December 2, 2011

Ref: Lorengo – Barton Salvage SMZ AP

Dear Mr. Lorengo

This letter is in reference to a request made by Bob Lorengo of Lorengo and Sons Logging, L.L.C. to the Department of Natural Resource and Conservation for an Alternative Practice. This AP is located in Section 35, T5N, R14W in Granite County. After review of the Checklist Environmental Assessment prepared for this request, the Alternative Practice to allow the removal of lodgepole pine and equipment operations within the SMZ of Blodgett Gulch (Creek) is approved, subject to the following conditions:

1) The harvest inside the fifty foot buffer will only occur during periods of frozen ground to a depth of four inches and/or snow-cover to a depth of six inches.
2) Operation of the feller-buncher will occur in a "straight in and straight out" manner and will occur no closer than 15 feet to the ordinary high water mark of Blodgett Gulch (Creek).
3) Felled trees would be placed outside of the 50 foot SMZ boundary of Blodgett Gulch (Creek) for skidding.
4) Felled trees may be placed inside of the 50 foot SMZ boundary of the overflow channels for skidding.
5) The overflow channels may be crossed at 100 foot intervals in a perpendicular manner.
6) Any and all slash deposited in the overflow channels will be removed upon completion of operations.
7) Feller-buncher will not enter the SMZ on slopes greater than 15%.
8) All live, un-infested lodgepole pine, and other tree species, will be retained and protected to the greatest extent possible.

Approved Alternative Practices, including any additional conditions required by DNRC, shall have the same force and authority as the standards contained in77-5-303, MCA, and shall be enforceable by DNRC under 77-5-305, MCA, to the same extent as such standards.

It is your responsibility to ensure that your operators understand that an Alternative Practice has been issued for their operations in this area, and that these conditions must be fully meet to achieve compliance with the SMZ Law.

This approval is contingent upon your execution and return of the attached statement to the DNRC Anaconda Unit Office.

Thank you for your cooperation in this matter. Please call me if you have any questions.

Sincerely,

Sean Steinebach
Service Forester

cc: HRA file, Landowner, Applicant,
Unit Office, Land Office,
Service Forestry Bureau

December 2, 2011

Lorengo/Barton Salvage

ALTERNATIVE PRACTICE RESPONSIBILTY AFFIDAVIT

In consideration of DNRC's approval of the alternative practice(s) in Section 35, T5N, R14W, I hereby certify that I, or by written contract the legal entity I represent, am responsible for the compliance with the Montana Streamside Management Zone Law. I understand that failure to implement any of the mitigation measures required by the DNRC will be considered a violation of the SMZ Law (77-5-301 et. Seq.), and may result in penalties assessed against me or the legal entity I represent.

Signature of Responsible Party **Date**

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Lorenego/Barton Alternative Practice
Proposed Implementation Date:	Upon Approval
Proponent:	Lorengo and Sons Logging, Inc.
Location:	Blodgett Gulch – Section 35, T5N, R14W
County:	Granite

I. TYPE AND PURPOSE OF ACTION

The purpose of this Alternative Practice is to remove beetle killed or infested lodgepole pine inside the Streamside Management Zone on private property in Blodgett Gulch (Creek). This creek does not deliver water to any other body of water, but does run year round. According to MCA 77-5-301 through 307, DNRC is authorized to administer and enforce the provisions of the SMZ Law. This Law was developed to protect the public interest of water quality and quantity within forested areas; provide for standards, oversights and penalties to ensure forest practices conserve the integrity of SMZ's; provide guidelines for wildlife management within SMZ's; and allow operators necessary flexibility to use practices appropriate to site-specific conditions in the SMZ. ARM 36.11.301 through 313 further specify the design of SMZ boundaries, allowable activities and prohibitions within the SMZ, penalties and other related provisions. According to MCA 77-5-304 and ARM 36.11.310, DNRC may approve alternative practices that are different from practices required by the SMZ Law only if such practices would be otherwise lawful and continue to conserve or not significantly diminish the integrity and function of the SMZ. Treatments would be limited to operation of a feller-buncher inside the 50 foot SMZ, but no closer than 15 feet to the ordinary high water mark (OHWM) of Blodgett Gulch (Creek). These treatments would be conducted on slopes less than 15% and would allow removal of dead lodgepole pine or lodgepole pine that is infested with mountain pine beetle to below minimum retention standards as identified under Rules 4 and 5 in the *Montana Guide to the Streamside Zone Law and Rules 2006* (ARM 36.11.310-313). Removal of lodgepole pine under this AP would constitute 50% of the total trees in the SMZ. Engelmann spruce, Douglas-fir, aspen and all live lodgepole pine would be retained. Additional stipulations of this request would include:

- Operation of the feller-buncher inside the SMZ would be in a straight-in and straight-out manner to minimize disturbance inside the 50 foot boundary.
- Operation would only occur during periods of frozen ground to a depth of four inches and/or snow to a depth of six inches.
- Felled trees would be placed outside of the 50 foot SMZ boundary of Blodgett Gulch (Creek) for skidding.
- Felled trees may be placed inside the 50 foot SMZ boundary of the overflow channels for skidding.
- The overflow channel may be crossed at 100 foot intervals in a perpendicular manner.
- Any and all slash deposited in the overflow channel will be removed upon completion of operations.
- Small, un-infested lodgepole pine, in addition to other species of trees such as Douglas-fir, Engelmann spruce and quaking aspen, would be retained.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:
Provide a brief chronology of the scoping and ongoing involvement for this project.

MT DNRC and Lorengo and Sons Logging, Inc. and the property owner.

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

N/A

3. ALTERNATIVES CONSIDERED:

Alternative A –No Action. This alternative would not operate machinery inside the fifty foot buffer. Beetle-killed trees would be hand-felled to minimum retention standards, left standing or removed in a non-commercial

manner, such as by an arborist. In instances when the trees are removed non-commercially, the DNRC has no jurisdiction over operations.

Alternative B – Action. Please see *Type and Purpose of Action* for a full description of this alternative.

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.

Alternative A - No Action
No equipment operation would be allowed inside the 50 foot SMZ. Minimum retention standards would be recognized. This would mean leaving a representative stand that includes dead lodgepole pine. Trees would be hand-felled and skidded by cable through the SMZ. Trees that stand in the area between Blodgett Gulch and the overflow channels would be left. Cable skidding each tree out of the SMZ has the potential to create more soil disturbance than a feller-buncher carrying trees out of the SMZ for skidding.

Alternative B – Action
Soils in the area of the AP are described by the Web Soils Survey as Moderately or Poorly Suited for equipment operation (see soils map and description). Equipment operation would be limited to areas where slope is less than 15%. Mitigation measures would include operating season restrictions that require frozen ground to a depth of four inches, snow depth of six inches; and operation of the feller-buncher in a "straight in and straight out manner". Severed trees will be placed outside of the 50 SMZ buffer of Blodgett Gulch for skidding. In addition, grass-seeding and installation of a slash-filter windrow on any disturbed area upon completion of activity would be required. Minimal impacts to soil stability and compaction are anticipated due to the soil rating, operating restrictions and mitigation measures.

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.

Alternative A - No Action
No equipment operation would be allowed inside the 50 foot SMZ. Minimum retention standards would be recognized. Trees would be hand-felled and skidded by cable through the SMZ or left standing.

Alternative B – Action
Blodgett Gulch does not deliver water to any other body of water. The harvest of trees within the first 15 feet of the SMZ may introduce low levels of sediment delivery to Blodgett Gulch. Increases in sedimentation would be expected to be minimal and temporary due to operations only occurring on slopes less than 15% and application of mitigation measures and operating restrictions. Inside the SMZ of Blodgett Gulch, all live and un-infested lodgepole pine and other tree species will be retained. Only the dead and mountain pine beetle infested lodgepole pine will be targeted and those trees make up about 50% of the trees inside the SMZ. Other species present include Douglas-fir, quaking aspen and Engelmann spruce. Mitigation measures include imposing seasonal operating restrictions that require frozen ground to a depth of four inches and snow depth of six inches; and requiring grass seeding and installation of a slash-filter windrow on any disturbed area upon completion of operations.

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.

N/A

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.

Alternative A - No Action
Trees may be hand-felled to minimum retention standards, but it would be expected that as retention trees fell the landowner would remove them anyway. Hand-felling and skidding hand-felled trees have the potential to be more damaging to the residual stand than the directional felling of a feller buncher.

Alternative B – Action
Vegetative communities would be affected to the extent that lodgepole pine would be reduced to below minimum retention standards as outlined in Rule 5 of the *Montana Guide to the Streamside Management Zone Law and Rules* handbook. Other species of trees such as Douglas-fir, Engelmann spruce and quaking aspen would be retained where present and understory vegetation would be protected to the greatest extent possible. Removal of the dead overstory would expedite natural regeneration and cumulative effects would decrease over time. Due to operating restrictions and mitigation measures, no unacceptable impacts are anticipated with the action alternative.

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.

Alternative A – No Action
Minimum retention standards would be adhered to as well as equipment restrictions. Due to the areas being heavily used for recreation and their proximity to roads and cabins, the suitability of the proposed sites would continue to be marginal at best for terrestrial and avian habitat. Dead lodgepole pine would eventually fall over and/or be removed in a non-commercial manner.

Alternative B – Action
There are no fish in Blodgett Gulch. Due to the areas being heavily used for recreation and their proximity to roads and cabins, the suitability of the proposed sites are currently reduced for terrestrial and avian habitat. Operating restrictions and mitigation measures would preserve the integrity of fish habitat if present. No unacceptable impacts are anticipated.

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.

Alternative A – No Action
A query of the Montana Natural Heritage Program identifies the area as being possible habitat for gray wolf, Canada lynx, wolverine and fisher. Due to the proximity of heavy recreational activities and access to cabin sites, this area is not ideal habitat for grey wolf, Canada lynx, wolverine or fisher. Minimum retention standards would be adhered to as well as equipment restrictions. Dead lodgepole pine would eventually fall over and/or be removed in a non-commercial manner.

Alternative B - Action
Due to the proximity of heavy recreational activities and access to cabin sites, this area would continue to not be ideal habitat for gray wolf, Canada lynx, wolverine or fisher. If a sighting of any of the listed species of concern (or evidence such as nests, dens etc…) occurs, operations would be halted, or not allowed, until further assessment can take place.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

Although no cultural or paleontologic resources are known to exist in the project APE, a systematic inventory of such resources has not occurred. Because none of the projects are located on state land, the DNRC has no

jurisdiction to require private landholders to conduct professional level inventories to identify, or develop treatment plans for, privately owned National Register eligible properties.

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 aesthetics would have the potential of being affected and may be perceived by recreationists, landowners and travelers. The removal of beetle killed lodgepole pine would look unsightly in the short term, but would encourage regeneration. This regeneration would eventually soften and replace aesthetic quality damaged by mountain pine beetle infestation. In addition, and more importantly, the harvest will improve safety by removing the beetle killed trees.

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.

N/A

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.

N/A

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.

The removal of beetle killed trees would improve safety to those that use the area for recreation. Cabins and recreational sites would become unsafe as beetle killed trees begin to fall over and improvements such as culverts and bridges would be put in jeopardy as falling trees impede water movement.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

N/A

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.

This project would provide employment for a three man crew for approximately one month. In addition this project would provide raw material for local mill operations.

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.

Negligible amounts.

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

N/A

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.

NA

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.

N/A

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.

N/A

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

N/A

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

N/A

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.

N/A

EA Checklist Prepared By:	**Name:** Sean Steinebach	**Date:** 12/1/11
	Title: Service Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B – Action Alternative.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

No significant impacts to the integrity and function of the SMZ will occur with the implementation of operating restrictions and mitigation measures.

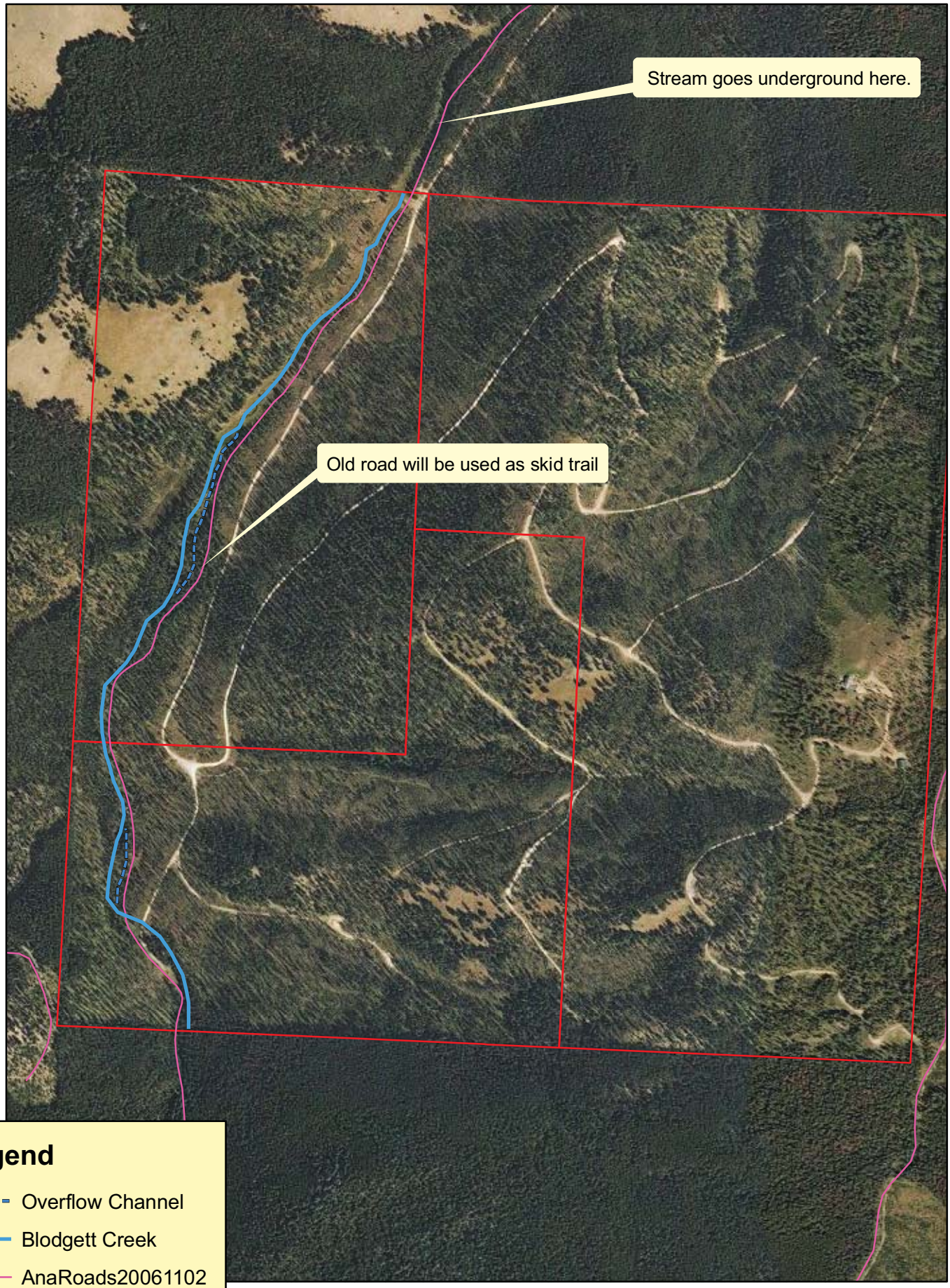
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

EA Checklist Approved By:	**Name:** Fred Staedler
	Title: Anaconda Unit Manager
Signature:	**Date**:

Barton LPP Salvage

S35, T5N, R14W

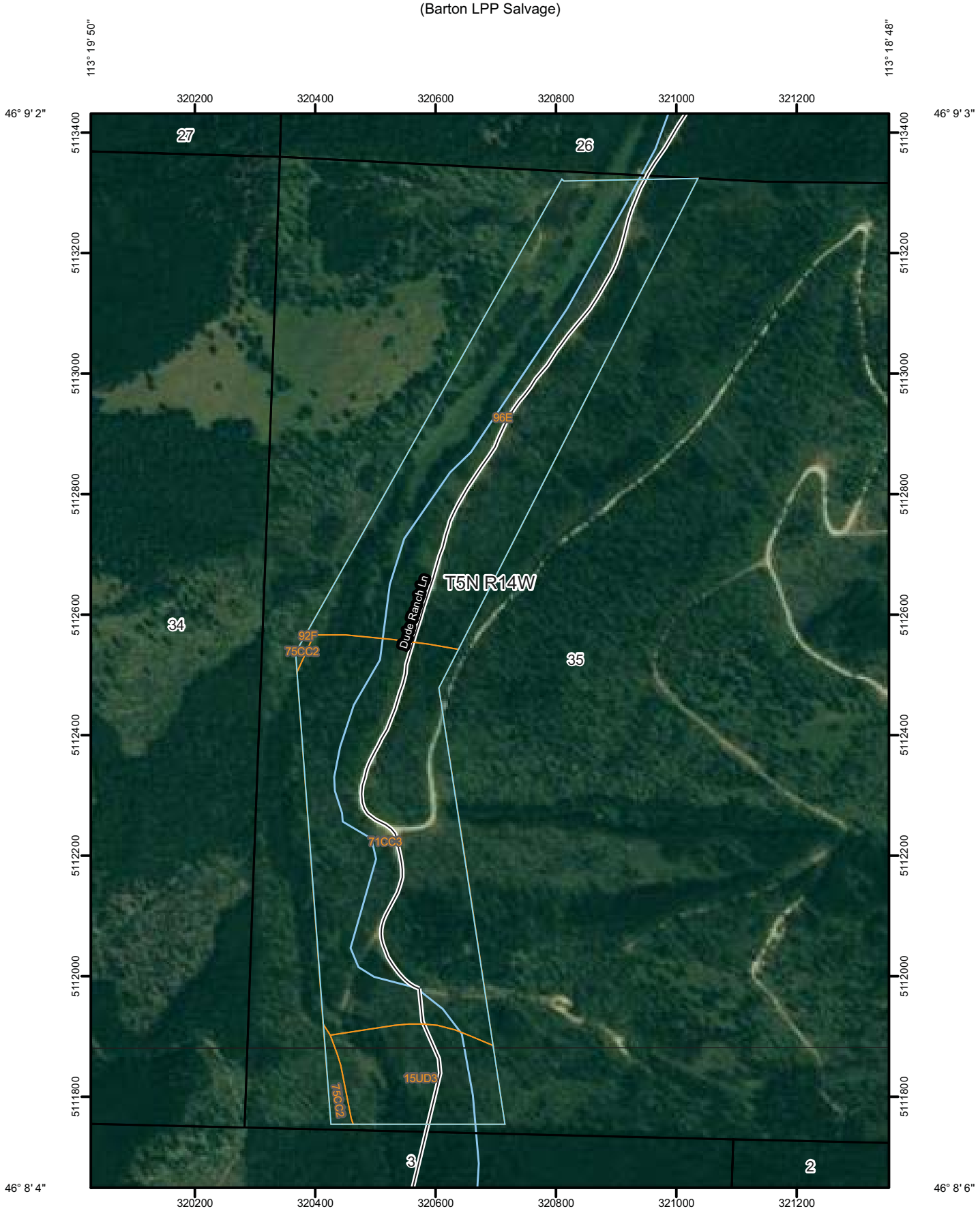


Legend

- Overflow Channel
- Blodgett Creek
- AnaRoads20061102
- Barton Property

0 320 640 1,280 1,920 2,560
Fee

(Barton LPP Salvage)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Gully

Short Steep Slope

Other

Political Features

Cities

PLSS Township and Range

PLSS Section

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:8,510 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 12N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Deer Lodge National Forest Area, Montana
Survey Area Data: Version 10, Feb 25, 2010

Date(s) aerial images were photographed: 8/20/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Deer Lodge National Forest Area, Montana (MT635)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
15UD3	Garlet family-Rock outcrop-Bata family, complex, steep glaciated mountain slopes and ridges	10.0	10.1%
71CC3	Helmville-Garlet families, complex, high relief mountain slopes and ridges	40.8	41.4%
75CC2	Helmville-Relyea-Whitore families, complex, low relief mountain slopes and ridges	1.1	1.2%
92F	Whitore gravelly loam, 35 to 60 percent slopes	0.0	0.0%
96E	Worock gravelly loam, cool, 15 to 35 percent slopes	46.6	47.3%
Totals for Area of Interest		**98.5**	**100.0%**

Forestland Planting and Harvesting

This table can help forestland owners or managers plan the use of soils for wood crops. Interpretive ratings are given for the soils according to the limitations that affect planting and harvesting on forestland. The ratings are both verbal and numerical.

Rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service, National forestry manual.

Report—Forestland Planting and Harvesting

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Forestland Planting and Harvesting– Deer Lodge National Forest Area, Montana							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15UD3—Garlet family-Rock outcrop-Bata family, complex, steep glaciated mountain slopes and ridges							
Garlet, extremely bouldery	45	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50		
Rock outcrop	25	Not rated		Not rated		Not rated	
Bata	15	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50	Low strength	0.50
71CC3—Helmville-Garlet families, complex, high relief mountain slopes and ridges							
Helmville	65	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75		
Garlet	15	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50		
75CC2—Helmville-Relyea-Whitore families, complex, low relief mountain slopes and ridges							
Helmville	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75	Slope	0.50
Relyea	30	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Slope	0.50
				Rock fragments	0.50		
				Stickiness; high plasticity index	0.50		
Whitore	25	Moderately suited		Unsuited		Moderately suited	
		Rock fragments	0.50	Rock fragments	1.00	Slope	0.50
				Slope	0.75		

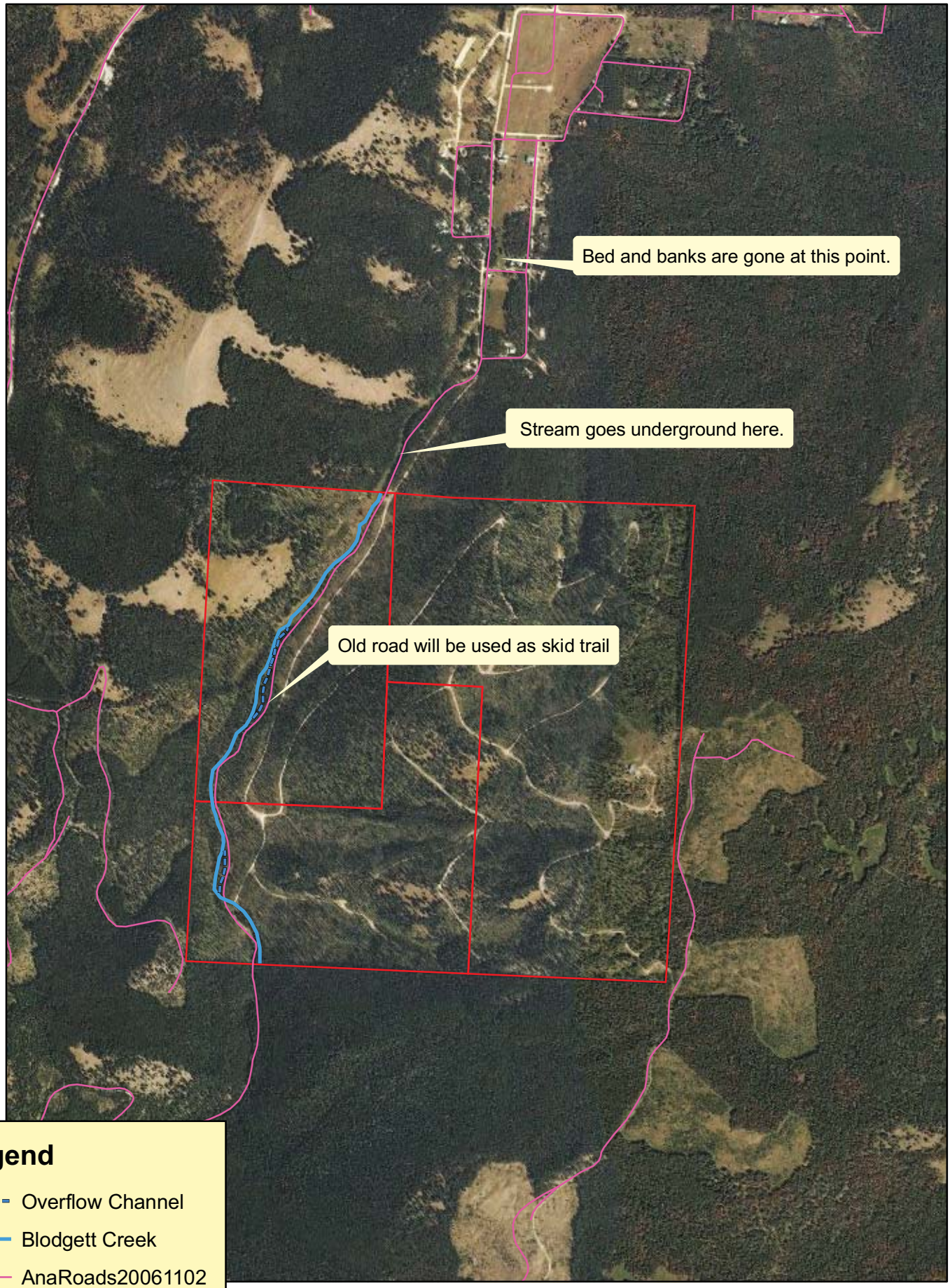
Forestland Planting and Harvesting– Deer Lodge National Forest Area, Montana							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
92F—Whitore gravelly loam, 35 to 60 percent slopes							
Whitore	85	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50	Low strength	0.50
96E—Worock gravelly loam, cool, 15 to 35 percent slopes							
Worock	85	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50

Data Source Information

Soil Survey Area: Deer Lodge National Forest Area, Montana
Survey Area Data: Version 10, Feb 25, 2010

Barton LPP Salvage

S35, T5N, R14W



Legend

- Overflow Channel
- Blodgett Creek
- AnaRoads20061102
- Barton Property

0 550 1,100 2,200 3,300 4,400 Feet

Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406)444-3009 mtnhp@mt.gov

Species of Concern Data Report

Visit http://mtnhp.org for additional information.

Report Date:
Thursday, December 1, 2011

Aquila chrysaetos

View Species Info in MT Field Guide

Common Name: Golden Eagle
General Habitat: Grasslands
Description: Vertebrate Animal
Mapping Delineation:
Confirmed nesting area buffered by a minimum distance of 3,000 meters in order to be conservative about encompassing the entire breeding territory and area commonly used for renesting and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

Species Status

Click Status for Explanations

Natural Heritage Ranks:
State: S3
Global: G5

Federal Agency Status:
U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier: 2
MT PIF Code:

Species Occurrences

Species Occurence Map Label: 270040
First Observation Date: 1993-07-09
Last Observation Date: 1993-07-09
SO Number: 70
Acreage: 6,951
SO Rank:

Species Occurence Map Label: 270042
First Observation Date: 1993-06-09
Last Observation Date: 1993-06-09
SO Number: 73
Acreage: 6,951
SO Rank:

Nucifraga columbiana

View Species Info in MT Field Guide

Common Name: Clark's Nutcracker
General Habitat: Conifer forest
Description: Vertebrate Animal
Mapping Delineation:
Observations with evidence of breeding activity buffered by a minimum distance of 1,000 meters in order to be conservative about encompassing the spring/summer breeding territories of family groups and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

Species Status

Click Status for Explanations

Natural Heritage Ranks:
State: S3
Global: G5

Federal Agency Status:
U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management:

FWP CFWCS Tier: 3
MT PIF Code: 3

Species Occurrences

Species Occurence Map Label: 283712
First Observation Date: 2004-06-23
Last Observation Date: 2004-06-23
SO Number: 126
Acreage: 772
SO Rank:

Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406)444-3009 mtnhp@mt.gov

Species of Concern Data Report

Visit http://mtnhp.org for additional information.

Report Date:
Thursday, December 1, 2011

Species Occurrences

Species Occurence Map Label:	**283714**	**SO Number:**	2,001
First Observation Date:	1994-07-13	**Acreage:**	772
Last Observation Date:	2004-06-23	**SO Rank:**	

Species Occurence Map Label:	**283716**	**SO Number:**	1,202
First Observation Date:	1996-06-27	**Acreage:**	772
Last Observation Date:	1996-06-27	**SO Rank:**	

Species Occurence Map Label:	**283718**	**SO Number:**	1,165
First Observation Date:	1995-06-22	**Acreage:**	772
Last Observation Date:	2004-06-23	**SO Rank:**	

Species Occurence Map Label:	**283722**	**SO Number:**	945
First Observation Date:	2000-06-27	**Acreage:**	772
Last Observation Date:	2004-06-23	**SO Rank:**	

Species Occurence Map Label:	**283734**	**SO Number:**	1,801
First Observation Date:	1996-06-27	**Acreage:**	772
Last Observation Date:	2004-06-23	**SO Rank:**	

Species Occurence Map Label:	**283744**	**SO Number:**	1,323
First Observation Date:	1995-06-22	**Acreage:**	772
Last Observation Date:	2004-06-23	**SO Rank:**	

Species Occurence Map Label:	**283750**	**SO Number:**	1,843
First Observation Date:	2004-06-23	**Acreage:**	772
Last Observation Date:	2004-06-23	**SO Rank:**	

Species Occurence Map Label:	**283752**	**SO Number:**	1,846
First Observation Date:	1995-06-22	**Acreage:**	772
Last Observation Date:	1995-06-22	**SO Rank:**	

Species Occurence Map Label:	**283762**	**SO Number:**	177
First Observation Date:	1998-07-16	**Acreage:**	772
Last Observation Date:	1998-07-16	**SO Rank:**	

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Species of Concern Data Report

Visit http://mtnhp.org for additional information.

Report Date:
Thursday, December 1, 2011

Certhia americana

View Species Info in MT Field Guide

Common Name: Brown Creeper
Description: Vertebrate Animal
General Habitat: Moist conifer forests

Mapping Delineation:

Observations with evidence of breeding activity buffered by a minimum distance of 300 meters in order to be conservative about encompassing home ranges and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S3
Global: G5

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management:

FWP CFWCS Tier: 2

MT PIF Code: 1

Species Occurrences

Species Occurence Map Label: 299288
First Observation Date: 2002-06-17
Last Observation Date: 2002-06-17
SO Number: 556
Acreage: 70
SO Rank:

Species Occurence Map Label: 299290
First Observation Date: 1998-07-16
Last Observation Date: 2004-06-23
SO Number: 540
Acreage: 70
SO Rank:

Carpodacus cassinii

View Species Info in MT Field Guide

Common Name: Cassin's Finch
Description: Vertebrate Animal
General Habitat: Drier conifer forest

Mapping Delineation:

Observations with evidence of breeding activity buffered by a minimum distance of 300 meters in order to be conservative about encompassing the courtship and foraging distance from nesting areas and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S3
Global: G5

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management:

FWP CFWCS Tier: 3

MT PIF Code: 3

Species Occurrences

Species Occurence Map Label: 290956
First Observation Date: 2004-06-23
Last Observation Date: 2004-06-23
SO Number: 1,029
Acreage: 70
SO Rank:

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Species of Concern Data Report

Visit http://mtnhp.org for additional information.

Report Date:
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Lasiurus cinereus

View Species Info in MT Field Guide

Common Name: Hoary Bat
General Habitat: Riparian and forest
Description: Vertebrate Animal
Mapping Delineation:

Mistnet captures, definitively identified acoustic recordings, and definitively identified roosting individuals buffered by a minimum distance of 3,500 meters in order to be conservative about encompassing the maximum reported foraging distance for the congeneric Lasiurus borealis and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S3
Global: G5

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management:

FWP CFWCS Tier: 2

MT PIF Code:

Species Occurrences

Species Occurence Map Label:	300980	SO Number:	611,741
First Observation Date:	2009-08-05	Acreage:	9,461
Last Observation Date:	2009-08-05	SO Rank:	

Species Occurence Map Label:	300984	SO Number:	611,745
First Observation Date:	2009-08-05	Acreage:	9,461
Last Observation Date:	2009-08-05	SO Rank:	

Species Occurence Map Label:	301006	SO Number:	611,751
First Observation Date:	2009-08-05	Acreage:	9,461
Last Observation Date:	2009-08-05	SO Rank:	

Species Occurence Map Label:	301008	SO Number:	611,747
First Observation Date:	2009-08-05	Acreage:	9,461
Last Observation Date:	2009-08-05	SO Rank:	

Martes pennanti

View Species Info in MT Field Guide

Common Name: Fisher
General Habitat: Mixed conifer forests
Description: Vertebrate Animal
Mapping Delineation:

Confirmed area of occupancy based on the documented presence of adults or juveniles within tracking regions containing core habitat for the species. Outer boundaries of tracking regions are defined by areas of forest cover on individual mountain ranges or clusters of adjacent mountain ranges with continuous forest cover.

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Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S3
Global: G5

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service: SENSITIVE
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier: 2

MT PIF Code:

Species Occurrences

Species Occurence Map Label:	158077	SO Number:	4
First Observation Date:	1983	Acreage:	1,803,113
Last Observation Date:	2006	SO Rank:	

Gulo gulo

View Species Info in MT Field Guide

Common Name: Wolverine
Description: Vertebrate Animal
General Habitat: Boreal Forest and Alpine Habitats

Mapping Delineation:

Confirmed area of occupancy based on the documented presence of adults or juveniles within tracking regions containing core habitat for the species. Outer boundaries of tracking regions are defined by areas of forest cover on individual mountain ranges or clusters of adjacent mountain ranges with continuous forest cover.

Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S3
Global: G4

Federal Agency Status:

U.S. Fish & Wildlife Service: C
U.S. Forest Service: SENSITIVE
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier: 2

MT PIF Code:

Species Occurrences

Species Occurence Map Label:	158013	SO Number:	5
First Observation Date:	1948	Acreage:	1,803,113
Last Observation Date:	2009	SO Rank:	

Thalictrum alpinum

View Species Info in MT Field Guide

Common Name: Alpine Meadowrue
Description: Vascular Plant
General Habitat: Wetland/Riparian

Mapping Delineation:

Individual occurrences are generally based upon a discretely mapped area provided by an observer and are not separated by any pre-defined distance. Individual clusters of plants mapped at fine spatial scales (separated by less than approximately 25-50 meters) may be grouped together into one occurrence if they are not separated by distinct areas of habitat or terrain features. Point observations are buffered to encompass any locational uncertainty associated with the observation.

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Species of Concern Data Report

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Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S2
Global: G5

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service: SENSITIVE
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier:

MT PIF Code:

Species Occurrences

Species Occurence Map Label:	57027	SO Number:	12
First Observation Date:	Jul 9 1993 12:00AM	Acreage:	66
Last Observation Date:	Jul 9 1993 12:00AM	SO Rank:	U

Kobresia simpliciuscula

View Species Info in MT Field Guide

Common Name: Simple Kobresia
Description: Vascular Plant
General Habitat: Alpine

Mapping Delineation:

Individual occurrences are generally based upon a discretely mapped area provided by an observer and are not separated by any pre-defined distance. Individual clusters of plants mapped at fine spatial scales (separated by less than approximately 25-50 meters) may be grouped together into one occurrence if they are not separated by distinct areas of habitat or terrain features. Point observations are buffered to encompass any locational uncertainty associated with the observation.

Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S3
Global: G5

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier:

MT PIF Code:

Species Occurrences

Species Occurence Map Label:	45259	SO Number:	8
First Observation Date:	Sep 7 1993 12:00AM	Acreage:	66
Last Observation Date:	Sep 7 1993 12:00AM	SO Rank:	U

Botrychium sp. (SOC)

View Species Info in MT Field Guide

Common Name: Moonworts
Description: Vascular Plant
General Habitat:

Mapping Delineation:

Mapped occurrences for Botrychiums are based on observations of one or more Botrychium species documented or reported for a site as opposed to indiviual species being mapped independently. Data is managed and presented in this format as a result of more than one Botrychium "species" commonly growing at a site, problems with reliably identifying Botrychiums to species and instability in Botrychium taxonomy. Botrychium Species of Concern locations have at least one reported observation of an individual Botrychium species listed by MTNHP as a Species of Concern.

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Species of Concern Data Report

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Thursday, December 1, 2011

Species Status

Click Status for Explanations

Natural Heritage Ranks:

State: S1S3
Global: G1G3

Federal Agency Status:

U.S. Fish & Wildlife Service:
U.S. Forest Service:
U.S. Bureau of Land Management:

FWP CFWCS Tier:

MT PIF Code:

Species Occurrences

Species Occurence Map Label:	19182	SO Number:	108
First Observation Date:	Aug 5 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 5 1997 12:00AM	SO Rank:	

Species Occurence Map Label:	57017	SO Number:	115
First Observation Date:	Aug 7 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 7 1997 12:00AM	SO Rank:	

Species Occurence Map Label:	57020	SO Number:	173
First Observation Date:	Aug 28 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 28 1997 12:00AM	SO Rank:	B

Species Occurence Map Label:	57021	SO Number:	174
First Observation Date:	Aug 28 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 28 1997 12:00AM	SO Rank:	B

Species Occurence Map Label:	57022	SO Number:	175
First Observation Date:	Aug 28 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 28 1997 12:00AM	SO Rank:	B

Species Occurence Map Label:	57023	SO Number:	176
First Observation Date:	Aug 28 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 28 1997 12:00AM	SO Rank:	B

Species Occurence Map Label:	57024	SO Number:	177
First Observation Date:	Aug 28 1997 12:00AM	Acreage:	2
Last Observation Date:	Aug 28 1997 12:00AM	SO Rank:	B

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Visit http://mtnhp.org for additional information.

Report Date:
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Species Occurrences

Species Occurence Map Label: 57025
First Observation Date: Aug 28 1997 12:00AM
Last Observation Date: Aug 28 1997 12:00AM
SO Number: 178
Acreage: 2
SO Rank: B

Species Occurence Map Label: 100202
First Observation Date: Jul 18 1998 12:00AM
Last Observation Date: Jul 18 1998 12:00AM
SO Number: 49
Acreage: 5
SO Rank:

Species Occurence Map Label: 57014
First Observation Date: Aug 3 1993 12:00AM
Last Observation Date: Aug 3 1993 12:00AM
SO Number: 47
Acreage: 19
SO Rank:

Species Occurence Map Label: 57026
First Observation Date: Aug 28 1997 12:00AM
Last Observation Date: Aug 28 1997 12:00AM
SO Number: 179
Acreage: 2
SO Rank: B

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Thursday, December 1, 2011

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Ecological Information

WINDY RIDGE

The geographic scope of your data search intersected an area for which the Natural Heritage Program databases have ecological information. Such information can be useful in assessing biological values and interpreting Species of Concern data. A summary is provided below of conditions at the time of site record creation.

WINDY RIDGE

General Description

Windy Ridge Research Natural Area (RNA) is located in the northern foothills of the Anaconda Range of northwestern Montana. The site is 4 miles (6 km) southwest of Georgetown Lake and 15 miles (24 km) south of the town of Philipsburg. The site is drained by Elk Creek, a tributary of the East Fork of Rock Creek.

Windy Ridge RNA supports an extensive rough fescue (*Festuca scabrella*) grassland in excellent ecological condition. At least three species of moonwort (*Botrychium*) are known from the site: Peculiar moonwort (Botrychium paradoxum,Northern Region Forest Service sensitive species), Mingan Island moonwort (*Botrychium minganense*), and common moonwort (*Botrychium lunaria*). In addition, an unidentified species or hybrid having a single frond is also present. Windy Ridge may support the largest population of peculiar moonwort known globally.

Other grassland species include Idaho fescue (*Festuca idahoensis*), onespike danthonia (*Danthonia unispicata*), Virginia strawberry (*Fragaria virginiana*), slender cinquefoil (*Potentilla gracilis*), autumn dwarf gentian (*Gentianella amarella*), and prairie smoke (*Geum triflorum*). The adjacent forests are dominated by lodgepole pine (*Pinus contorta*) and Douglas-fir (*Pseudotsuga menziesii*), and are classified, in part, as subalpine fir/heartleaf arnica (*Abies lasiocarpa / Arnica cordifolia*) and Douglas-fir/pinegrass (*Pseudotsuga menziesii / Calamagrostis rubescens*) habitat types. Elevation of the grassland averages about 7200 feet (2195 m) and ranges from a high of 7487 feet to a low of about 6600 feet (2012 m).

Biological Significance

Windy Ridge supports a rough fescue (*Festuca scabrella*) grassland in excellent ecological condition. Peculiar moonwort (*Botrychium paradoxum*), a Forest service (Northern Region) sensitive plant species, is known from the RNA, as are several other species of Botrychium.

Key Ecological Factors

An exposed, ridgetop meadow lies within the RNA. Topography is gently to moderately sloped. A large peculiar moonwort (*Botrychium paradoxum*) population is found in the RNA in areas characterized by dry loam soil with few rocks and a well developed organic horizon.

Exotic Species

Musk thistle (*Carduus nutans*) is present on the extreme west edge of the grassland. Several hundred plants were present in 1994.

Other Values

The presence of an undisturbed rough fescue (*Festuca scabrella*) grassland, and a large peculiar moonwort (*Botrychium paradoxum*) population justifies a V2 description.

Management Information

The RNA is within a grazing allotment but use is very light. Musk thistle (*Carduus nutans*) control would be beneficial at the western end of the grassland. Grazing occurs in lowlands below the RNA. However, lack of water on the RNA should keep grazing activity minimal.

Information Gaps

Boundary selection and identification of conflicts are unknown for the RNA, as is detailed grazing allotment information.

More detailed data on vegetation communities in this area may be available; if you are interested, contact the Montana Natural Heritage Program at (406) 444-5354 or mtnhp@mt.gov

MONTANA
Natural Heritage
Program

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December 1, 2011

Sean Steinebach
Montana DNRC
1300 Maguire Road
Anaconda, Montana 59711

Dear Sean,

I am writing in response to your recent request regarding Montana species of concern in the vicinity of the Barton LPP Salvage project in Section 35, T05N, R14W. I checked our databases for information in this general area and have enclosed 34 species occurrence reports for 10 species of concern, 1 ecological site report, a map depicting species of concern and ecological site locations, and a map depicting wetland locations in the vicinity of each project. Note that the maps are in Adobe GeoPDF format. With the appropriate Adobe Reader, it provides a convenient way to query and understand the information presented on the map.

Please keep in mind the following when using and interpreting the enclosed information and maps:

(1) These materials are the result of a search of our database for species of concern that occur in an area defined by requested township, range and section with an additional one-mile buffer surrounding the requested area. This is done to provide a more inclusive set of records and to capture records that may be immediately adjacent to the requested area. Reports are provided for the species of concern that are located in your requested area with a one-mile buffer. Species of concern outside of this buffered area may be depicted on the map due to the map extent, but are not selected for the SOC report.

(2) On the map, polygons represent one or more source features as well as the locational uncertainty associated with the source features. A source feature is a point, line, or polygon that is the basic mapping unit of a Species Occurrence (SO) representation. The recorded location of the occurrence may vary from its true location due to many factors, including the level of expertise of the data collector, differences in survey techniques and equipment used, and the amount and type of information obtained. Therefore, this inaccuracy is characterized as locational uncertainty, and is now incorporated in the representation of an SO. If you have a question concerning a specific SO, please do not hesitate to contact us.

(3) This report may include sensitive data, and is not intended for general distribution, publication or for use outside of your agency. In particular, public release of specific location information may jeopardize the welfare of threatened, endangered, or sensitive species or communities.

(4) The accompanying map(s) display management status, which may differ from ownership. Also, this report may include data from privately owned lands, and approval by the landowner is advisable if specific location information is considered for distribution. Features shown on this map do not imply public access to any lands.

(5) Additional biological data for the search area(s) may be available from other sources. We suggest you contact the U.S. Fish and Wildlife Service for any additional information on threatened and endangered species (406-449-5225). Also, significant gaps exist in the Heritage Program's fisheries data, and we suggest you contact the Montana Fisheries

Information System for information related to your area of interest (phone: 406-444-3373, or web site: **http://fwp.mt.gov/fishing/mFish/**).

(6) Additional information on species habitat, ecology and management is available on our web site in the Plant and Animal Field Guides, which we encourage you to consult for valuable information. You can access these guides at http://mtnhp.org. General information on any species can be found by accessing the link to NatureServe Explorer.

The results of a data search by the Montana Natural Heritage Program reflect the current status of our data collection efforts. These results are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys, which may be required for environmental assessments. The information is intended for project screening only with respect to species of concern, and not as a determination of environmental impacts, which should be gained in consultation with appropriate agencies and authorities.

I hope the enclosed information is helpful to you. Please feel free to contact me at (406) 444-3290 or via my e-mail address, below, should you have any questions or require additional information.

Sincerely,

Martin P. Miller
Montana Natural Heritage Program
martinm@mt.gov

Montana Species of Concern
Barton LPP Salvage
Species of Concern / Sites

SPECIES OF CONCERN: A polygon feature representing only what is known from direct observation with a defined level of certainty regarding the spatial location of the feature.

NonVascular Plants
- NonVascular Plants

Vascular Plants
- Vascular Plants

Invertebrates
- Invertebrates

Amphibians
- Amphibians

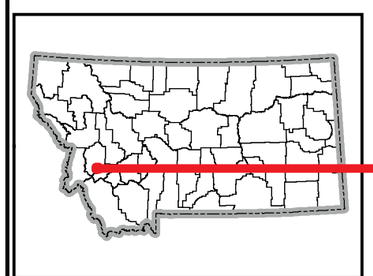
Fish
- Fish

Reptiles
- Reptiles

Birds
- Birds

Mammals
- Mammals

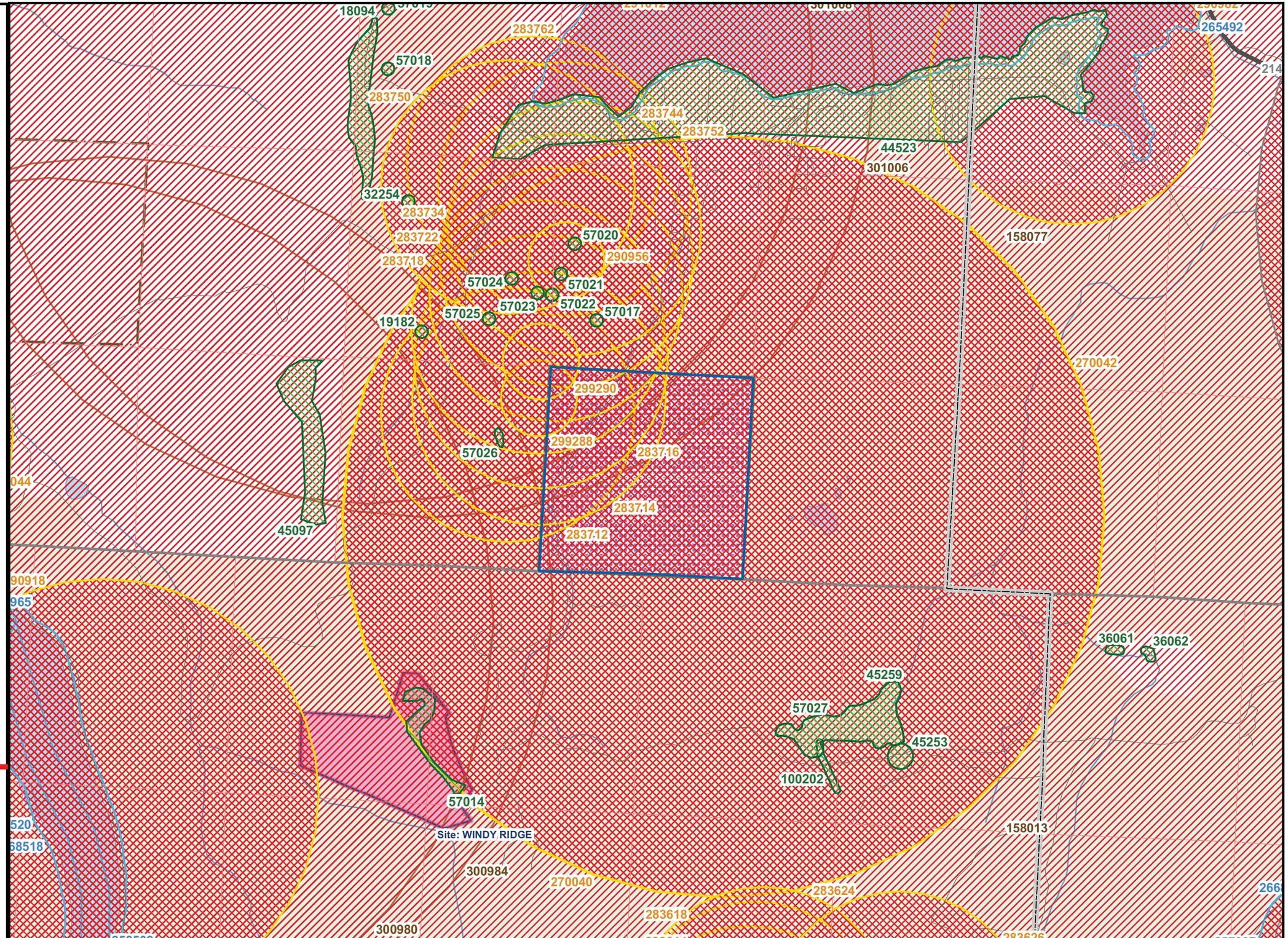
Sites
- Sites



Not all legend items may occur on the map.

Features shown on this map do not imply public access to any lands.

This map displays management status, which may vary from ownership.



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0 0.5 1 2 3 4 Miles

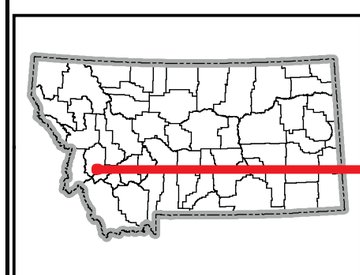
Map Document: K:\REQUESTS\Requests\12\DNRC\12dnrc0025\12dnrc0025.mxd (12/1/2011)

Montana Species of Concern
Barton LPP Salvage
Wetlands

SPECIES OF CONCERN: A polygon feature representing only what is known from direct observation with a defined level of certainty regarding the spatial location of the feature.

Wetland and Riparian Classes

- Lacustrine
- Freshwater Pond
- Freshwater Emergent Wetland
- Freshwater Shrub Wetland
- Freshwater Forested Wetland
- Riverine
- Riparian Emergent
- Riparian Shrub
- Riparian Forested



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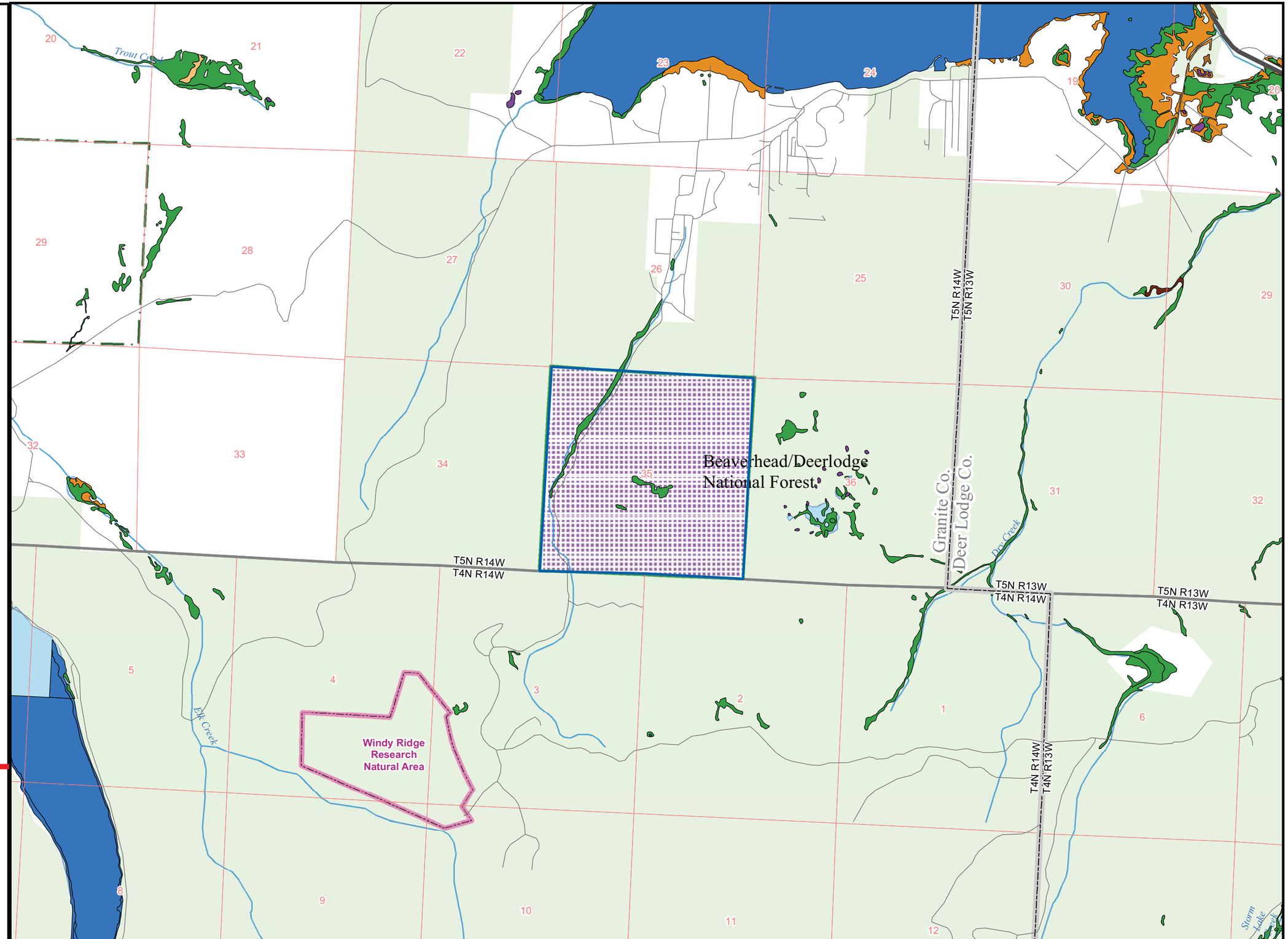

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Montana Natural Heritage Program

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