United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Arizona Strip Field Office
345 East Riverside Drive
St. George, UT 84790-9000
http://www.az.blm.gov

In reply refer to:
4120

August 3, 2007

NOTICE OF DECISION
Brown and Shumway Catchment

Dear Interested Party:

Please be advised that an Environmental Assessment (EA) was prepared (EA-AZ-110-2007-0039) for the proposed Brown and Shumway catchment. This EA went through an interdisciplinary review process, and a Finding of No Significant Impact (FONSI) and Decision Record (DR) were approved. The EA, FONSI, and DR are public documents, and available upon request.

The EA showed the site specific environmental effects of working cooperatively to improve grazing management and rangeland health within the Brown and Shumway, Shinarump and Cedar Ridge Allotments. Allotment management plans are in effect which identify the need for additional facilities to improve grazing management. In furtherance of cooperative resource conservation, enhancement and management objectives, construction of a catchment and pipelines are proposed on the Brown and Shumway, Shinarump and Cedar ridge Allotments.

The proposed action or alternatives addressed below are consistent with the Arizona Strip District Resource Management Plan (RMP) dated January 31, 1992, as amended April 1997, and are consistent with Federal, State and local laws, regulations, and plans to the maximum extent possible. A No Action alternative was also analyzed. Mitigation measures to be implemented through this analysis are as follows:

Excavate only to the extent necessary to install the apron, storage tank, pipelines, and troughs; remove all construction debris from the site; equip the drinking troughs with a wildlife escape ramp, and install a wildlife drinker.

This decision is effective immediately in accordance with regulations contained in 43 CFR 4190.1.

If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days of the receipt of this decision. The appellant has a burden of showing that the decision appealed is in error.

If you wish to file a petition (request) pursuant to regulation 43 CFR 4.416 for a stay

(suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the board, the petition for a stay must accompany your notice of appeal . A petition for stay is required to show sufficient justification based on standards listed below. Copies of the notice to appeal and petition for 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 soliciter (see 43 CFR 4.416) 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 regulation, 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,
(4) Whether the public interest favors granting the stay.

For more information or to request a copy of the EA, FONSI, or DR, please contact Ben Ott at (435) 688-3329

Sincerely,

Becky J. Hammond
Field Manager

U.S. Bureau of Land Management
Arizona Strip Field Office

ENVIRONMENTAL ASSESSMENT
Brown and Shumway Catchment

EA-AZ- 110-2007-0039

INTRODUCTION

The Arizona Strip Field Office of the Bureau of Land Management (BLM), Fredonia, Arizona Field Office of the Natural Resources Conservation Service (NRCS), Arizona Game and Fish Department (AGFD), and the grazing permittees are working cooperatively to improve grazing management and rangeland health within the Brown and Shumway, Shinarump and Cedar Ridge Allotments. Allotment management plans are in effect which identify the need for additional facilities to improve grazing management. In furtherance of cooperative resource conservation, enhancement and management objectives, construction of a catchment and pipelines are proposed on the Brown and Shumway, Shinarump and Cedar ridge Allotments.

PURPOSE AND NEED

Existing ponds (located within ½ mile of the proposed catchment) at the northeast portion of the Brown and Shumway Allotment are essentially nonfunctional due to seepage, a result of the porous soil. Seepage could be reduced by adding bentonite clay or sodium carbonate[1] to the soil which under lays water in the ponds. However, these treatments would be relatively short lived, with seepage reverting to pretreatment levels after only a few years. On the other hand, installation of the proposed catchment and pipelines would provide reliable water over the long term for livestock and wildlife use in all three allotments.

Conformance with Land Use Plan

The proposed action and alternative described below are in conformance with the Arizona Strip District Resource Management Plan (RMP) dated January 31, 1992, as amended April 1997, and are consistent with Federal, State and local laws, regulations, and plans. Rangeland management was considered in the Vermillion Grazing EIS of 1979, which was subsequently adopted as management direction in the Arizona Strip District RMP of 1992 (I-1). The Vermillion Grazing EIS states: Additional water sources are needed to provide dependable livestock water in all pastures. . . . catchments [are needed] to provide a source of water to improve livestock distribution on areas where water is presently limited. (1-18).

RMP decisions applicable to this proposed action include:

[1] Sodium carbonate through the process of cation exchange causes clay particles in the soil to expand, reducing seepage. Earl L. Neff, "Using Sodium Carbonate to Seal Leaky Stock Ponds in Eastern Montana," Journal of Range Management 33(4), July 1980: 293.

GZ01 Manage rangeland in accordance with multiple-use objectives, requirements and provisions of established laws, regulation and BLM policies, and the Vermillion Grazing Environmental Impact Statement and Allotment Management Plans, which specify grazing systems, management facilities and land treatments.

GZ06 Continue implementing the Vermillion grazing management program as described in the Grazing Environmental Impact Statement that specifies grazing systems, management facilities and land treatments, provided they are consistent with other Resource Management Plan Decisions.

TE02 Prior to potentially disturbing activities or surface disturbing activities on public land, a special status species review will be conducted by a qualified specialist.

S/V A1 Surface disturbing activities on public land would be reviewed for cultural values by a cultural resource specialist.

Relationship to Statutes, Regulations, Other Plans and BLM Guidance

This proposal is in conformance with Arizona's Standards and Guides, which were developed through a collaborative process involving the Arizona Resource Advisory Council and the Bureau of Land Management State Standards and Guides Team. The Secretary of the Interior approved the Standards and Guides in April 1997. The Decision Record, signed by the BLM State Director (April 1997) provided for full implementation of the Standards and Guides in all Arizona Land Use Plans.

PROPOSED ACTION AND ALTERNATIVE

Proposed Action

At T. 41 N., R. 1 W., sec. 7,6,5; (Shinarump Point Quadrangle, see referenced map), respectively, install a catchment apron, storage tank, drinking troughs, and a four strand barb wire fence around the perimeter of the catchment apron to discourage trampling by livestock and wildlife. A mesh wire deer fence would be installed around the storage tank. Storage capacity at the catchment location would be around 150,000 gallons. One square foot of catchment apron per five gallons of water storage is believed to be best to meet livestock and wildlife needs, balance evaporation losses, and allow for erratic precipitation. Approximately 2 miles of 1¼ inch polyethylene or PVC pipe would be installed, either by ripping or trenching, to gravity feed collected water from the catchment apron to the storage tank and thence to the drinking troughs. Two pipelines would be utilized to take water by gravity flow into Cedar ridge and Shinarump Allotments. Water would be left on to the troughs to accommodate wildlife needs. It is estimated that the catchment site would be less than 4 acres in area. Funding for the projects would be provided by the NRCS, AGFD, and grazing permittees.

Mitigation for the projects would include: excavate only to the extent necessary to install

each apron, storage tank, pipelines, troughs, and fence; contour and blend excavated material to reduce visual contrast; if necessary water bar access roads; remove all construction debris from the site; and equip each drinking trough with a wildlife escape ramp.

There is potential for the spread of noxious and invasive weeds from equipment contaminated with weed seed and/or biomass. To reduce this potential, the BLM requires the following measures be taken: The operator will thoroughly power wash and remove all vegetative material and soil before transporting equipment to the site to help minimize the threat of spreading noxious and invasive weeds. This includes trucks, trailers, and all other machinery. The route will be inventoried for weeds and if any are found the line will be moved to miss it or the infestation will be treated and the equipment will be re-cleaned upon reaching the out side edge of the infestation before going on, and follow-up monitoring would occur to detect possible weed increase.

The proposed action includes future maintenance activities and any necessary reconstruction for the life of the project which is expected to be at least 50 years. The exact maintenance requirements are not known but are expected to include minor repairs to pipes, the catchment apron, and fence around the catchment apron, and the drinking troughs.

No-Action Alternative

Under the no-action alternative, the catchment would not be installed on BLM administered lands.

AFFECTED ENVIRONMENT

The affected environment is tiered to the Arizona Strip District RMP (January 31, 1992), Affected Environment pages III-1 to III-58, and pages 2-1 to 2-47 of the Vermillion Grazing EIS (1979) which was adopted into the RMP and are essentially the same for this action. Chapter 2 of the Vermillion Grazing EIS describes the environmental components likely to be impacted by the proposed action. Environmental components discussed in the EIS that might affect or be affected by the proposal are: Vegetation, Soils, Water Resources, Animals (wildlife), Cultural Resources, Visual Resources, and Land Uses including livestock grazing and recreation.

Location and General Setting

The Brown and Shumway, Shinarump and Cedar Ridge Allotments are located on the Arizona Strip in Coconino County, Arizona approximately 2 to 3 miles northeast of Fredonia, Arizona. The land pattern in the area involved includes BLM-administered public land, state land, and private land controlled by the grazing permittees.

The following critical elements of the human environment are not present or are not affected by the proposed action or alternative in this EA:

Prime or unique farmlands
Flood plains
Environmental Justice
Native American Religious Concerns
Wastes (hazardous or solid)
Wetland Riparian Zones
Wild and Scenic Rivers
Areas of Critical Environmental Concern
Wilderness

Elements Brought Forward for Consideration

Soil and Air
Vegetation
Wildlife
Cultural Resources
Visual Resources
Recreation
Noxious Weeds
Threatened or Endangered Species

Migratory birds were considered but dropped from further analysis because they would be unaffected by the proposed action or alternative in this EA.

Soil and Air: Soils are mostly silty loams and gravely loams, derived typically from siltstone, mudstone and shale as parent material. Air quality within the general area is good, though wind blown dust and smog from urban areas are considered minor sources of pollution. The Arizona Strip District is managed under Class II Ambient Air Quality Standards (prevent substantial decreases in air quality).

Vegetation: Terrain consists of open brushy flats and drainage bottoms; vegetated by sagebrush, pinion and juniper trees, cliffrose, ephedra, blue grama, galleta, cheatgrass, and various annual and perennial forbs. Desirable deer browse on the sagebrush ridges includes cliffrose, and isolated patches of fourwing saltbush.

Wildlife: Mammals typical of the area include, mule deer, coyote, bobcat, mountain lion, jackrabbit, cottontail rabbit, ground squirrel, and various rodents. Common avian species include sparrows, jays, woodpeckers, ravens, and various raptors such as red tailed hawks and golden eagles. Reptiles include western rattlesnakes, gopher snakes and various lizard species.

Cultural Resources: The area has a representation of a wide range of cultural diversity in its archaeological resources from 11,000 years ago to present. Known Paleo-Indian, Archaic, Anasazi, Paiute, and Historic Cultural manifestations have been reported throughout the region.

Visual Resources: The area involved is classified by BLM as a class 4 visual resource management (VRM) zone. The class 4 VRM has scenic quality which is categorized as fair and change should not be in contrast to the landscape.

Recreation: Primary activities that occur in the area are hunting, camping, and back country touring (sightseeing by vehicle). Off-highway vehicle travel in the area is limited to existing roads and trails. The Recreational Opportunity Spectrum System used by BLM describes the area as semi-primitive, motorized activities.

Noxious Weeds: There are currently no known noxious weeds within the vicinity of the proposed projects.

Threatened or Endangered Species: Special status raptors such as bald eagles (*Haliaeetus leucocephalus*) (delisted in 2007), California condor (endangered – experimental population), and peregrine falcon (*Falco peregrinus anatum*) (delisted in 1999) are not known to nest or roost on the area of the proposed action, but may occasionally fly over the area.

ENVIRONMENTAL CONSEQUENCES

Impacts of the Proposed Action

Soil and Air: Excavation would be limited to what is necessary to install the catchment apron, storage tank, pipelines, troughs, and fences; but would result in some degree of soil disturbance and compaction. The catchment would allow better dispersal of grazing animals on Brown and Shumway, Shinarump and Cedar Ridge Allotments, reducing impacts of concentrated livestock use.

No impacts to air quality are expected except for a temporary increase in dust from the vehicular and construction activity associated with the project.

Vegetation: Installation of the proposed catchment would cause damage to some species of vegetation. Impacts would occur as a result of vehicular activity in delivering materials and excavation. The area of impact would be limited to pipe installation route and lands identified for installation of catchment apron, troughs and storage tank.

Overall, the proposed action would benefit vegetative resources in the long term by facilitating improved control of livestock distribution and use, resulting in additional grazing deferments within the Brown and Shumway, Shinarump and Cedar Ridge Allotments. Regular seasonal deferment from grazing would improve health, reproduction, and vigor of range plants; plant diversity; ecosystem function; and productivity.

Wildlife: Preparation for catchment installation would involve surface disturbance and the clearing of some brush which would disturb or alter wildlife habitat in that area. Some

small wildlife would be displaced to adjacent habitats. The proposed action would also have the impact of creating dust and noise, temporarily disturbing wildlife in the area.

Rest-rotation grazing enhanced by these new facilities would change livestock distribution and vegetation utilization and improve the long-term ecosystem health within the areas involved. Anticipated improvement of the rangeland health would be beneficial to most forms of wildlife over the long run. Any disturbance associated with catchment construction would be offset by the availability of additional water for wildlife.

Cultural Resources: A Class 3 cultural survey was completed and no cultural resources were found in the area of the proposed project work.

Visual Resources: The proposed catchment is within a class 4 VRM zone, involving scenic quality which is categorized as fair. Impact on visual quality would be slight, as the catchment would not be visible near the vicinity of Highway 89.

Recreation: No impact to recreation users is anticipated. Added water facilitated by the catchment may enhance hunting and wildlife viewing opportunities for recreationists.

Noxious Weeds: There are currently no known noxious weeds within the vicinity of the proposed catchment, and the area is routinely surveyed for new weeds. To prevent possible spread of weeds, the equipment to be used in construction of the catchment would be inspected and cleaned prior to placement at the work site.

Threatened or Endangered Species: No listed, proposed, or candidate species would be affected by implementation of the proposed action. Special status raptors such as bald eagles, California condors, and peregrine falcon, may occasionally fly over the area, but would not be affected by the proposed action.

Impacts of No Action

Soil and Air: No impact to soil or air would result from this alternative.

Vegetation: The no-action alternative would eliminate the vegetation disturbance associated with installing the new catchment but would also limit options for better livestock control, which would be most beneficial to the vegetative resources.

Wildlife: This alternative would alleviate possible disturbance to wildlife associated with installating a new catchment, but would preclude availability of additional water.

Cultural Resources: No impacts on cultural resources would result because of this alternative.

Visual Resources: No adverse impacts on visual resources have been identified.

Recreation: No additional impacts on recreation users would result because of this

alternative.

Noxious Weeds: No effect.

Threatened or Endangered Species: No effect.

CUMULATIVE IMPACTS

Proposed Action: Facilities associated with livestock grazing have been present on the Arizona Strip for over 100 years. Cumulative impacts of the proposed catchment would be insignificant because of the small scale of the project in relation to all the other facilities developed over the years. In the future additional water developments might be proposed for other allotments in order to resolve utilization and livestock distribution problems. For a more complete analysis of cumulative impacts from actions proposed to occur on public lands on the Arizona Strip, refer to the Arizona Strip District Resource Management Plan and Final EIS (1990 pp. III-33 to III-36).

No-Action Alternative: This alternative would eliminate the minor soil and vegetation disturbance associated with installing the catchment; but would limit accomplishment of the objectives and associated improvements in rangeland health, ability to provide additional water for livestock and wildlife.

CONSULTATION AND COORDINATION

This document underwent internal review (Arizona Strip Field Office). A Notice of Decision Letter was sent out to ASDO NEPA mailing list as well as livestock permittees, AZ State Land Department and Fredonia NRCS. The BLM and other specialists conducting this review were:

Gloria Benson, Native American Coordinator
Tom Folks, Recreation/Wilderness/VRM
Laurie Ford, Lands/Realty/Minerals
Michael Herder, Wildlife/ T&E
John Herron, Cultural
Lee Hughes, Special Status Plants
Ray Klein, GCPNM Supervisory Ranger
Linda Price, S&G
Bob Sandberg, Range/Vegetation
Richard Spotts, Environmental Coordinator
Ron Wadsworth, Supervisory Law Enforcement
LD Walker, Weed Coordinator
Becky Hammond, ASFO Manager

Andi Rogers Arizona Game and Fish
Rick Miller Arizona Game and Fish
LeAnn Skrzynski Kaibab-Paiute tribe

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis of potential environmental impacts contained in this environmental assessment, I have determined that the proposed action would not have a significant effect on the human environment and therefore an environmental impact statement will not be prepared.

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Field Manager, Arizona Strip Field Office

DECISION RECORD

It is my decision to authorize the proposed action, analyzed in the Environmental Assessment AZ-110-2007-0039, to install a catchment apron and storage tank, and locate water troughs along the pipline route in order to gravity feed water from the catchment apron and storage tank to the troughs. In conjunction with this a no action alternative was also analyzed. The proposed action was selected in deference to the no action alternative because reliable water would be provided for livestock and wildlife use and better livestock distribution would result on the allotments.

Mitigation for the project includes: excavate only to the extent necessary to install the apron, storage tank, pipeline, and troughs; remove all construction debris from the site; equip the drinking troughs with a wildlife escape ramp, and install a wildlife drinker.

In addition, any sub-surface archaeological, historical, or paleontological remains discovered during use shall be left intact; all work in the area shall stop immediately and the field manager
shall be notified immediately. Recommencement of work shall be allowed upon clearance by the field manager in consultation with the archaeologist. An additional archaeological survey shall be required in the event the proposed project location is changed, or additional surface disturbing activities are added to the project after the initial survey. Any such survey would have to be completed prior to commencement of the project. Also, to avoid the spread of noxious weed seed, excavating equipment should be power washed prior to entering the project area.

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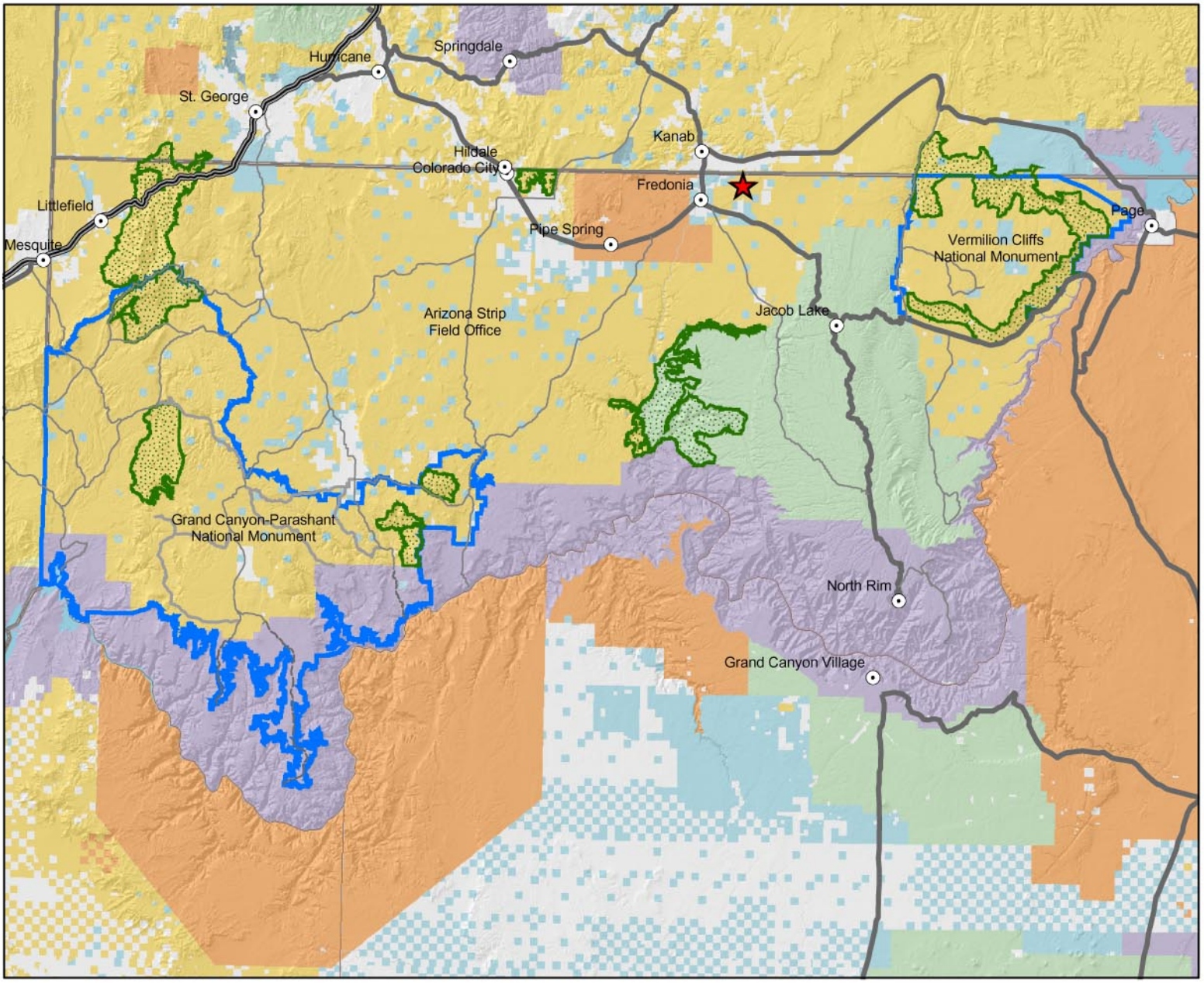
Field Manager, Arizona Strip Field Office Date

AZ-110-2007-0039 - Brown and Shumway Catchment

State of Arizona



Legend

- Area of NEPA Project
- Designated Wilderness
- Monuments
- Bureau of Land Management
- State Lands
- Private Lands
- National Park Service
- Indian Lands
- National Forest
- Interstate
- Primary Routes
- Secondary Routes
- Light Duty Routes
- 4WD Routes

Location Map

1:1,220,000

0 10 20 30 40 Miles

0 20 40 60 80 KM

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United States Department of the Interior
Bureau of Land Management
Arizona Strip District Office

Map created on July 30, 2007

CAUTION:
Land ownership data is derived from less accurate data than the 1:24000 scale base map. Therefore, land ownership may not be shown for parcels smaller than 40 acres, and land ownership lines may have plotting errors due to source data.

No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.