CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Lonner Salvage
Proposed Implementation Date:	Upon Approval
Proponent:	Resource Specialties, Inc.
Location:	T5N, R14W, Section 13
County:	Granite County

I. TYPE AND PURPOSE OF ACTION

Rich Blaney of Resource Specialties, Inc. has been hired to remove mountain pine beetle infested lodgepole pine from private ground on the shore of Georgetown Lake in the Piney Point Sub-division. The proposed harvest would require operation of skidding equipment inside the fifty foot SMZ buffer on this body of water. Minimum retention standards would not be met on approximately 150 feet of shoreline. Trees would be hand-felled parallel to the lake shore and skidded using a cable skidder to the landing. The increased maneuverability of allowing the skidder to operate to the 25 foot mark would prevent leave trees from being damaged during the operation. Lodgepole pine not infested with mountain pine beetle would be retained as well as all other tree species. Mitigation measures would include grass seeding and slash filter wind-rows on disturbed areas.

II. PROJECT DEVELOPMENT

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

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

Rich Blaney (operator), Jeffrey Lonner (landowner) and the MT DNRC.

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 or on Georgetown Lake. Beetle-killed trees would be removed (at a higher cost) by cable skidding through the residual stand. Potential for damage to leave trees increases as there is less maneuverability skidding from outside the 50 foot buffer.

Alternative B – Action
See *Type and Purpose of Action*.

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.

Alternative B – Action
Soils are categorized as Elve gravelly loam and Evaro gravelly ashy loam. These soils are moderately suited to harvest operations on slopes less than 35%. The slopes in the proposed AP site are 20-25%. No impacts are anticipated due to dry ground (<20% moisture content) operating restrictions and mitigation measures. (See attached soil survey)

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. Hand-felling operations may introduce low levels of sediment delivery to Georgetown Lake. Sedimentation delivery from existing roads, other land treatments and developments would continue. Minimal direct, indirect, and cumulative impacts to water quality and quantity would be expected.

Alternative B – Action

The harvest of trees within the first 25 feet of the SMZ may introduce low levels of sediment delivery to adjacent waterbodies. However, the 25 foot equipment exclusion zone would be expected to provide adequate filtration for any displaced soils or increased runoff due to compacted soils in the 25 to 50 foot AP zone. Mitigation measures include imposing operating restrictions that require ground moisture of 20% or less; and requiring grass seeding and installation of erosion control measures such as a slash-filter windrow on any disturbed area upon completion of operations. DNRC may monitor AP sites to verify effectiveness. Minimal direct, indirect, and cumulative impacts to water quality and quantity are expected due to operation restrictions and mitigation measures.

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

No equipment operation would be allowed inside the 50 foot SMZ. Minimum retention standards would be recognized.

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 trees would expedite natural regeneration and cumulative effects to vegetative communities would decrease as trees regenerate and replace those that are harvested.

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 area being heavily used for recreation and its proximity to roads and cabins, the suitability of the proposed site would continue to be marginal at best for terrestrial and avian habitat.

Alternative B – Action

Due to the area being heavily used for recreation and its proximity to roads and cabins, the suitability of the proposed site would continue to be marginal at best for terrestrial and avian habitat. Operating restrictions and mitigation measures would minimize sedimentation impacts to fish habitat. The AP would reduce recruitable woody debris in Georgetown Lake. Cumulative impacts would be expected to be short term and minimal.

---

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.

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.

Alternative A – No Action
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. Aesthetics would be degraded as green trees transitioned to red and eventually fell over.

Alternative B – Action
Potential impacts may be perceived as adverse 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.

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 harvest is related to the safety of the landowners. The dead lodgepole pine would pose a risk to the landowners if no action is taken.

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.

Three people would be employed during the harvest. The project would be short term and have minimal effect on the employment market.

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 tax revenue.

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.

N/A

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.

The project may have effects on the quality of activities from a visual standpoint. Houses along Piney Point would become more obvious. The project would be short term and the effects would be also.

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:** 12/10/09
	Title: Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B – Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

No unacceptable impacts are anticipated

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

EA Checklist Approved By:	**Name:**
	Title:
Signature:	**Date**:

August 25, 2011

Ref: Resource Specialties - Lonner Salvage SMZ AP

Dear Mr. Blaney

This letter is in reference to a request made by Rich Blaney of Resource Specialties, Inc. to the Department of Natural Resource and Conservation for an Alternative Practice. This AP is located in Section 13, 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 to below minimum retention standards and equipment operations within the 50 foot SMZ of Georgetown Lake is approved, subject to the following conditions:

1) The harvest inside the fifty foot buffer will only occur during periods of soil moisture of 20% or less.
2) Operation of skidder will occur no closer than 25 feet to the ordinary high water mark of Georgetown Lake.
3) Operations will be followed by grass-seeding and slash-filter windrows where necessary.
4) All 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

August 25, 2011

Resource Specialties - Lonner Salvage

ALTERNATIVE PRACTICE RESPONSIBILTY AFFIDAVIT

In consideration of DNRC's approval of the alternative practice(s) in Section 13, 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**

Harvest Equipment Operability—Granite County Area, Montana
(Georgetown Lake AP)

Map Scale: 1:5,710 if printed on A size (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1,200

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

Poorly suited

Moderately suited

Well suited

Not rated or not available

Political Features

Cities

Water Features

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:5,710 if printed on A size (8.5" × 11") sheet.

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

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: Granite County Area, Montana
Survey Area Data: Version 11, Dec 2, 2009

Date(s) aerial images were photographed: 8/1/1995

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.

Harvest Equipment Operability

Harvest Equipment Operability— Summary by Map Unit — Granite County Area, Montana						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres in AOI**	**Percent of AOI**
82D	Elve gravelly loam, 4 to 15 percent slopes	Well suited	Elve (85%)		0.1	0.7%
82E	Elve gravelly loam, 15 to 35 percent slopes	Moderately suited	Elve (85%)	Slope (0.50)	6.7	55.6%
			Evaro (5%)	Low strength (0.50)		
				Slope (0.50)		
			Worock (5%)	Low strength (0.50)		
				Slope (0.50)		
97E	Evaro gravelly ashy loam, 15 to 35 percent slopes	Moderately suited	Evaro (85%)	Low strength (0.50)	3.8	31.1%
				Slope (0.50)		
			Worock (4%)	Low strength (0.50)		
				Slope (0.50)		
			Holloway (4%)	Slope (0.50)		
			Elve (3%)	Low strength (0.50)		
				Slope (0.50)		
W	Water	Not rated	Water (100%)		1.5	12.5%
Totals for Area of Interest					**12.1**	**100.0%**

Harvest Equipment Operability— Summary by Rating Value		
Rating	**Acres in AOI**	**Percent of AOI**
Moderately suited	10.5	86.8%
Well suited	0.1	0.7%
Null or Not Rated	1.5	12.5%
Totals for Area of Interest	**12.1**	**100.0%**

Description

Ratings for this interpretation indicate the suitability for use of forestland harvesting equipment. The ratings are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification of the soil, depth to a water table, and ponding. Standard rubber-tire skidders and bulldozers are assumed to be used for ground-based harvesting and transport.

The ratings are both verbal and numerical. Rating class terms indicate the degree to which the soils are suited to this 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.

Numerical ratings 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 map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Resource Specialties - Lonner SMŽ AP

T5N R14W S13

0 95 190 380 570 760 Feet

Animal Species of Concern

9 Species of Concern
5 Potential Species of Concern
Filtered by the following criteria:
Township = 5 N Range = 13 W

Species List Last Updated **08/03/2009**

MONTANA Natural Heritage Program

A program of the University of Montana and Natural Resource Information Systems, Montana State Library

Species of Concern

9 Species
Filtered by the following criteria:
Township = 5 N Range = 13 W

MAMMALS (MAMMALIA)

4 SPECIES
FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 5 N RANGE = 13 W

SCIENTIFIC NAME COMMON NAME	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Canis lupus Gray Wolf	**Canidae** Wolves / Coyotes / Foxes	G4	S3	DM	SENSITIVE	SENSITIVE	1	1%	32%	Generalist
	Species verified in these Counties: Beaverhead, Broadwater, Carbon, Cascade, Deer Lodge, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Pondera, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland									
Gulo gulo Wolverine	**Mustelidae** Weasels	G4	S3		SENSITIVE	SENSITIVE	2	0%	37%	Conifer forest
	Species verified in these Counties: Beaverhead, Broadwater, Carbon, Cascade, Deer Lodge, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Pondera, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland									
Lynx canadensis Canada Lynx	**Felidae** Cats	G5	S3	LT	THREATENED	SPECIAL STATUS	1	1%	40%	Subalpine conifer forest
	Species verified in these Counties: Beaverhead, Broadwater, Carbon, Cascade, Deer Lodge, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Pondera, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland									
Martes pennanti Fisher	**Mustelidae** Weasels	G5	S3		SENSITIVE	SENSITIVE	2	1%	31%	Mixed conifer forests
	Species verified in these Counties: Beaverhead, Deer Lodge, Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Mineral, Missoula, Pondera, Powell, Ravalli, Sanders, Teton									

BIRDS (AVES)

2 SPECIES
FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 5 N RANGE = 13 W

SCIENTIFIC NAME COMMON NAME	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Accipiter gentilis Northern Goshawk	**Accipitridae** Hawks / Eagles	G5	S3			SENSITIVE	2	2%	68%	Mixed conifer forests
	Species verified in these Counties: Beaverhead, Broadwater, Carbon, Carter, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Powder River, Powell, Ravalli, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland									
Melanerpes lewis Lewis's Woodpecker	**Picidae** Woodpeckers	G4	S2B				2	8%	78%	Riparian forest
	Species verified in these Counties: Big Horn, Carter, Deer Lodge, Flathead, Lewis and Clark, Lincoln, Missoula, Powder River, Powell, Ravalli, Sanders									

FISH (ACTINOPTERYGII)

2 SPECIES
FILTERED BY THE FOLLOWING CRITERIA:

TOWNSHIP = 5 N RANGE = 13 W

SCIENTIFIC NAME COMMON NAME	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Oncorhynchus clarkii lewisi Westslope Cutthroat Trout	**Salmonidae** Trout	G4T3	S2		SENSITIVE	SENSITIVE	1		34%	Mountain streams, rivers, lakes
		Species verified in these Counties: Beaverhead, Broadwater, Cascade, Chouteau, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Pondera, Powell, Ravalli, Sanders, Silver Bow, Teton								
Salvelinus confluentus Bull Trout	**Salmonidae** Trout	G3	S2	LT	THREATENED	SPECIAL STATUS	1		18%	Mountain streams, rivers, lakes
		Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Mineral, Missoula, Powell, Ravalli, Sanders								

INVERTEBRATES - INSECTS

1 SPECIES

FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 5 N RANGE = 13 W

SCIENTIFIC NAME COMMON NAME	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
BUTTERFLIES										
Euphydryas gillettii Gillette's Checkerspot	**Nymphalidae** Nymphalid Butterflies	G2G3	S2						42%	Wet meadows
		Species verified in these Counties: Beaverhead, Cascade, Deer Lodge, Fergus, Flathead, Glacier, Madison, Mineral, Missoula, Pondera, Powell								

Plant Species of Concern

4 Species of Concern
1 Potential Species of Concern
Filtered by the following criteria:
Township = 5 N Range = 14 W

Species List Last Updated **09/16/2009**

MONTANA Natural Heritage Program

A program of the University of Montana and Natural Resource Information Systems, Montana State Library

Species of Concern

4 Species
Filtered by the following criteria:
Township = 5 N Range = 14 W

FERNS AND FERN ALLIES (PTERIDOPHYTA)

2 SPECIES
FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 5 N RANGE = 14 W

SCIENTIFIC NAME COMMON NAME	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY
Botrychium crenulatum Wavy Moonwort	**Botrychium dusenii**	**Ophioglossaceae** Adder's-Tongue / Moonworts	G3	S2S3		SENSITIVE		2
			Species verified in these Counties: Flathead, Glacier, Granite, Lake, Lincoln, Missoula, Sanders					
Botrychium paradoxum Peculiar Moonwort		**Ophioglossaceae** Adder's-Tongue / Moonworts	G2	S2		SENSITIVE	SENSITIVE	2
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Jefferson, Lincoln, Pondera, Powell, Teton					

FLOWERING PLANTS - DICOTS (MAGNOLIOPSIDA)

2 SPECIES
FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 5 N RANGE = 14 W

SCIENTIFIC NAME COMMON NAME	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY
Phlox kelseyi var. missoulensis Missoula Phlox	**Phlox missoulensis**	**Polemoniaceae** Phlox Family	G2G3	S2S3		SENSITIVE	SENSITIVE	2
			Species verified in these Counties: Cascade, Granite, Judith Basin, Lewis and Clark, Meagher, Missoula, Powell					
Ranunculus orthorhynchus Straightbeak Buttercup		**Ranunculaceae** Buttercup Family	G5	S1				1
			Species verified in these Counties: Deer Lodge, Granite, Mineral					