access

There are no transportation and access concerns associated with the annual grubbing applications at the CMA.

23. Land Tenure, Rights-of-Way (ROWs), Other Realty Uses, Issues, or Concerns

There are no ROW's or other realty concerns associated with the grubbing of cholla at the CMA.

24. Environmental Justice

There are no environmental justice concerns with the annual cholla grubbing at the CMA.

4. CUMULATIVE IMPACTS

It is not anticipated that there would be any cumulative impacts to the CMA or surrounding area. Major benefits of the proposed treatment are eradication of undesirable plant species and decreased erosion and improved watershed conditions, wildlife habitat, etc.

MONITORING, MITIGATION MEASURES, AND BEST MANAGEMENT PRACTICES

The effectiveness of this proposed application will be monitored every year. Mitigation measures necessary regarding implementation of this project include constant inquiries with NRCS and BLM specialists that have used this type of treatment in the past. Further, the USFWS will be contacted to assist with determining prime breeding and nesting periods for avian species.

1. Cultural or Historical

The BLM, in consultation with the interested tribe(s), will take action to mitigate or negate any effects of the proposed action by conducting a Class III cultural resources inventory of the area proposed to be cleared prior to ground disturbing activities and allow ample time for the completion of the Section 106 process. Newly identified and currently known cultural resources will be avoided and only those methods which do not cause ground disturbance will be allowed within the defined site boundaries.

If additional ground disturbance is required, the BLM archaeologist must be notified prior to any work. If archeological material such as chipped stone tools, pottery, bone, historic ceramics, glass, metal, or building structures are exposed; stop work at that spot immediately and contact the BLM at (918) 621-4153 or (918) 621-4100.

2. Native American Indian Religious Concerns

In the event that lease development practices are found in the future to have an adverse effect on Native American TCPs or cultural resources, the BLM, in consultation with the affected tribe(s), will take action to mitigate or negate those effects. Measures include, but are not limited to physical barriers to protect resources, relocation of practices responsible for the adverse effects, or other treatments as appropriate.

3. Paleontology

If vertebrate paleontological resources are exposed; stop work at that spot immediately and contact the BLM at (918) 621-4153 or (918) 621-4100.

5. BLM TEAM MEMBERS

NAME	TITLE	ORGANIZATION
Leslie Theiss	Field Manager	BLM, AmFO, Amarillo, TX
Glenda Briscoe	Ass. Field Man. Support Services	BLM, AmFO, Amarillo, TX
Adrian Escobar	Natural Resource Specialist	BLM, AmFO, Amarillo, TX
George Thomas	Senior Wildlife Biologist	BLM, OFO, Tulsa, OK
Ryan Howell	Archeologist	BLM, OFO, Tulsa, OK

6. REFERENCES

1969 National Environmental Policy Act (as amended):

<http://ceq.hss.doe.gov/nepa/regs/nepa/nepaeqia.htm>

1973 Endangered Species Act (as amended):

<http://www.fws.gov/laws/lawsdigest/esact.html>

1976 Federal Land Policy and Management Act (as amended):

<http://www.blm.gov/flpma/>

Federal Laws and Regulations Executive Order 13112 of February 3, 1999 – Invasive Species:

<http://www.invasivespeciesinfo.gov/shared/printPHP2.php>

Fields, Richard. Zone Archeologist: Bureau of Land Management (pers. comm. April 2011)

Natural Resource Conservation Service: Ecological Site Description.

Remedy Ultra:

<http://www.dowagro.com/range/products/RemedyUltra.htm>

Parker D., and M. H. Reiser. 1997 Low-Impact, Selective Herbicide Application for Control of African Rue. A preliminary Field Guide. United States Department of Agriculture, Forest Service Southwestern Region publication. 4 pp.

Sosebee, R. E. 1983. Physiological, phonological and environmental consideration in brush and weed control. In Proceedings of brush management symposium, ed. K. C. McDaniel 27-34. Denver, CO: Society for Range Management.

The Federal Land Policy and Management Act of 1976, as amended:

<http://www.blm.gov/flpma/>

Title 40 Code of Federal Regulations § 1500:

http://ceq.hss.doe.gov/nepa/regs/ceq/toc_ceq.htm

Title 40 Code of Federal Regulations § 81.337:

http://www.google.com/url?sa=t&source=web&cd=1&ved=0CCAQFjAA&url=http%3A%2F%2Fedocket.access.gpo.gov%2Fcf%2F2009%2Fjulqtr%2Fpdf%2F40cfr81.337.pdf&ei=f22LT_e_ABo-isAOqh5yJCg&usq=AFQjCNFHbbqO8ZtsBM3O2qiPcpipDRs5Xw

Title 43 Code of Federal Regulations § 1600:

http://www.access.gpo.gov/nara/cfr/waisidx_08/43cfr1600_08.html

Title 43 Code of Federal Regulations § 4700

http://www.access.gpo.gov/nara/cfr/waisidx_08/43cfr4700_08.html

U.S. Department of the Interior. Bureau of Land Management, Herbicides Approved for Use on BLM Lands, September 30, 2010:

<http://www.google.com/url?sa=t&source=web&cd=1&ved=0CBkQFjAA&url=http%3A%2F%2Fwww.blm.gov%2Fpgdata%2Fetc%2Fmedialib%2Fblm%2Fwy%2Fprograms%2Finvasiveplants%2Fdocs.Par.98139.File.dat%2FApprovedHerbicideFormulations.pdf&ei=z0yTTbfiBZOcsQP1InPCw&usg=AFQjCNGBVYD5UiUZjMUodiMfW0RDeloEKw>

U.S. Department of the Interior. Bureau of Land Management, Special Status Species Management (Manual 6840):

http://www.google.com/url?sa=t&source=web&cd=1&ved=0CBgQFjAA&url=http%3A%2F%2Fwww.blm.gov%2Fpgdata%2Fetc%2Fmedialib%2Fblm%2Fca%2Fpdf%2Fpdfs%2Fpa_pdfs%2Fbiology_pdfs.Par.9d22a8ee.File.dat%2F6840_ManualFinal.pdf&ei=MWeLTZGbF4-qsAOc1oCmCg&usg=AFQjCNFduaOsrXn3TsGTVcY8Uy3SmEvcoQ

United States Geological Service. Water Data for the Nation:

<http://waterdata.usgs.gov/nwis>

Yoakum, J. D. 1975. Antelope and livestock on rangelands. *Journal of Animal Science* 40: 985-988.

Thomas, George. Senior Wildlife Biologist: Bureau of Land Management. (personal comm. April 2012).

Wauer, Richard Lynn. Range Specialist: Natural Resources Conservation Service (personal comm. March 2012)



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Oklahoma Field Office
7906 E. 33rd Street, Suite 101
Tulsa, Oklahoma 74145
www.blm.gov/nm



In Reply Refer To:

The Bureau of Land Management, Amarillo Field Office, Cross Bar Cooperative Management Area: Cholla Cactus Grubbing Project (EA NM-060-2012-001), Potter County, TX Unit, Potter County, Texas

The Bureau of Land Management's Cross Bar Cooperative Management Area, located northwest of Amarillo, Texas, proposes the eradication of Cholla Cactus on the Crossbar Ranch. These plants are invasive and must be controlled or removed for fire prevention as well as in preparation for the eventual return of the Black Footed Ferret. This treatment will be administered via mechanical grubbing.

Removal of cholla cactus with the grubbing procedure causes a ground disturbance that is one to two feet in diameter and five to ten inches in depth. This activity will not be allowed on currently known cultural resources within the Cross Bar Cooperative Management Area. A Class III cultural resources inventory of the area proposed to be cleared will be conducted *prior* to ground disturbing activities and ample time will be allowed for the completion of the Section 106 process. Newly identified and currently known cultural resources will be avoided and only those methods which do not cause ground disturbance will be allowed within the defined site boundaries. This will ensure that No Historic Properties will be affected for the proposed action.

If archeological material such as chipped stone tools, pottery, bone, historic ceramics, glass, metal, or building structures are exposed; stop work at that spot immediately and contact the BLM archaeologist at (918) 621-4153 or (918) 621-4100, and the Texas State Historic Preservation Office at (512) 463-5394.

/s/ Ryan Howell _____; _____ April 16, 2012
Ryan Howell, Archeologist Date



United States Department of the Interior

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RE: Biological Evaluation for the Bureau of Land Management, Amarillo Field Office, Crossbar Cholla Cactus Grubbing Project Located in Potter County, Texas.

The Bureau of Land Management's (BLM) environmental assessment (EA) for this project contains all pertinent information regarding the specific characteristics of this project. The purpose of this report is to document the biological determination of effect for the grubbing and removal of cholla cactus on the 12,000 acre Crossbar Ranch managed by the BLM Amarillo Field Office (AmFO) in Potter County, Texas.

The U.S. Fish and Wildlife Service National Wetlands Inventory Cliffside, TX Quad map shows various wetlands within the boundaries of the Crossbar Ranch. These wetland areas consist primarily of three tributaries (Horse Creek, Ranch Creek, and West Amarillo Creek) of the Canadian River. The Canadian River is the north boundary of the Crossbar Ranch. Horse and Ranch Creek are intermittent streams while West Amarillo Creek has a plunge pool at the headwater area and an intermittent flow downstream into the Canadian River. There are a few freshwater pond areas located within the 12,000 acre Crossbar, however; grubbing of cholla cactus will have no impact to any wetland or riparian areas of the Crossbar. Erosional control measures and Best Management Practices (BMP) will insure protection of and limit any potential impacts to wetland areas located within 300' of grubbing activities.

Federally and State listed endangered, threatened, proposed, and candidate species for Potter County, Texas consist of the western burrowing owl, ferruginous hawk, snowy plover, western snowy plover, mountain plover, prairie falcon, peregrine falcon, American peregrine falcon, Arctic peregrine falcon, whooping crane, bald eagle, interior least tern, lesser prairie chicken, peppered chub, Arkansas River shiner, west sphinx moth, gray wolf, pale Townsend's big-eared bat, black-tailed prairie dog, black-footed ferret, western small-footed bat, cave myotis bat, big free-tailed bat, plains spotted skunk, black bear, swift fox, Mexican mud-plantain, and the Texas horned lizard. There is limited potential for the above listed species to occur in the proposed project location. If any species of snakes are observed during any stage of the project life, measures should be taken to avoid killing of them, unless imminent human danger exists.

Many species of animals utilize the habitat associated with the proposed project. The proposed action would not remove food, cover, and space for wildlife in this area as cholla cactus is an invasive plant species. Removal of cholla cactus will be beneficial to general shortgrass prairie wildlife (including plant species) of the area. More mobile wildlife species would move away from the area during the grubbing activity of the proposed action to avoid direct mortality, and the increase in human presence and levels of noise associated with the grubbing process. The less mobile species could suffer some mortality during active grubbing. As the biomass of cholla cactus is removed from the area, niche availability for shortgrass prairie plant species will increase, thereby benefiting shortgrass prairie wildlife species.

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between and among the U.S., Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Under the MBTA, incidental, unintentional and accidental take, killing or possession of a migratory bird or its parts, nests, eggs or produces, manufactured or not, without a permit is unlawful. The MBTA has no provisions for a permitting process which allows for a regulated "take" of migratory birds. Sixteen Birds of Conservation Concern are listed for the Short Grass Prairie (Bird Conservation Region 18), where this project occurs. The Breeding bird surveys conducted near the site (Skellytown route) found three species from that list, mountain plover, burrowing owl, and the lark bunting. This project is not likely to adversely impact the populations of any of these bird species. During the grubbing process should any bird nesting activity (usually occurring from April through June) be identified, disturbance of that plant should be avoided. Likewise, if bird nesting activity is identified near any grubbing activity; grubbing in that area should be suspended until fledging has completed so as not to disrupt the breeding or rearing process of any migratory birds nesting in that area.

Based on all the information discussed above, the biological determination of effect for federally listed species regarding this project is "NO EFFECT".



4-12-2012

George Thomas, Senior Wildlife Biologist

Date

6. FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD

Decision: It is my decision to authorize the proposed action in sections on the Crossbar Management Area. Mitigation measures identified in the environmental impacts section of the Environmental Assessment have been formulated into stipulations. This decision incorporates by reference, the attached stipulations.

Finding of No Significant Impacts: Based on the analysis of potential impacts contained in this Environmental Assessment, I have determined that impacts are not expected to be significant and an environmental impact statement is not required.

Rational for Decision: The treatment of cholla cactus will better serve the native species of that occur on the CMA. This treatment will have minimal impacts on the CMA surfaces and those of the surrounding area. Further, these treatments will have minimal to no impact on surface water or ground water

/S/ Leslie Theiss

Amarillo Field Office Manager

4/17/2012

Date