CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Paradise Land Banking Project
Proposed Implementation Date:	Fall 2016
Proponent:	DNRC - Bozeman Unit
Location:	E2SE4NW4 Section 32-T4S-R9E
County:	Park
Trust:	University of Montana

I. TYPE AND PURPOSE OF ACTION

Offer for Sale at Public Auction, a 7.6 acre parcel of state land that has been separated from the main 320 acre tract by US Hwy 89. The parcel is currently held in trust for the benefit of the University of Montana. Revenue from the sale would be deposited in a special account, with monies from other sales around the State, to purchase replacement lands meeting acquisition criteria related to legal access, productivity, potential income and proximity to existing state ownership which would then be held in trust for the benefit of University of Montana.

The proposed sale is part of a program called Land Banking authorized by the 2003 Legislature, and updated by the 2007 and 2009 Legislatures. The purpose of the program is for the Department of Natural Resources and Conservation to overall, diversify uses of land holdings of the various trusts, improve the sustained rate of return to the trusts, improve access to state trust lands and consolidate ownership.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

A legal notice was published in the Livingston Enterprise on February 24, and March 2, 2016 and the Bozeman Chronicle on February 28, and March 6, 2016 requesting comments.

A letter requesting comments to be submitted by May 25, 2015 was sent to interested parties on April 16, 2015, including adjacent landowners (listed on the Land Ownership data base of the Natural Resources Information System administered by the Montana State Library), the Park County Commissioners, the Montana Department of Fish Wildlife and Parks and members of the Negotiated Rulemaking Committee who participated in writing the Administrative Rules for the Land Banking Program. A complete list of the individuals contacted is available upon request.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

No other governmental organizations have jurisdiction over this proposal.

3. ALTERNATIVES CONSIDERED:

Proposed Alternative: Offer approximately 7.6 acres of State Land for sale at Public Auction and subject to Statutes addressing the Sale of State Land found in Title 77, Chapter 2, Part 3 of the Montana Codes Annotated. Proceeds from the sale would be deposited in the Land Bank Fund to be used in conjunction with proceeds from other sales for the purchase of other state land, easements, or improvements for the beneficiaries of the respective trusts, in this case the University of Montana Trust.

No Action Alternative: Defer inclusion of the parcel in the Land Banking Program, maintain state ownership of the parcel at this time, continue to lease for grazing and tolerate non-lessee use and abuse of the parcel.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The soils consist of Cozdome-Vendome loams on <5% slopes. Soils are a coarse loamy alluvium over sandy and gravelly alluvium derived from igneous, metamorphic and sedimentary rock. Topsoils are poor with little rock content. These soils are suited for grazing purposes with a range production average of 1490 lbs/ac/yr and are not well suited for hay or grain production. This parcel has been overgrazed by an adjacent landowner. Soil degradation susceptibility is slight and compaction resistance is low but restoration potential high. There are no unusual geologic features but special reclamation considerations maybe needed for overgrazing. No direct or cumulative impacts to geology and soils are anticipated as a result of the proposal.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

An old non-functioning ditch runs through the southeast corner of the parcel but there is no developed water source. The Yellowstone River passes ~150 feet to the southeast of the parcel but there is no connection or delivery to the waterway. No direct or cumulative impacts to water quality are anticipated as a result of the proposal.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The tract of land is located approximately 12 miles south of Livingston MT. Air quality is currently good. Impacts to air quality may result from a variety of activities including road use, agricultural burning, wildfires, industrial development, vehicle emissions or heating system emissions among others. This proposal does not include any on-the–ground activities, or changes to activities therefore no direct or cumulative effects are expected to occur to air quality as a result of the proposal.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The 7.6 acre parcel is part of a 320 acre grazing lease that is separated from the main tract by US Hwy 89. The parcel has been fenced off by an adjacent landowner (Deer Haven Ranch) who is not the lessee and uses it as their own property, including a locked gate, no trespassing signs and livestock grazing. The parcel has been overgrazed and left in poor condition over the years.

The land is native rangeland that consists of mostly bluebunch wheatgrass, needle and thread, prairie June grass, elk sedge and bluegrass. Undesirable plants found on the parcel include knapweed, cheatgrass, thistle, cinquefoil and spurge.

It is unknown what land use activities may be associated with a change in ownership; however the vegetation on this tract is typical of a land throughout the vicinity and there are no known rare, unique cover types or vegetation on the tracts. Direct or cumulative effects to vegetation are not expected as a result of the proposal.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The area is used by a variety of wildlife to include large ungulates (elk, mule deer and white-tailed deer), small to large sized predators and omnivores (weasels, red fox, coyotes, bobcats, grey wolves, mountain lions, black bear), numerous species of small mammals (mice, voles, ground squirrels, rabbits, marmots, etc.), various raptors (red-tailed hawks, golden eagles, American kestrels, prairie falcons, etc.) upland game birds (ruffed-grouse, Hungarian partridge), and numerous non-game bird species (a wide variety of migrant and resident bird species associated with available habitats).

It is unknown what land use activities may be associated with a change in land ownership. A change in future land management direction on this section could potentially alter wildlife use and distribution.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

The proposed project is located in dry grassland habitats not typically preferred by lynx. Preferred lynx habitat is not present within the proposed project area due to the lack of highly desirable habitat conditions for lynx and their primary prey, snowshoe hares. Adverse direct, indirect or cumulative impacts to lynx as a result of this project are expected to be negligible.

Grizzly bear use of the upper Yellowstone Valley does occur and the project area is located in what is considered occupied habitat. Human access levels are presently moderate to high due to the adjacent private lands, residential structures and public access within the Yellowstone River corridor and project area. Adverse direct, indirect and cumulative impacts to grizzly bears as a result of this project are expected to be minimal.

The proposed project area falls within the range of wolverines and periodic or transient use of the proposed project area could occur. High elevation areas with persistent snow late into the spring do not occur in the project area. Due to the scope, scale, nature, and location of the proposed project, activities associated with this proposal are expected to have negligible effect on wolverines.

The proposed project area falls within the Greater Yellowstone Experimental Area for gray wolves. Several packs reside in the vicinity of the project area but no known denning or rendezvous sites occur within 1 mile of the project area. However, wolves may occasionally use the project area and occasional sightings have been noted in the area. Minimal risk of direct, indirect or cumulative effects that would result in harm to wolves would be anticipated under the alternatives considered.

No Bald Eagle nests were observed on the State parcel. Feeding areas, roosting areas or suitable nesting habitat do occur on or within one mile of the proposed project area. Due to the scope, scale, nature and location of this proposed project, no direct, indirect or cumulative effects to Bald Eagles associated with this project are anticipated.

The Yellowstone River is very close to the State parcel and is known to support cold-water fisheries including Yellowstone Cutthroat Trout. Direct, indirect or cumulative impacts to the fisheries resource within this watershed as a result of implementing the proposed action is expected to be negligible. Future impacts to fisheries are not expected.

No plant species of concern have been observed in Section 32-T4S-R9E.

It is unknown what land use activities may be associated with a change in land ownership. A change in future land management direction on this section could potentially alter wildlife use and distribution. No direct or cumulative impact to Threatened, Endangered or unique wildlife or plants is anticipated as a result of the proposal.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

The state parcel proposed for sale (SENE1/4 Section 32, T04S R09E) was inventoried in 2015 to Class III standards for cultural and paleontological resources. No paleontologic resources were identified, but the abandoned grade of the Northern Pacific Railroad (24PA1120) and a privately owned irrigation canal (24PA1114) are on, or immediately adjacent to the state parcel proposed for sale. Neither of these cultural resources would be affected with the sale of this property, and no additional archaeological investigative work is recommended. A report of inventory work conducted, and the results of that effort are on file with the DNRC and the Montana State Historic Preservation Office.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The parcel is visible by the surrounding community and vehicles traveling on US Hwy 89. The parcel does not provide any unique scenic quality that is not also provided by adjacent lands. No direct or cumulative impact to aesthetics is anticipated as result of the proposal.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

This tract totaling 7.6 acres is part of the University of Montana Trust of which there are more than 17,200 surface acres within the state, 880 surface acres within Park County. This tract is currently the only tract in Park County under consideration for sale under the Land Banking Program.

There are additional tracts of state land currently under consideration for sale through the Land Banking Program on a statewide basis. Each of these tracts are at a different stage in their review process, and are being examined under separate analysis. The authorizing legislation has placed a cap on the total land banking sales of 250,000 acres statewide.

The transfer of ownership would not have any impact or demands on environmental resources of land, water, air or energy.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Grazing lease range evaluations have been conducted on this tract and are in the Department files.

A cultural resources inventory of the state tract was completed in October, 2013.

An EA for the NEON Paradise Valley project, which includes Section 32-T4S-R9E, was completed with decision in June 2015.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No impacts to human health and safety would occur as a result of the proposal.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

The 320 acre tract of land is currently leased for grazing purposes (69 Animal Unit Months) with the 7.6 acre parcel able to support ~1 AUM's. The current lessee, Vaugh and Naomi Johnson, is interested in the tract for sale. The lands surrounding the main State tract have been heavily subdivided and developed. The Deer Haven Ranch Marital Trust owns the land east of the parcel and manages their land for agriculture and livestock. Yellowstone Valley Partners LLC owns the land south of the parcel and likely manages their land for real estate purposes. State of Montana lands directly to the west of the 7.6 acre parcel are under various right-of-way easements with the Dept. of Transportation and utility companies.

Grazing, agriculture and real estate are the main activities around the State parcel. The parcel is presently being grazed but with the direct access to US Hwy 89 and the additional infrastructure, including a gravel road and buried power and phone lines, it would be a good fit with the surrounding real estate development. The state land is currently not zoned.

It is unknown if a change in use would occur if the tract was transferred to another owner. Any future change in land use would be subject to review under state and local regulations intended to address impacts to local industrial, commercial and agricultural activities. No direct or cumulative impacts are anticipated as a result of the proposal.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The proposal would have no affect on quantity and distribution of employment.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Currently the tract is not assessed for taxes due to State of Montana ownership. If the property were to be sold and purchased by a private land owner, Park County would begin to receive tax revenues for the parcel.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

The proposed sale would not have an impact on government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The tract is currently not zoned.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Access to this parcel is provided by US Highway 89 and a gravel access road (an easement to the Deer Haven Ranch property) which is blocked with a locked gate. The parcel has been fenced, posted with no trespassing signage and heavily overgrazed.

Recreational use of the state land is limited by the quality of access, the small size of the parcel and the appearance that the parcel is privately owned.

The transfer of ownership on this tract would likely have an impact on the ability recreationists trying to access the parcel. It is unknown what recreational uses would be allowed under different ownership.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

The ownership transfer of this tract would not require additional housing or impact population changes. It is unknown what land uses would occur under new ownership. Any future proposal to develop the property and increase housing would be subject to review under state and local regulations.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The State Trust land in this proposal is currently managed for grazing uses. The State land is generally indistinguishable from the adjacent private lands, with no unique quality.

It is unknown what management activities would take place on the land if ownership was transferred. The sale of the state land will not directly or cumulatively impact cultural uniqueness or diversity.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The 7.6 acre parcel has a grazing capacity for ~1 Animal Unit Month (.13 AUM's/ac) at a rate of $19.57/AUM and generating an income of $19.57 annually or approximately $2.58 per acre in 2016. The average income derived from the use of the surface acres in all classifications is approximately $2.58 per acre. Even with the AUM rate increase in 2016, the $2.58 per acre for grazing is less than the average return of $3.58 for grazing on State land as a whole in 2015, and the AUM per acre is lower than the state average of .24 AUM's/ac.

Since the Land Banking program began the state has sold 68,060 acres generating $36,561,730 in revenue and has acquired 64,629 acres while spending $31,215,807. The average income of the acres sold was $201,571 annually ($2.96 per acre) while the average income for the acreage acquired is $330,373 annually ($5.11 per acre).

An appraisal of the property value has not been completed to date. Under DNRC rules, the appraisal would be conducted after preliminary approval to proceed is granted by the Board of Land Commissioners and the Department is conducting more detailed evaluations in order to make a final determination on whether to offer the tract for sale. However, at this time, given the real estate market in Paradise Valley, we believe the value of this tract is above the average value of trust lands in the state. The estimated revenue from the sale of the State parcel is $15,000.00 per acre ($114,000.00).

The revenue generated from the sale of this tract is intended to be combined with other revenue in the Land Banking Account to purchase replacement property for the benefit of the University of Montana Trust. It is anticipated the replacement property would have legal access and be adjacent to other trust lands which would provide greater management opportunities and income. If replacement property was not purchased prior to the expiration of the statute, the revenue would be deposited into the permanent trust for investment.

EA Checklist Prepared By:	**Name:**	Chuck Barone	**Date:**	5/10/2016
	Title:	Bozeman Unit Forester		

V. FINDING

25. ALTERNATIVE SELECTED: Proposed Alternative: Offer approximately 7.6 acres of State Land for sale at Public Auction and subject to Statutes addressing the Sale of State Land found in Title 77, Chapter 2, Part 3 of the Montana Codes Annotated. Proceeds from the sale would be deposited in the Land Bank Fund to be used in conjunction with proceeds from other sales for the purchase of other state land, easements, or improvements for the beneficiaries of the respective trusts, in this case the University of Montana Trust.

26. SIGNIFICANCE OF POTENTIAL IMPACTS: I have determined that none of the anticipated environmental impacts outlined in the EA are significant according to the criteria outlined in *ARM 36.2.524.* I find that no impacts are regarded as severe, enduring, geographically widespread, or frequent. Further, I find that the quantity and quality of various resources, including any that may be considered unique or fragile, will not be adversely affected to a significant degree. I find no precedent for future actions that would cause significant impacts, and I find no conflict with local, State, or Federal laws, requirements, or formal plans. In summary, I find that the identified adverse impacts will be avoided, controlled, or mitigated by the design of the project to the extent that the impacts are not significant.

Furthermore, this parcel of land is too small to be viably managed for grazing as it is classified and sale will best effectively recover the parcels economic value to the trust.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

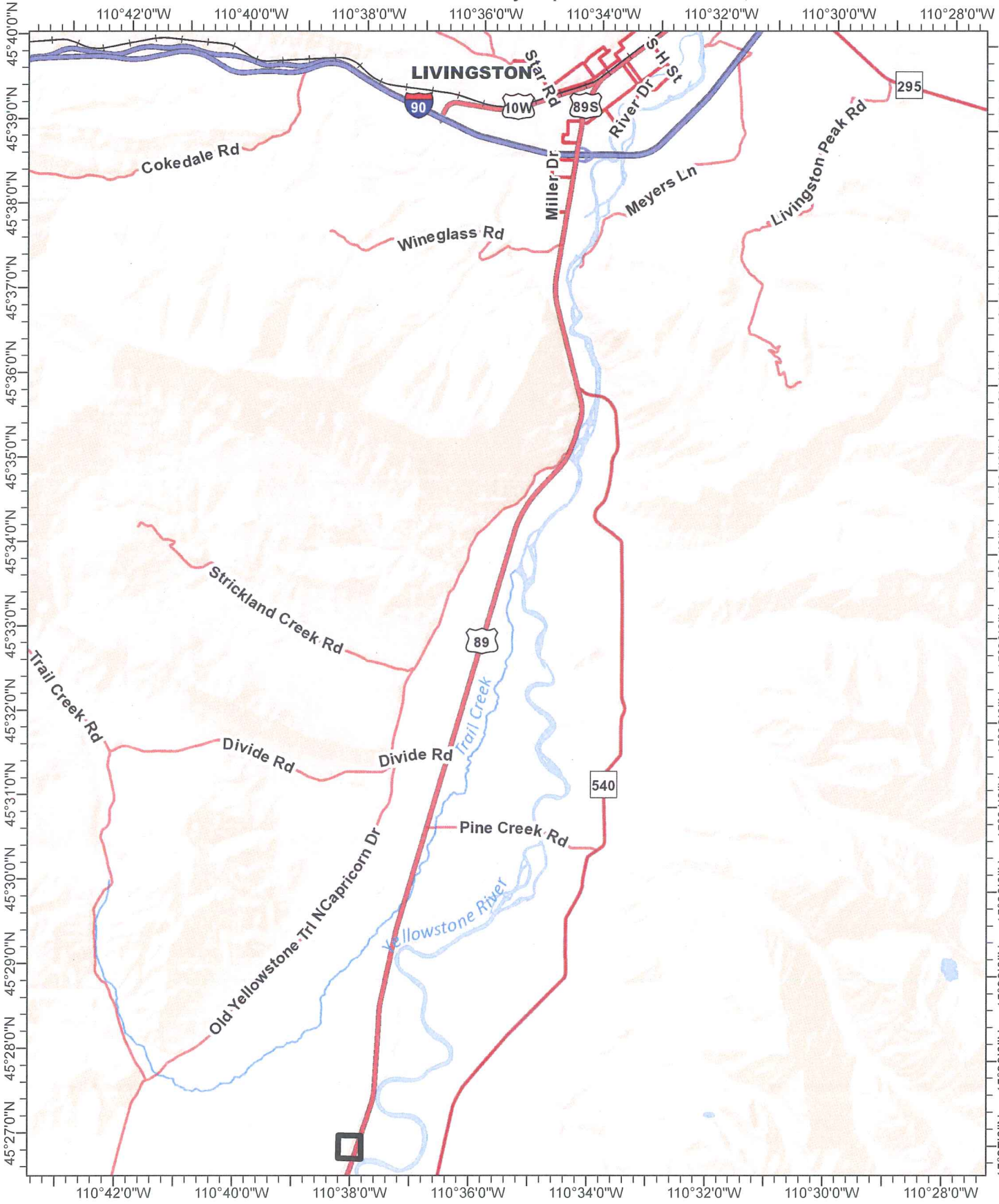
[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:**	Craig Campbell
	Title:	Bozeman Unit Manager
Signature:	Craig Campbell/s/	**Date**: 5/13/2016

ATTACHMENTS

A – Vicinity/Site Specific Maps
H – Checklist for Endangered, Threatened and Sensitive Species

ATTACHMENT A
Paradise Land Banking Proposal - Bozeman Unit
Vicinity Map



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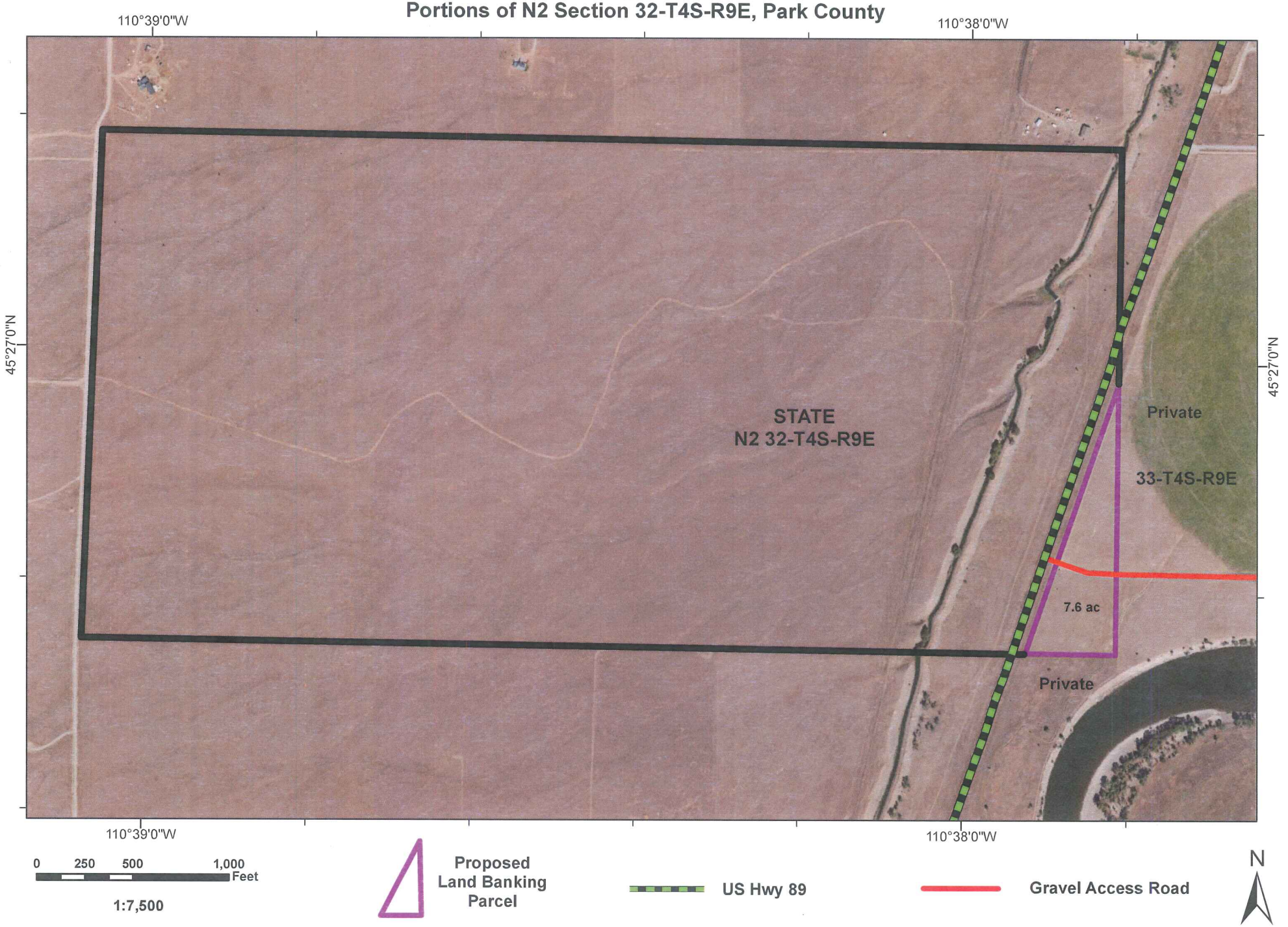
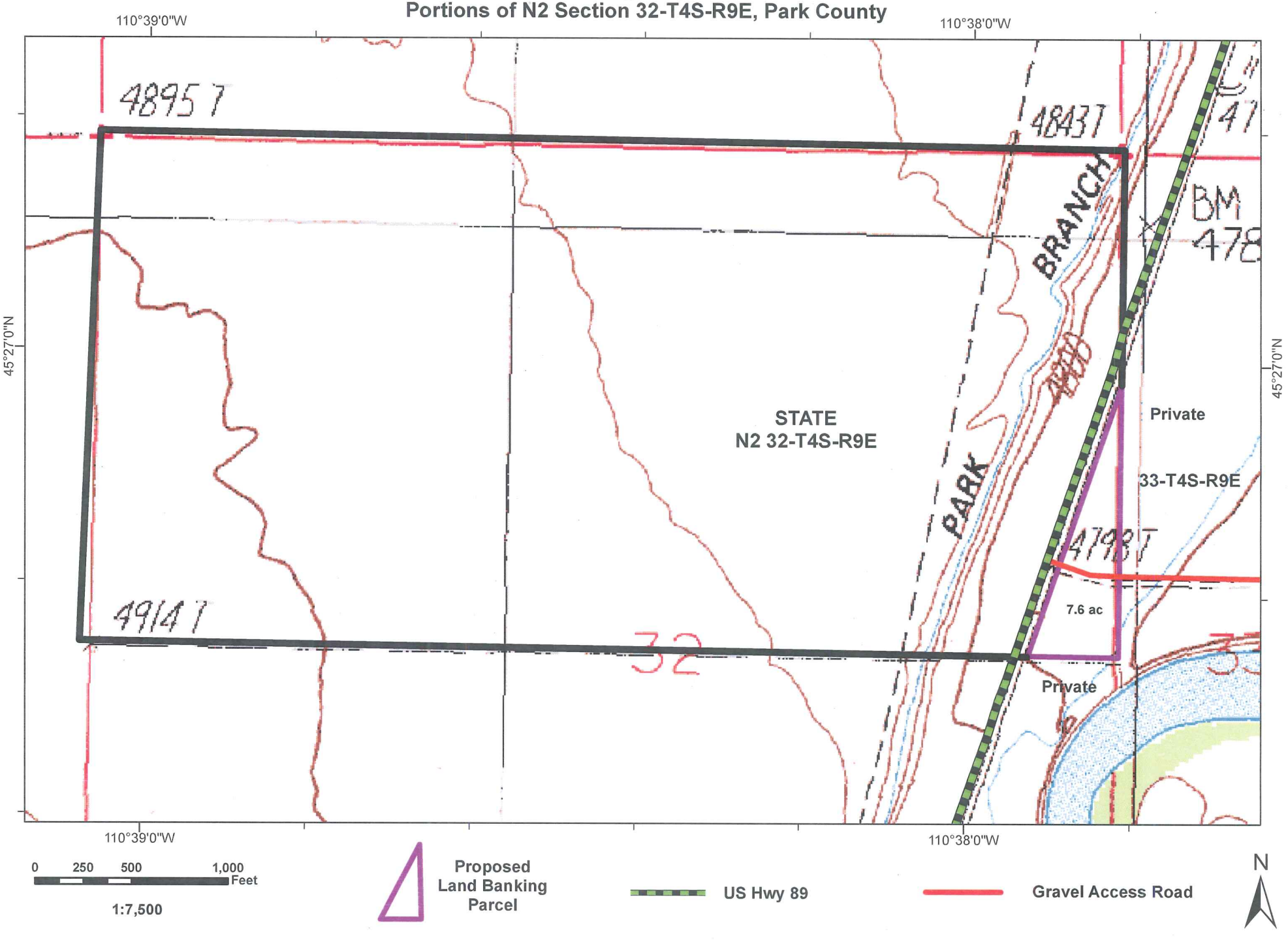
Proposed Land Banking Area

N

ATTACHMENT A
Paradise Land Banking Proposal - Bozeman Unit
Portions of N2 Section 32-T4S-R9E, Park County



ATTACHMENT A
Paradise Land Banking Proposal - Bozeman Unit
Portions of N2 Section 32-T4S-R9E, Park County



ATTACHMENT H

PARADISE LAND BANKING
CHECKLIST FOR ENDANGERED, THREATENED AND SENSITIVE SPEICES
CENTRAL LAND OFFICE

Prepared by Chuck Barone March 29, 2016

Threatened and Endangered Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Canada Lynx (Lynx canadensis) Habitat: dense spruce/fir forest supporting snowshoe hares.	[N] The proposed project is located in dry grassland habitats not typically preferred by lynx. Habitats high in coarse woody debris that are preferred for denning, and large acreages (>50 acres) of dense conifer regeneration at high elevations that are preferred for foraging are not present in the project area. The predominant cover types within the project area do not contain high horizontal cover comprised of subalpine and spruce bows. Considering the limited presence of several habitat attributes within the project area that are known to be important for lynx and snowshoe hares (e.g. dense overstory canopy, dense shrubs and downed logs), habitat in this area is likely suited at best as travel habitat or matrix habitat that would facilitate movement, linkage, and provide habitat for secondary prey species. Preferred lynx habitat is not present within the proposed project area due to the lack of highly desirable habitat conditions for lynx and their primary prey, snowshoe hares. Adverse direct, indirect or cumulative impacts to lynx as a result of this project are expected to be negligible.
Grizzly Bear (*Ursus arctos*) Habitat: recovery areas, security from human activity	[Y] The proposed project area lies outside of any grizzly bear recovery area. The nearest recovery area is the Yellowstone Grizzly Bear Recovery Zone (USFWS 1993) situated ~15 miles south of Section 32-T4S-R9E. Riparian areas adjacent to the Yellowstone River corridor in Section 32-T4S-R9E have been identified as potential grizzly bear spring habitat. The surrounding foothills above the main river valley have been identified as potential grizzly bear denning habitat. Grizzly bear use of the upper Yellowstone Valley does occur and the project area is located in what is considered occupied habitat (Interagency Occupied Habitat Map, September 2002). The project sites are comprised of dry grassland types not typically preferred by bears. Riparian habitats preferred by bears do occur along the adjacent Yellowstone River corridor. Human access levels are presently moderate to high due to the adjacent private lands, residential structures and public access within the Yellowstone River corridor

	and project area. It is unknown what land use activities may be associated with a change in land ownership. A change in future land management direction on this section could potentially alter wildlife use and distribution. Potential for any measurable increases in bear-human conflicts are not expected. Due to the scope, scale, nature and location of the proposed project, activities associated with this proposal are not expected to affect grizzly bears. Adverse direct, indirect and cumulative impacts to grizzly bears as a result of this project are expected to be minimal.
Wolverine (Gulo gulo) Habitat: High elevation cirque basins and zones with persistent snow in late spring	[N] The proposed project area falls within the range of wolverines. The DNRC is not aware of any specific observations of wolverines associated with the proposed project area; however, periodic or transient use of the proposed project area could occur. High elevation areas with persistent snow late into the spring do not occur in the project area. Due to the scope, scale, nature, and location of the proposed project, activities associated with this proposal are expected to have minimal effect on wolverines.

DNRC Sensitive Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Bald Eagle (*Haliaeetus leucocephalus*) Habitat: late-successional forest <1 mile from open water	[N] Bald Eagles have been documented within the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). No Bald Eagle nests were observed on the State parcel. Feeding areas, roosting areas or suitable nesting habitat do occur on or within one mile of the proposed project area. Due to the scope, scale, nature and location of this proposed project, no direct, indirect or cumulative effects to Bald Eagles associated with this project are anticipated.
Black-Backed Woodpecker (*Picoides arcticus*) Habitat: Habitat: mature to old burned forest	[N] Black-backed woodpeckers have been documented within the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). Forested stands are negligible within the proposed project area. Trees are not presently experiencing noticeable insect activity and no recent burns (≤5 years old) have occurred within the State tract or adjoining sections. Regionally insect activity is abundant at the landscape scale and not likely to be limiting for black-backed woodpeckers. Due to the scope, scale, nature and location of this proposed project, no direct, indirect or cumulative effects to black-backed woodpeckers would be expected to occur.

Black-tailed Prairie Dog (*Cynomys ludoviscianus*) Habitat: Prairie, shortgrass prairie, badlands	[N] Black-tailed prairie dogs have not been documented in the project area or surrounding area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). No grassland habitat suitable for use by black-tailed prairie dogs occurs in or near the project area. No direct, indirect or cumulative effects to prairie dogs would be anticipated under the alternatives considered.
Flammulated Owl (*Otus flammeolus*) Habitat: late-successional ponderosa pine and Doug.-fir forest	[N] Flammulated Owls have not been documented within the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). The parcels involved in the proposed project do not maintain the forest habitat types preferred by Flammulated Owls. No direct, indirect or cumulative effects to Flammulated Owls would be anticipated under the alternatives considered.
Gray Wolf (*Canis lupus*) Habitat: ample big game pops., security from human activity	[N] The proposed project area falls within the Greater Yellowstone Experimental Area for gray wolves. Several packs reside in the vicinity of the project area but no known denning or rendezvous sites occur within 1 mile of the project area. However, wolves may occasionally use the project area and occasional sightings have been noted in the area. Minimal risk of direct, indirect or cumulative effects that would result in harm to wolves would be anticipated under the alternatives considered. If wolves or an active den site were detected in the immediate area, operations would cease, and a DNRC biologist would be consulted. Appropriate mitigations would be developed and applied prior to resuming activities.
Greater Sage-grouse (*Centrocercus urophasianus*) Habitat: sagebrush semi-desert	[N] Sage Grouse have been documented in the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). Sagebrush semi-desert habitats suitable for use by Sage Grouse do occur within one mile of the project area but no leks, lek areas or core areas have been identified within one mile of the project area. Should sage grouse be present in the vicinity of the project area, any effects to habitat or disturbance-related effects would be expected to be minimal and preferred sagebrush habitat would not be altered. Impacts to Sage Grouse are not anticipated.
Harlequin Duck (*Histrionicus histrionicus*) Habitat: white-water streams, boulder and cobble substrates	[N] Harlequin ducks have been documented within the Yellowstone River corridor adjacent to the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). High gradient streams suitable for use by harlequins do occur within the project area. Due to the scope, scale, nature and location of this proposed project, no impacts to Harlequin Ducks would be expected to occur as a result of this project.

Mountain Plover (*Charadrius montanus*) Habitat: short-grass prairie, alkaline flats, prairie dog towns	[N] Mountain Plovers have not been documented within the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). No short-grass prairie or prairie dog towns occur on, or within one mile of the proposed project area. No impacts to Mountain Plovers are expected as a result of this project.
Northern Bog Lemming (*Synaptomys borealis*) Habitat: sphagnum meadows, bogs, fens with thick moss mats	[N] No sphagnum meadows, bogs or fens occur within or near the project area, and the project area occurs outside of the known distribution of northern bog lemmings in Montana (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). No direct, indirect or cumulative effects to bog lemmings would be anticipated for the alternatives considered.
Peregrine Falcon (*Falco peregrinus*) Habitat: cliff features near open foraging areas and/or wetlands	[N] Peregrine Falcons have been documented within the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). No cliff features but suitable foraging areas do occur within one-mile of the State parcel. No known nest sites occur within or near the project area. No direct, indirect or cumulative effects to peregrine falcons would be anticipated for the alternatives considered.
Pileated Woodpecker (*Dryocopus pileatus*) Habitat: late-successional ponderosa pine and larch-fir forest	[N] Pileated Woodpeckers have not been documented within the area that encompasses the proposed project area (MNHP/FWP Montana Field Guide 2016 and MNHP 2016). The project area occurs outside of the normal distribution of pileated woodpeckers in Montana. No direct, indirect or cumulative effects to pileated woodpeckers would be anticipated for the alternatives considered.
Townsend's Big-Eared Bat (*Plecotus townsendii*) Habitat: caves, caverns, old mines	[N] No known caves, caverns, or old mines suitable for use by bats occur within 1 mile of the project area. No direct, indirect or cumulative effects to Townsend's big-eared bats would be anticipated for the alternatives considered.

*Montana National Heritage Program/ FWP Montana Field Guide 2016. National Heritage Tracker 2016.