Environmental Assessment Checklist

Project Name: Scout Lake OSR
Proposed Implementation Date: January, 2016
Proponent: Swan Unit, Northwest Land Office, Montana DNRC
County: Lake

Type and Purpose of Action

Description of Proposed Action:

The Swan Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Scout Lake OSR. The project is located approximately 12 air miles south of Swan Lake, MT, 1.5 miles east of MT Highway 83 on the In-pah-ah Road (refer to Attachments vicinity map A-**1** and project map A-**2**) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	**Sec 8 T23N R17W**	**640**	**109**
Public Buildings			
MSU 2nd Grant			
MSU Morrill			
Eastern College-MSU/Western College-U of M			
Montana Tech			
University of Montana			
School for the Deaf and Blind			
Pine Hills School			
Veterans Home			
Public Land Trust			
Acquired Land			

Objectives of the project include:

- To remove the Douglas-fir remaining in the stand to slow/reduce the spread of *Armillaria* root disease.
- Reduce the number of remaining western larch and ponderosa pine seedtrees down to 4 trees per acre to provide a natural seed source for regeneration of the stand.
- Generate revenue for the Common Schools Trust.
- Pile and scarify the units to expose mineral soil for seed germination.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Clearcut	
Seed Tree	109
Shelterwood	
Selection	
Commercial Thinning	
Salvage	
Total Treatment Acres	**109**
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	
Planting	
Proposed Road Activities	# Miles
New permanent road construction	
New temporary road construction	
Road maintenance	
Road reconstruction	
Road abandoned	
Road reclaimed	
Other Activities	
Site preparation of slash piling and scarification	109

Duration of Activities:	21 months
Implementation Period:	January 2016 – September 2017

The lands involved in this proposed project are held in trust by the State of Montana. (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

The DNRC would manage lands involved in this project in accordance with:

- The State Forest Land Management Plan (DNRC 1996),
- Administrative Rules for Forest Management (ARM 36.11.401 through 471),
- Swan Valley Grizzly Bear Conservation Agreement (SVGBCA)
- and all other applicable state and federal laws.

Project Development

SCOPING:

- DATE:
  - May 22, 2015 through June 22, 2015
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website: http://dnrc.mt.gov/PublicInterest/Notices/Default.asp
  - Letters were mailed to DNRC resources specialists, adjacent landowners, statewide scoping list, and interested parties
- AGENCIES SCOPED:
  - Montana Tribal Historic Preservation offices
  - Montana DFWP
  - USFS, Flathead NF, Swan Lake Ranger District
- COMMENTS RECEIVED:
  - How many: Two comments were received
  - Concerns: Protection of Native American cultural sites
  - Results (how were concerns addressed): Forest Management Supervisor responded to the comments and those responses were recorded in the project file. Cultural resources was addressed and mitigated for under the Scout Lake EIS. The two units designated for harvest activities were analyzed for in the Scout Lake EIS.

DNRC specialists were consulted, including: Leah Breidinger, Marc Vessar, and Patrick Rennie.

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in associated contracts.

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED: *(Conservation Easements, Army Corps of Engineers, road use permits, etc.)*

- **United States Fish & Wildlife Service-** DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands HCP and the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at www.dnrc.mt.gov/HCP.

- **Montana Department of Environmental Quality (DEQ)-** DNRC is classified as a major open burner by DEQ and is issued a permit from DEQ to conduct burning activities on state lands managed by DNRC. As a major open-burning permit holder, DNRC agrees to comply with the limitations and conditions of the permit.

- **Montana/Idaho Airshed Group-** The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to

accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2006). The Group determines the delineation of airsheds and impact zones throughout Idaho and Montana. Airsheds describe those geographical areas that have similar atmospheric conditions, while impact zones describe any area in Montana or Idaho that the Group deems smoke sensitive and/or having an existing air quality problem (Montana/Idaho Airshed Group 2006). As a member of the Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit.

ALTERNATIVES CONSIDERED:

No-Action Alternative: The No-Action Alternative is used as a baseline for comparing the effects that the Action Alternative would have on the environment and is considered a possible alternative for selection. Under this alternative, the proposed harvest would not take place and, therefore, no revenue would be generated for the Common Schools Trust. Trees with low resistance to *Armillaria* root disease (Douglas-fir) would continue to be attacked and killed. Other trees would either continue at their current growth rate and vigor class, or experience change in growth and vigor as tree competition increases over time. Natural regeneration would be slow in establishing the next generation of trees. The establishment of natural grasses and a lack of bare mineral soil would continue to inhibit the establishment of natural tree seedlings. Firewood permits, recreational use, fire suppression, noxious-weed control, and other management activities may still occur. Natural events, such as windthrow and down fuel accumulation would continue to occur.

Action Alternative: Harvesting of approximately 251 MBF of Douglas-fir, lodgepole pine, and western larch would generate revenue for the Common Schools Trust. The removal of Douglas-fir seedtrees would allow growing space for *Armillaria* resistant species (ponderosa pine, western larch, western white pine, and lodgepole pine). This activity would also remove the Douglas-fir seed source which would reduce the likelihood of natural regeneration occurring from this species. Scarification would be completed across 30 to 35% of the units to expose bare mineral soil and remove grasses to allow natural regeneration to establish. Slash piling and burning would reduce the fire hazard from fuels created through harvest operations. Site preparation would prepare site for natural and if necessary, planted regeneration of trees resistant to *Armillaria* root disease.

Impacts on the Physical Environment

Evaluation of the impacts on the No-Action and Action Alternatives including **direct, secondary, and cumulative** impacts on the Physical Environment.

VEGETATION:

Vegetation Existing Conditions:

The units proposed for harvesting were originally harvested during the summer of 2012 and the winter of 2012/2013. An even aged silvicultural prescription was utilized which left approximately 10 to 12 trees per acre in the units. Species composition consists of Douglas-fir, western larch, lodgepole pine, and ponderosa pine as the remaining seedtrees. There are

pockets of sub-merchantable trees that consist of Douglas-fir, grand fir, and other shade tolerant species.

The stands have a history of mortality caused by *Armillaria* root disease. The disease created small openings in the canopy where the Douglas-fir and grand fir had been killed. *Armillaria* root disease is also very prevalent in the adjacent stands and causing on-going spread and mortality.

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Noxious Weeds	X				X				X					
Rare Plants	X				X				X					
Vegetative community	X				X				X					
Old Growth	X				X				X					
Action														
Noxious Weeds	X													
Rare Plants	X													
Vegetative community		X											Y	
Old Growth	X													

Vegetation Mitigations: Same as Scout Lake 2 contract requirements.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions:

Soils present in the project area landtypes 26C-7 and 26C-8. Both landtypes are only moderately erosive. A thorough discussion of the existing condition can be found in the Scout Lake Multiple Timber Sale Project Final Environmental Impact Statement.

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Physical Disturbance (Compaction and Displacement)	X				X						X			1
Erosion	X				X					X				1
Nutrient Cycling	X				X					X				1
Slope Stability	X				X				X					1
Soil Productivity	X				X					X				1
Action														

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Physical Disturbance (Compaction and Displacement)		X				X					X			1, 2
Erosion		X				X				X				1, 2
Nutrient Cycling		X				X				X				1, 2
Slope Stability	X				X				X					1, 2
Soil Productivity		X				X				X				1, 2

Comments:

1) Impact ratings were gathered from the Soils Analysis in the Scout Lake Multiple Timber Sale Project Final Environmental Impact Statement (DNRC, 2012)
2) Due to the season of operation, limited harvest proposed and implementation of Forestry BMPs, the risk of impacts would be low.

Soil Mitigations:

ARM 36.11.422 (2) and (2)(a) state that appropriate BMPs shall be determined during project design and incorporated into implementation. To ensure that the incorporated BMPs are implemented, the specific requirements would be incorporated into the DNRC Timber Sale Contract. As part of this alternative design, the following BMPs are considered appropriate and would be implemented during harvesting operations:

1) Limit equipment operations to periods when soils are relatively dry, (less than 20 percent), frozen, or snow-covered in order to minimize soil compaction and rutting, and maintain drainage features. Check soil moisture conditions prior to equipment start-up.

2) On ground-based units, the logger and sale administrator would agree to a skidding plan prior to equipment operations. Skid-trail planning would identify which main trails to use and how many additional trails are needed. Trails that do not comply with BMPs (i.e. trails in draw bottoms) would not be used unless impacts can be adequately mitigated. Regardless of use, these trails may be closed with additional drainage installed, where needed, or grass-seeded to stabilize the site and control erosion.

3) Tractor skidding should be limited to slopes of less than 40 percent unless the operation can be completed without causing excessive displacement or erosion. Based on site review, short, steep slopes may require a combination of mitigation measures, such as adverse skidding to a ridge or winchline, and skidding from more moderate slopes of less than 40 percent.

4) Keep skid trails to 20 percent or less of the harvest unit acreage. Provide for drainage on skid trails and roads concurrently with operations.

5) Slash disposal: Limit the combination of disturbance and scarification to 30 to 40 percent of the harvest units. No dozer piling on slopes over 35 percent; no

excavator piling on slopes over 40 percent, unless the operation can be completed without causing excessive erosion. Consider lopping and scattering or jackpot burning on the steeper slopes. Consider disturbance incurred during skidding operations to, at least, partially provide scarification for regeneration.

6) Retain woody debris and a feasible majority of all fine litter following harvesting operations. On units where whole tree harvesting is used, implement one of the following mitigations for nutrient cycling: 1) use in-woods processing equipment that leaves slash on site; 2) return-skid slash and evenly distribute within the harvest area; or 3) cut tops from every third bundle of logs so that tops are dispersed as skidding progresses.

WATER QUALITY AND QUANTITY:

This project would harvest only the seed trees from an existing harvest unit. The level of harvest is low and would not be expected to have a measurable water quality/quantity effect due to very gentle terrain and no SMZ/RMZ harvest.

Water Quality and Quantity Existing Conditions:
Project is located in the In-pa-ah watershed. A review of the Scout Lake Multiple Timber Sale Project Final Environmental Impact Statement indicates low existing impacts. See the Scout Lake EIS for detailed information.

Water Quality & Quantity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Water Quality	X				X					X				
Water Quantity	X				X					X				
Action														
Water Quality	X				X					X				
Water Quantity	X				X					X				

Comments:

Water Quality & Quantity Mitigations:
Follow applicable Forestry BMPs and additional mitigations listed in the Scout Lake Project

FISHERIES:

Fisheries Existing Conditions: Harvest is proposed in the In-pa-ah watershed, however no harvest is proposed adjacent to any stream. See the Scout Lake EIS for detailed fisheries information.

No-Action: No direct or indirect impacts would occur to affected fish species or affected fisheries resources beyond those described in Fisheries Existing Conditions. Cumulative effects (other related past and present factors; other future, related actions; and any impacts described in Fisheries Existing Conditions) would continue to occur.

Action Alternative (see Fisheries table below):

Fisheries	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Sediment	X				X					X				
Flow Regimes	X				X					X				
Woody Debris	X				X					X				
Stream Shading	X				X					X				
Stream Temperature	X				X					X				
Connectivity	X				X					X				
Populations	X				X						X			1
Action														
Sediment	X				X					X				
Flow Regimes	X				X					X				
Woody Debris	X				X					X				
Stream Shading	X				X					X				
Stream Temperature	X				X					X				
Connectivity	X				X					X				
Populations	X				X						X			1

Comments:

1) Scout Lake Multiple Timber Sale Project Final Environmental Impact Statement fisheries analysis indicated nonnative fish species as the primary adverse impact.

Fisheries Mitigations: follow applicable Forestry BMPs and additional mitigations listed in the Scout Lake Project

WILDLIFE:

No-Action: No additional impacts beyond those described in the Scout Lake Timber Sale EIS would be expected.

Action Alternative: The following impacts would be additive to those described in the Scout Lake Timber Sale EIS (see table below).

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Threatened and Endangered Species														
Grizzly bear *(Ursus arctos)* Habitat: Recovery		X				X				X			Y	WI-1

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
areas, security from human activity														
Canada lynx (*Felix lynx)* Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	X				X				X					
Wolverine *(Gulo gulo)*	X				X				X					
Sensitive Species														
Bald eagle *(Haliaeetus leucocephalus)* Habitat: Late-successional forest within 1 mile of open water	X				X				X					
Black-backed woodpecker *(Picoides arcticus)* Habitat: Mature to old burned or beetle-infested forest	X				X				X					
Coeur d'Alene salamander *(Plethodon idahoensis)* Habitat: Waterfall spray zones, talus near cascading streams	X				X				X					
Columbian sharp-tailed grouse *(Tympanuchus Phasianellus columbianus)* Habitat: Grassland, shrubland, riparian, agriculture	X				X				X					
Common loon *(Gavia immer)* Habitat: Cold mountain lakes, nest in emergent vegetation	X				X				X					
Fisher	X				X				X					

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
(Martes pennanti) Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian														
Flammulated owl *(Otus flammeolus)* Habitat: Late-successional ponderosa pine and Douglas-fir forest	X				X				X					
Gray Wolf *(Canis lupus)* Habitat: Ample big game populations, security from human activities		X				X				X			Y	WI-2
Harlequin duck *(Histrionicus histrionicus)* Habitat: White-water streams, boulder and cobble substrates	X				X				X					
Northern bog lemming *(Synaptomys borealis)* Habitat: Sphagnum meadows, bogs, fens with thick moss mats	X				X				X					
Peregrine falcon *(Falco peregrinus)* Habitat: Cliff features near open foraging areas and/or wetlands	X				X				X					
Pileated woodpecker *(Dryocopus pileatus)* Habitat: Late-successional ponderosa pine and larch-fir forest	X				X				X					
Red-tailed Hawk *(Buteo jamaicensis)*		X				X				X			Y	WI-3

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Habitat: Open forests and fields														
Townsend's big-eared bat *(Plecotus townsendii)* Habitat: Caves, caverns, old mines	X				X				X					
Big Game Species														
Elk		X				X				X			Y	WI-4
Whitetail		X				X				X			Y	WI-4
Mule Deer	X				X				X					

Comments:

WI-1 Grizzly Bear – The Project Area is located in the Goat Creek Grizzly Bear Subunit, which is currently closed to commercial forest management activities during the non-denning season (*SVGBCA 1997*). All forest management activities would only occur during the denning season. Seed trees and young Douglas-fir trees susceptible to root rot would be removed by the proposed activities, potentially reducing sight-distances. All harvest units would meet distance to cover minimums as described in the Scout Lake Multiple Timber Sale EIS (*DNRC 2012*) and clumps of young regenerating trees would be retained where disease issues associated with Douglas-fir do not occur.

WI-2 Gray wolves - Wolves may use habitat in the vicinity of the Project Area. Disturbance associated with timber sales at den and rendezvous locations can adversely affect wolves; however, timing restrictions would apply if den or rendezvous sites are documented (*ARM 33.11.430(1)(a)(b)*).

WI-3 Red-tailed Hawk – A red-tailed hawk nest was active in the Project Area during 2015. The nest tree and all trees shading the nest tree would be retained. Occupancy status and nest location would be surveyed in the spring and summer if necessary to ensure that the correct area is protected. Logging would occur outside of the nesting season, minimizing adverse effects on red-tailed hawks.

WI-4 Big game – Seed trees and young Douglas-fir trees susceptible to root rot would be removed from approximately 106 acres of potential elk and white-tailed deer winter range; however, considering that approximately 5-10% mature canopy cover is present in the proposed units the area is not likely to provide substantial thermal cover and additional removal of seed trees would have little impact on wintering big game animals. The proposed activities may displace local deer and elk using nearby stands for one winter. To reduce adverse impacts to big game, patches of hiding cover would be retained throughout the units where disease is not a

concern and the roads accessing the site would be effectively closed to the public during operations.

Wildlife Mitigations:

- If a threatened or endangered species is encountered, consult a DNRC biologist immediately. Similarly, if undocumented nesting raptors or wolf dens are encountered within ½ mile of the Project Area contact a DNRC biologist.
- Contractors will adhere to food storage and sanitation requirements as described in the timber sale contract. Ensure that all attractants such as food, garbage, and petroleum products are stored in a bear-resistant manner.
- Prohibit contractors and purchasers conducting contract operations from carrying firearms while on duty as per *ARM 36.11.444(2)* and *GB-PR2* (*USFWS and DNRC 2010)*.
- Restrict public access at all times on restricted roads that are opened for harvesting activities.
- Retain at least 2 snags and 2 snag recruits per acre >21 inches dbh or the next available size class, particularly favoring western larch and Douglas-fir for retention. If snags are cut for safety concerns, they must be left in the harvest unit. Emphasize retention of 15-inch diameter downed logs where they occur.
- Restrict commercial forest management activities to the denning season (Nov 16-March 31).
- Retain the red-tailed hawk nesting tree and trees shading the nest tree.

AIR QUALITY:

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Smoke	**X**				**X**				**X**					
Dust	**X**				**X**				**X**					
Action														
Smoke		**X**			**X**				**X**				**Y**	**1**
Dust	**X**				**X**				**X**					

Comments:

1) The project is located within Montana Airshed 2. Slash pile burning would occur in conjunction with other pile burning in the area.

Air Quality Mitigations:

- To minimize cumulative effects during burning operations, burning would be done in compliance with the Montana Airshed Group, reporting regulations and any burning restrictions imposed in Airshed 2. This would provide for burning during conditions of acceptable ventilation and dispersion.

ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Historical or Archaeological Sites	X				X				X					
Aesthetics	X				X				X					
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					
Action														
Historical or Archaeological Sites	X				X				X					1
Aesthetics	X				X				X					
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					

Comments:

1) DNRC has no record of cultural resources within the proposed project area of potential effect – reference Scout Lake Timber Sale EIS.

Mitigations:

- If previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

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.*

- Scout Lake Multiple Timber Sale Project FEIS (March 2012)
- Cilly Cliffs Multiple Timber Sale Project FEIS (August 2014)
- Fatty Creek Restoration Project (Summer 2015)
- Goat Rot Flats (Summer 2015)

Impacts on the Human Population

Evaluation of the impacts on the proposed action including **direct, secondary, and cumulative** impacts on the Human Population.

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Health and Human Safety	X				X				X					
Industrial, Commercial and Agricultural Activities and Production	X				X				X					
Quantity and Distribution of Employment	X				X				X					
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of Recreational and Wilderness Activities	X				X				X					
Density and Distribution of population and housing	X				X				X					
Social Structures and Mores	X				X				X					
Cultural Uniqueness and Diversity	X				X				X					
Action														
Health and Human Safety	X				X				X					
Industrial, Commercial and Agricultural Activities and Production	X				X				X					
Quantity and Distribution of Employment	X				X				X					
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of Recreational and Wilderness Activities	X				X				X					
Density and Distribution of population and housing	X				X				X					
Social Structures and Mores	X				X				X					

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Cultural Uniqueness and Diversity	X				X				X					

Comments: N/A

Mitigations: N/A

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.*

- In 1996, the Land Board approved the Record of Decision (ROD) for the SFLMP. The SFLMP provides philosophical basis, consistent policy, technical rationale, and guidance for the management of forested state trust lands. In 2003, DNRC adopted the *Forest Management Rules* (*ARM 36.11.401* through *456*). The *Forest Management Rules* are the specific legal resource management standards and measures under which DNRC implements the SFLMP and subsequently its forest management program.

- In December 2011, the Land Board approved the ROD for the Montana DNRC HCP. Approval of the ROD was followed by the issuance of a Permit by the USFWS. The HCP is a required component of an application for a Permit which may be issued by the USFWS to state agencies or private citizens in situations where otherwise lawful activities might result in the incidental take of federally-listed species. The HCP is the plan under which DNRC intends to conduct forest-management activities on select forested state trust lands while implementing specific mitigation requirements for managing the habitats of grizzly bear, Canada lynx, and 3 fish species (bull trout, westslope cutthroat trout, and Columbia redband trout).

- The project would adhere to the agreements made in the SVGBCA.

Other Appropriate Social and Economic Circumstances:
Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimated stumpage is based on comparable sales analysis. This method compares recent sales to find a market value for stumpage. These sales have similar species, quality, average diameter, product mix, terrain, date of sale, distance from mills, road building and logging systems, terms of sale, or anything that could affect a buyer's willingness to pay.

No Action: The No Action alternative would not generate any return to the trust at this time. Armillaria root disease would continue to move through the soil possibly causing mortality to the remaining Douglas-fir. The stands would continue to grass over and limit the opportunity for western larch seedlings to become established.

Action: The timber harvest would generate additional revenue for the Common School Trust. The estimated return to the trust for the proposed harvest is $26,480.00 based on an estimated harvest of 250 thousand board feet (1,324 tons) and an overall stumpage value of $20.00 per ton. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

References

DNRC 1996. State forest land management plan: final environmental impact statement (and appendixes). Montana Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, Montana.

DNRC. 2010. Montana Department of Natural Resources and Conservation Forested State Trust Lands Habitat Conservation Plan: Final EIS, Volume II, Forest Management Bureau, Missoula, Montana.

DNRC. 2012. Scout Lake Multiple Timber Sale Project final environmental impact statement. Montana DNRC Swan Unit, Swan Lake, MT.

SVGBCA. 1997. Swan Valley grizzly bear conservation agreement. USFWS, Helena, MT. 37pp.

Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur?
No

Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?
No

Environmental Assessment Checklist Prepared By:

Name: Karen Goode, Marc Vessar, Leah Breidinger
Title: Management Forester, Hydrologist, Wildlife Biologist
Date: December 7, 2015

Finding

Alternative Selected

Two alternatives are present and fully analyzed in the CEA:

- The No-Action Alternative would result in no revenue being generated for the Common Schools Trust. The Douglas-fir trees would continue to be attacked and killed. Other trees would either continue at their current growth rate and vigor class, or experience change in growth and vigor as tree competition increases over time. Firewood permits,

recreational use, fire suppression, noxious-weed control, and other management activities may still occur. Natural events, such as windthrow and down fuel accumulation would continue to occur.

- The Action Alternative includes removal of 251 MBF of timber on approximately 109 acres about a mile east of the Swan Highway, on the Swan River State Forest. The Action Alternative would generate revenue for the Common School Trust. The removal of Douglas-fir seedtrees would allow growing space for *Armillaria* resistant species (ponderosa pine, western larch, western white pine, and lodgepole pine). Scarification would be completed across 30 to 35% of the units to expose bare mineral soil and remove grasses to allow natural regeneration to establish. Slash piling and burning would reduce the fire hazard from fuels created through harvest operations. Site preparation would prepare site for natural and if necessary, planted regeneration of trees resistant to *Armillaria* root disease.

I have reviewed the correspondence from the public and information presented in the CEA. I have selected the Action Alternative without additional modifications. I feel the Action Alternative best meets the purpose and need for action for the following reasons:

- The selected Action Alternative meets the goals and objectives listed in this CEA.
- The analysis of identified issues did not reveal information to persuade me to select the No-Action Alternative.
- The project area is located on state-managed lands that are principally valuable for the timber that is on them (*77-1-402 MCA*). DNRC manages these lands according to the standards adopted by the Administrative Rules for Forest Management (*ARM 36.11.401* through *450*) and the philosophy within the SFLMP, which states:

  Our premise is that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests…in the future; timber management will continue to be our primary source of revenue and our primary tool for achieving biodiversity objectives.

- The Action Alternative meets all requirements of the Administrative Rules for Forest Management (*ARM 36.11.401* through *450*), the Montana DNRC Forested State Trust Lands Habitat Conservation Plan, and the SVGBCA, in that, impacts are minimal, mitigated, and minor in scope.

- As mandated by State statute (*77-5-222 MCA*), the Action Alternative will contribute to DNRC's sustained yield.

Significance of Potential Impacts

I find that the Action Alternative will not have significant impacts on the human environment for the following reasons:

- The Action Alternative conforms to the management philosophies of DNRC and is in compliance with existing laws, rules, policies, and standards applicable to this type of proposed action.
- DNRC will not be precluded from analyzing future actions on state trust lands.

- The Action Alternative is similar to past projects on state trust lands using common practices in the industry and activities are not being conducted on unique or fragile sites.

Need for Further Environmental Analysis

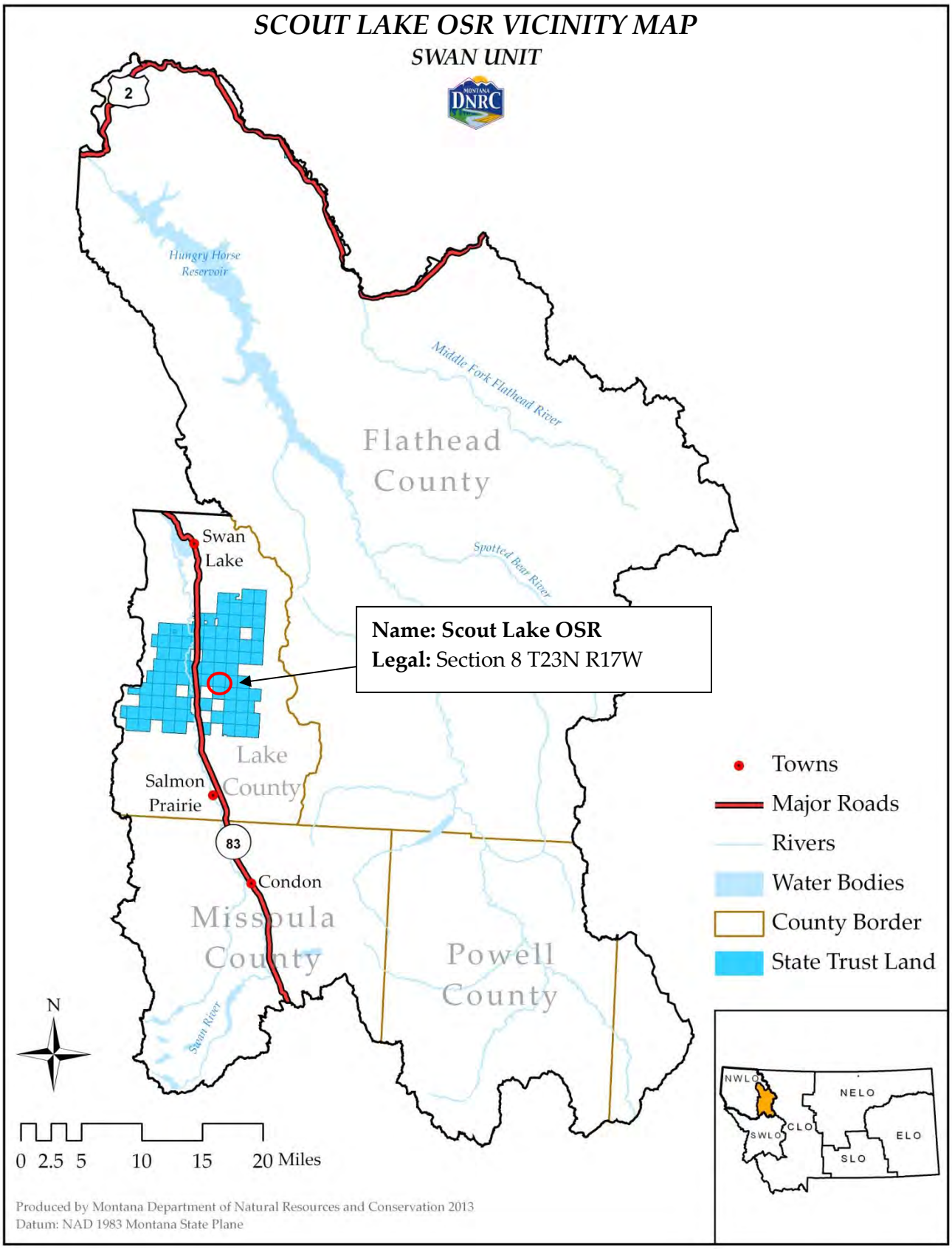
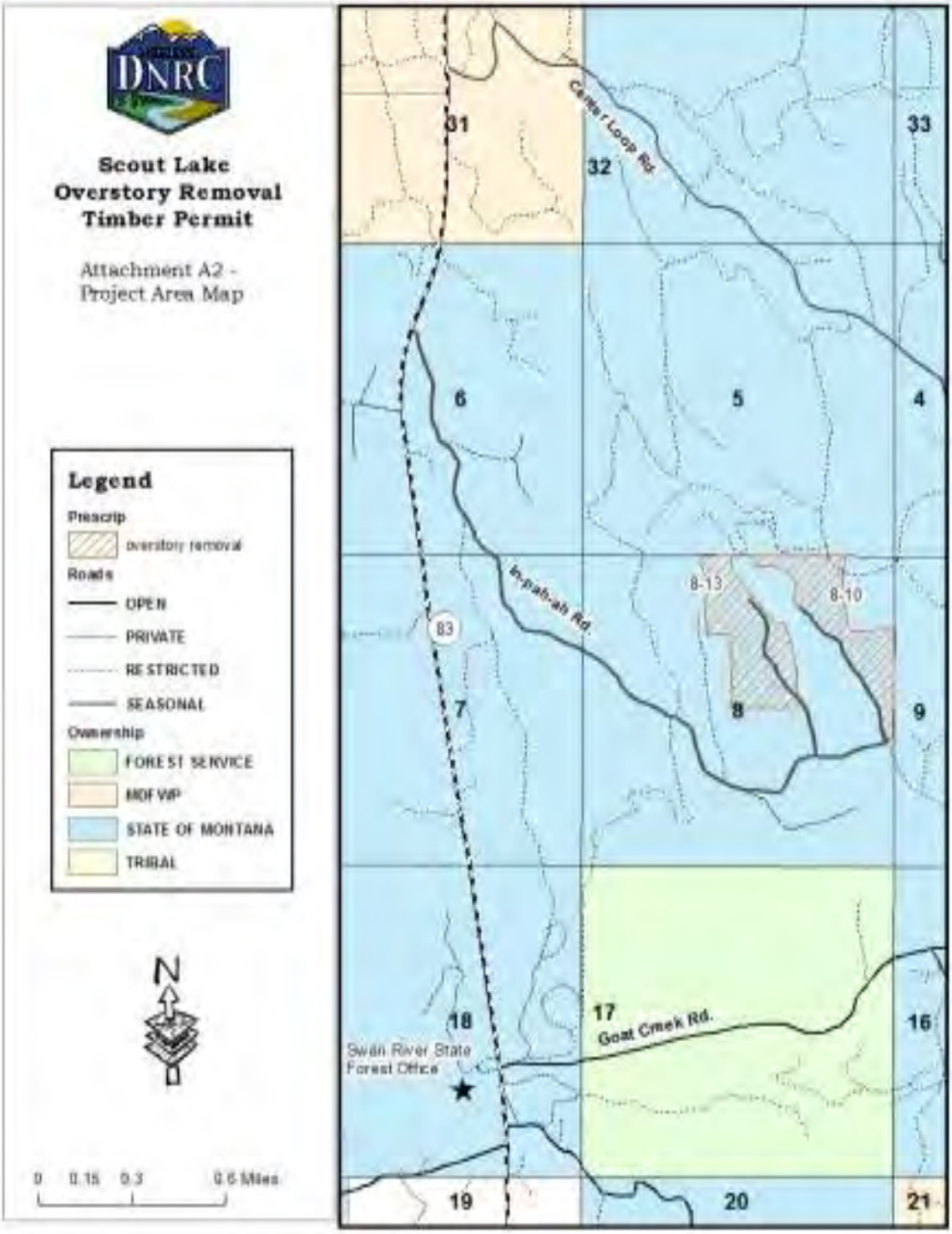
	EIS		More Detailed EA	X	No Further Analysis

Environmental Assessment Checklist Approved By:

Name: Nick Aschenwald
Title: Forest Management Supervisor
Date: December 8, 2015
Signature: /s/ Nick Aschenwald

Attachment A- Maps

A-1: Timber Sale Vicinity Map



A-2: Timber Sale Harvest Units