

First publication of the notice of this timber sale will be July 30, 2014 in the Eugene Register-Guard. This notice in the newspaper constitutes the decision document for purposes of protest under 43 CFR 5003 - Administrative Remedies. Protests of this sale must be filed within 15 days after the first publication of this notice. As interpreted by BLM, the regulations do not authorize the acceptance of protests in any form other than a signed, written hard copy that is delivered to the physical address of the Eugene District Office as defined below.

Site and Mailing Address:

Bureau of Land Management
3106 Pierce Parkway, Suite E
Springfield Oregon 97477-7910

If you have any questions, please call Mike Korn at (541) 683-6792

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE

DECISION RECORD

DOI-BLM-OR-E050-2014-0009-EA
Wild Fish Creek Timber Sale

DECISION

It is my decision to implement this action as described in the Determination of NEPA Adequacy Documentation DOI-BLM-OR-E050-2014-0009-DNA.

PLAN CONFORMANCE

The proposed action has been reviewed by BLM staff. The Proposed Action is in conformance with the 1995 Eugene District Record of Decision and Resource Management Plan (as amended). Based on the Determination of NEPA Adequacy, I have determined that the existing NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

SURVEY AND MANAGE

The Wild Fish project is consistent with court orders relating to the Survey and Manage mitigation measure of the Northwest Forest Plan, as incorporated into the Eugene District Resource Management Plan.

On December 17, 2009, the U.S. District Court for the Western District of Washington issued an order in *Conservation Northwest, et al. v. Rey, et al.*, No. 08-1067 (W.D. Wash.) (Coughenour, J.), granting Plaintiffs' motion for partial summary judgment and finding a variety of NEPA violations in the BLM and USFS 2007 Record of Decision eliminating the Survey and Manage mitigation measure. Judge Coughenour deferred issuing a remedy in his December 17, 2009 order until further proceedings, and did not enjoin the BLM from proceeding with projects. Plaintiffs and Defendants entered into settlement negotiations that resulted in the 2011 Survey and Manage Settlement Agreement, adopted by the District Court on July 6, 2011.

The Ninth Circuit Court of Appeals issued an opinion on April 25, 2013, that reversed the District Court for the Western District of Washington's approval of the 2011 Survey and Manage Settlement Agreement. The case is now remanded back to the District Court for further proceedings. This means that the December 17, 2009, District Court order, which found National Environmental Policy (NEPA) inadequacies in the 2007 analysis and records of decision removing Survey and Manage, is still valid.

Previously, in 2006, the District Court (Judge Pechman) had invalidated the agencies' 2004 RODs eliminating Survey and Manage due to NEPA violations. Following the District Court's 2006 ruling, parties to the litigation had entered into a stipulation exempting certain categories of activities from the Survey and Manage standard (hereinafter "Pechman exemptions").

Judge Pechman's Order from October 11, 2006 directs: "Defendants shall not authorize, allow, or permit to continue any logging or other ground-disturbing activities on projects to which the 2004 ROD applied unless such activities are in compliance with the 2001 ROD (as the 2001 ROD was amended or modified as of March 21, 2004), except that this order will not apply to:

- A. Thinning projects in stands younger than 80 years old (emphasis added);
- B. Replacing culverts on roads that are in use and part of the road system, and removing culverts if the road is temporary, or to be, decommissioned;

- C. Riparian and stream improvement projects where the riparian work is riparian planting, obtaining material for placing in-stream, and road or trail decommissioning; and where the stream improvement work is the placement large wood, channel and floodplain reconstruction, or removal of channel diversions; and
- D. The portions of project involving hazardous fuel treatments where prescribed fire is applied. Any portion of a hazardous fuel treatment project involving commercial logging will remain subject to the survey and management requirements except for thinning of stands younger than 80 years old under subparagraph a. of this paragraph.”

Following the District Court’s December 17, 2009 ruling, the Pechman exemptions still remained in place. I have reviewed the Wild Fish Project in consideration of both the December 17, 2009 partial summary judgment and Judge Pechman’s October 11, 2006 order. Because the Wild Fish project includes no regeneration harvest and includes thinning only in stands less than 80 years old, I have made the determination that this project meets Exemption A of the Pechman Exemptions (October 11, 2006 Order), and therefore may still proceed to be offered for sale even if the District Court sets aside or otherwise enjoins use of the 2007 Survey and Manage Record of Decision since the Pechman exemptions would remain valid in such case.

ADMINISTRATIVE REMEDIES

The decision to implement this project may be protested under 43 CFR 5003 - Administrative Remedies. In accordance with 43 CFR 5003.2, the decision for this project will not be subject to protest until the notice of sale is first published in the Eugene Register-Guard. This published notice of sale will constitute the decision document for the purpose of protests of this project (43 CFR 5003.2b). Protests of this decision must be filed with this office within fifteen (15) days after first publication of the notice of sale. As interpreted by BLM, the regulations do not authorize the acceptance of protests in any form other than a signed, written hard copy that is delivered to the physical address of the BLM Eugene District Office.

Signature of the Responsible Official:

/S/ Michael J. Korn
Michael J. Korn
Field Manager, Siuslaw Resource Area
Eugene District Office

07/14/2014
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE

DETERMINATION OF NEPA ADEQUACY (DNA)

OFFICE: Siuslaw Resource Area, BLM Eugene District

TRACKING NUMBER: DOI-BLM-OR-E050-2014-0009-DNA

PROJECT NAME: Wild Fish Timber Sale

LOCATION/LLEGAL DESCRIPTION: T.17 S., R.7 W., Sections 27 & 33, Will. Mer.

A. Description of Proposed Action

The proposed action is to implement the Long Tom portion of the Wild Fish Timber Sale by thinning approximately 43 acres of General Forest Management Area (GFMA) (31 acres) and Riparian Reserves (RR) (12 acres) land use allocations (LUA). The project site is located within the Long Tom Landscape Plan EA planning area. The proposed action (including silvicultural prescriptions; logging systems; RR treatments; road renovation; road decommissioning prescription; wildlife, botany, and fuels mitigation measures) is described in the attached "Implementation Prescription." This project is a part of the larger "Wild Fish Timber Sale" which implements thinning under the Rethin EA as well. A separate decision is being implemented for that portion.

B. Land Use Plan (LUP) Conformance

The Eugene District initiated planning and design for this project to conform and be consistent with the following:

- Eugene District Record of Decision and Resource Management Plan (RMP), as amended. Date approved: June 1995
- Long Tom Landscape Plan Environmental Assessment (EA). Date approved: July 2011

The proposed action is in conformance with the applicable LUPs because it is specifically provided for in the following LUP decisions:

"Design silvicultural systems on General Forest Management Areas to meet a high level of timber production within a framework of mitigating measures and project design features which protect environmental quality and habitat for wildlife, fish and botanical species" (RMP 1995, p. 86).

In Riparian Reserves "Design and implement wildlife habitat restoration and enhancement activities in a manner that contributes to attainment of Aquatic Conservation Strategy objectives... Manage riparian areas for a late seral stage unless watershed analysis identifies reasons for alternate objectives... Maintain the riparian/wetland conditions within the historic range of conditions as much as can be determined..." (RMP 1995, p. 42).

C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

The proposed action is covered by the Long Tom Landscape Plan EA (July 2011).

United States Fish and Wildlife Service Biological Opinion for the Long Tom Landscape Plan EA.

D. NEPA Adequacy Criteria

1. **Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?**

The proposed thinning is part of Alternative 4 (preferred alternative) analyzed in the Long Tom Landscape Plan EA and is contained within the EA analysis area. The current proposed action implements the following specific actions in the selected alternative:

In matrix lands "Forest stands between 30 and 79 years of age would be thinned using the traditional silvicultural technique of thin from below to relative densities in the mid-thirties, generally ranging from 32 to 38. Spotted owl dispersal habitat would be maintained to USFWS standards (EA, p. 11)."

Wild Fish consists of approximately 43 acres of matrix and riparian reserve thinning consisting of a stand that is 76 years of age. The Long Tom portion of the Wild Fish Timber Sale will thin trees to a curtis relative density of 33. Thinning will retain 163 square feet basal area per acre, averaging about 50 trees per acre, maintaining an average canopy closure of 60 percent (Kintop model). This prescription will maintain northern spotted owl dispersal and foraging habitat.

"All streams would receive a minimum buffer of approximately 60 feet within which no thinning would occur." (EA, p. 12).

A minimum no treatment buffer of 60 feet will be retained on all streams – see the implementation prescription for specific stream buffer information.

"Roads would be constructed or renovated/improved as needed. Approximately 20 to 30 miles of construction and approximately 170 to 190 miles of renovation/improvement would occur." (p. 16).

There will be no new road construction; approximately 6,547 feet of road will be renovated or improved.

"Decommissioning strategy for Matrix lands: Newly constructed and renovated/improved natural surface roads; Newly constructed and renovated/improved roads within late successional stands that are natural surface or have been rocked to facilitate harvest activities but are not needed for future management." (decommissioning will be done using the design features listed in the EA) (EA 2011, p. 8).

Approximately 2,270 feet of road would be decommissioned (see the implementation prescription for design features).

2. **Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?**

The Long Tom Landscape Plan EA analyzed four alternatives in addition to a no action alternative. The alternatives analyzed a variety of thinning prescriptions. The EA analyzed the effects of thinning on suitable and potentially suitable habitat for northern spotted owls (pp. 29-32) and marbled murrelet habitat (p. 31). The effects of thinning on spotted owl nest patches (pp. 32-33) were analyzed as well. The effects of road use and improvements on ACS objectives were analyzed (pp. 24-29). The effects of management activities on the release or storage of carbon were analyzed (pp. 39-41). Comments received were taken into consideration both before and after the alternatives were analyzed. No new environmental concerns, interests, resource values or circumstances have been revealed since the EA was published that would indicate a need for additional alternatives.

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessment, recent endangered species listings, updated list of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

There is no significant new information or circumstance relative to the analyses in the Long Tom Landscape Plan EA and the current proposed action. The project is located in the 2012 northern spotted owl critical habitat designation. The Revised Recovery Plan for the Northern Spotted Owl (USDI-FWS, Revised Recovery Plan for the Northern Spotted Owl 2011), (USDI-FWS, Revised Critical Habitat for the Northern Spotted Owl; Final Rule) provides new information; however, the actions do not change the adequacy of the existing analysis. Consistency is a result of project design features that protect northern spotted owls and their habitat. Trees with potential marbled murrelet nesting structure located within the harvest area have been painted yellow and will be reserved. The unit is not located within marbled murrelet designated critical habitat.

4. Are the direct, indirect and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

There is no new information or circumstance that would alter the effects analysis in the Long Tom Landscape Plan EA. The Long Tom Landscape Plan EA analyzed direct and indirect impacts of the proposed action; the current project consists of treatments that were described in the proposed action for the EA. The EA concluded that thinning the stands would improve growing conditions and improve the quality of habitat for northern spotted owls. The EA analysis concluded that habitat within known current owl home ranges would maintain the ability of the stand to function as dispersal and foraging habitat and that the actions outlined in this timber sale will not exceed the anticipated effects on wildlife.

Thinning and associated activities would result in slash creation in the short-term, increasing fire risk, followed by a long term reduction in the risk of severe fire, relative to leaving stands un-thinned (EA, p. 38). Road renovation, new road construction, and log-haul would produce negligible, if any, sediment delivery to streams, while road improvements such as replacement of culverts and upgrading surfacing would reduce long-term sediment delivery (EA, p.26). Stream buffers will protect streams from sediment that may be generated from logging operations (EA, p. 26). Reduction in canopy closure from thinning, road renovation and new road construction could result in some further establishment and spread of noxious weeds; however, weed levels will decrease as the canopy recovers and shade is restored to these sites. Weed introductions will be minimized by cleaning of vehicles prior to entry into the stand (EA, p.36). The EA analyzed both the short-term and long-term effects of carbon emissions and carbon storage. The analysis indicated that long-term cumulative carbon emissions levels were less than the long term carbon sequestration levels 30 years after thinning.

The site specific effects of the current proposed action are consistent with the effects analysis in the Long Tom Landscape Plan EA. The stand conditions in the project area for the current proposed action are consistent with those anticipated in the Long Tom Landscape Plan (EA, pp. 14-16). Dispersal and foraging habitat thinned would continue to function as owl dispersal and foraging habitat since the silvicultural prescriptions for these units maintain at least 60% canopy cover. Marbled murrelet protocol surveys were completed and no detections were made.

Site visits and surveys did not identify any unique conditions (such as special habitats or special status species), and there are no specially designated areas (such as ACECs or RNAs) in the project area. Additional details are provided in the Long Tom Landscape Plan EA project analysis file.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Public involvement for the Long Tom Landscape Plan EA has been adequate. Scoping was completed before the analysis for the EA began. An information sheet describing the proposed project and project area was included in the Long Tom Watershed Council newsletter in March of 2009. A letter was mailed to interested parties on March 15, 2009. Representatives of the BLM attended a Long Tom Watershed Council meeting on March 29, 2011. The EA and preliminary FONSI were made available for a 30-day public review on March 15, 2011, twelve comments were received. One comment suggested a wider range of alternatives and mentioned that thinning to 60% canopy cover be analyzed as a separate alternative. One comment requested a more open, inclusive and collaborative process of review and analysis. The EA process included an adequate scoping and public comment period which began approximately three years ago.

One comment suggested that county commissioners should be allowed to make recommendations for road decommissioning but not allowed decision making authority. The EA incorrectly stated that county commissioner "approval" will be obtained before road decommissioning measures are implemented. That statement in the EA has been changed to state county commissioners will "review" decommissioning measures before implementation. Two comments enquired if surveys for survey and manage species will be performed in stands greater than 80 years of age.

BLM received one protest following the publication of the Decision Record, filed August 8, 2011. The protest was denied on January 10, 2012. The appeal period ended on February 21, 2012. BLM notified the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians; the Confederated Tribes of the Siletz; and the Confederated Tribes of the Grand Ronde of the Long Tom Landscape Plan EA during the scoping process, requesting information regarding tribal issues or concerns relative to the project. BLM also sent the tribes copies of the EA and no responses were received.

BLM has consulted with the U.S. Fish and Wildlife Service (USFWS). BLM completed formal consultation under the Endangered Species Act (ESA) with the USFWS on effects of the Wild Fish Timber Sale on the northern spotted owl and marbled murrelet. The current proposed action is consistent with the description of the action in the Long Tom Landscape Plan Biological Opinion issued by the USFWS in 2011. Northern spotted owl critical habitat was re-designated in 2012 and conferencing with USFWS has been completed for this project. The proposed action is not likely to adversely affect northern spotted owls or their designated critical habitat because thinning would maintain 60% canopy cover within spotted owl foraging habitat. The project will not likely adversely affect marbled murrelet habitat. Because the current proposed action would have no effect on coho salmon and its designated critical habitat, as well as no adverse effect on Essential Fish Habitat, consultation with the National Oceanic and Atmospheric Administration - Fisheries is not required.

E. BLM Staff Consulted

<u>Name</u>	<u>Title</u>	<u>Resource</u>
Crystal Perez-Gonzalez	Forester	Team Lead/Silviculturist
Karin Baitis	Soil Scientist	Soils/Road Decom
Doug Goldenberg	Botanist	Botany
Luis Palacios	Civil Engineering Technician	Engineering/Road Decom
Tom Jackson	IT Specialist	GIS
Kristin Allison	Fuels Specialist	Fuels
Dan Crannell	Wildlife Biologist	Wildlife
Sarah Diehr	Forester	Logging Systems
Leo Poole	Fisheries Biologist	Fisheries
Sharmila Premdas	Landscape Planner	NEPA
Steve Steiner	Hydrologist	Hydrology

Prepared By

/S/ Sharmila Premdas
Sharmila Premdas, NEPA Planner

Date: 07/24/2014

Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan. Additionally, the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

/S/ Jan Robbins (Acting)
Michael J. Korn
Field Manager,
Siuslaw Resource Area

Date: 07/24/2014

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.

**Long Tom Landscape Plan
Project Implementation Prescription
Wild Fish - Tract No. 14-520
T.17 S, R.7 W, Sec 27, 33**

Summary

The Wild Fish timber sale is an approximately 43 acre thinning project in the Matrix and Riparian Reserve Land Use Allocations. The estimated harvest volume is 817 MBF. Approximately 5 acres were dropped from thinning because of low conifer stocking.

Silviculture

- Vary the leave tree spacing as needed to generally reserve the larger, more vigorous trees.
- Selected leave trees should generally be of good form and relatively free of defect; however, trees with unique structure such as wolf trees, broken tops, and/or with cavities shall be reserved in sufficient numbers to maintain presence in the stands.
- Priority for selection of reserve trees is incense cedar, Douglas-fir, and western hemlock.
- Reserve Pacific yew, snags, hardwoods. Retain on site any yew, snags, and hardwoods felled for safety or operational reasons.
- All trees marked with yellow paint are Marbled Murrelet leave trees.
- Reserve superior trees within the sale area. These trees will not be damaged during logging operations.

Matrix Treatment 31 acres

Select conifer leave trees to reserve 160 Sq Ft basal area/ac.
Retention of target basal area of conifer will average 48 trees/ac, Curtis RD = 32
Residual stand basal area is 163 Sq Ft with a Curtis RD = 33

Riparian Reserve Treatment 12 acres

Thin Riparian Reserves using the same prescription as the adjacent upland area.

Logging systems

Cable Yarding Design Features: The entire sale area is within guidelines for ground based yarding, however may be cable yarded if the following design features are met:

- Cable yard to designated or approved landings.
- Space cable corridors 150 feet apart and limit to 12 feet in width (a cable system capable of 75 foot lateral yarding).
- Require a minimum one-end suspension. Intermediate supports may be necessary to achieve the required suspension.
- Require full suspension on all yarding across streams.
- Lay out cable yarding system to eliminate gouging (log dragging) to reduce concentration of drainage delivering to streams.
- Make cable yarding corridors erosion resistant if needed where severe gouging has occurred.
- Layout cable corridors used for yarding in concave slopes above stream channel initiation points (headwall areas) at 45 degrees to perpendicular of the centerline. This is to provide a sharp channel junction to dissipate the energy of any potential debris flows or torrents.
- Minimize sidehill yarding across headwall areas to reduce soil disturbance and slope failures.

Ground-Based Yarding Design Features:

- Limit operations to when soil moisture content provides the most resistance to compaction (generally less than 25%--during the dry season, typically, July 1 to October 15, as approved by the Authorized Officer in consultation with the Soil Scientist).
- Monitor soil moisture contents on soils identified for ground based logging.
- Limit skid trails to slopes less than 35% with approval from the Authorized Officer.

- Pre-designate and approve all skid trails.
- Use existing skid trails wherever possible.
- Preplan (map) and designate (flag) skid trails to occupy less than 10% of the Unit. This can be accomplished by minimum 150 foot spacing between skid trails, and maintaining width of the skid trail to 12 feet (felling of trees to-lead to the skid trails optimizes winching distances that can be as much as 100 feet so that distances between trails could reach 200 feet).
- Limit use of low ground pressure (recommended <6 psi) ground-based yarding equipment to one round trip when operating outside designated primary skid trails, walking the equipment over downed slash to minimize soil disturbance.
- Skid logs to designated or approved landings.
- De-compact all skid trails and landings and place slash and brush on trails. Use of an excavator with a bucket with teeth that can be used to shatter but not mix the soil is optimum for density thins. Care should be taken not to mix or displace the soil profile. In density thins, roots can be avoided with use of a modified bucket. De-compaction should immediately follow logging operations and take place no later than October 15. If de-compaction cannot be accomplished the same operating season, all trails should be left in an erosion resistant condition and blocked.
- When logging with ground-based equipment within 210 feet of any stream, skid trails shall be located at least 75 feet from the posted boundary. Within 210 feet of any stream, ground-based yarding equipment shall not leave the designated trail.

Engineering

Access:

Name/Number	Action	Road control	RWA/Easement
17-7-33.2	Use	Private (OT1)	RWA-E-310 Supp. 36
17-7-33.3 por	Renovation	BLM	NA
17-7-33.3 por	Renovation	Private (OT1)	RWA-E-310 Supp. 36
17-7-34.10	Renovation	Private (OT1)	RWA-E-310 Supp. 120-Free Use
17-7-34.2*	Renovation	Private (OT1)	RWA-E-310 Supp. 36

OT1 = Oxbow Timber 1

BLM = Bureau of Land Management

*This road will be used for thinning actions under the Rethin EA as well.

Special access needs:

New construction: There is no new road construction

Renovation:

Name/Number	Length (feet)	Surface Type	Buy-out?	Comments
17-7-33.2	581	Rock	NA	
17-7-33.3	2,270	Purchaser's option	NA	Renovation includes brushing and grading, currently this road is natural surfaced in section 27.
17-7-34.2	475	Rock	Yes	
17-7-34.10	3,221	Rock	Yes	

- Approximately 22.70 stations renovation.

Summary:

- 65.47 stations renovation
- Logger's choice landings/spurs requested by Purchaser are subject to approval by the Authorized Officer.
- Green trees are available for guylines at all roads.

Road decommissioning

All decommissioning shall be completed during the dry season.

- (aa) Purchaser shall decompact all natural surfaced roads and landings with decompaction equipment, such as a track mounted excavator with a thumb that is capable of moving logging slash, during the dry season.
- (bb) Purchaser shall construct drainage dips, waterbars and/or lead-off ditches, as directed by the Authorized Officer.
- (cc) Purchaser shall place logging slash (6" and greater) on surfaces where available.
- (dd) Purchaser shall block at entry points using stumps, slash, and/or cull logs, or earthen barricades, as directed by the Authorized Officer.

			If Not Rocked				If Rocked		
			(aa)	(bb)	(cc)	(dd)	(bb)	(cc)	(dd)
Road Number	Wet Weather Haul	Road Rocking	Decompact	Drainage	Logging Slash	Blocking	Drainage	Logging Slash	Blocking
17-7-33.3	If rocked	optional	X	X	X	X	X		X

Storm proofing roads and placing them in a self-maintaining condition consists of site-specific measures to stabilize roadside slopes, prevent erosion of soil and/or sediment delivery to streams by reducing the concentration of water on the road prism and ditchlines, before blocking.

Soils

- To maintain soil productivity, utilize design features as described in Logging Systems.
- Road decommissioning recommendations are described in the Road Decommissioning table.

Hydrology

- Streamside protection buffers are 60 feet on each side of stream 27.2, north and west sides of stream 33.99, and north and west sides of stream 33.98 from the confluence with stream 33.99 to the confluence with stream 27.2
- Streamside protection buffers are 75 feet on the south and east sides of stream 33.99; and on the south, west and east sides of stream 33.98 from the confluence with stream 33.99 to the boundary of sections 28 and 33.
- Streamside protection buffers are 100 feet on each side of stream 33.98 from the confluence with stream 27.2 to the northern boundary; to the south and east sides of stream 33.98 from the boundary of sections 28 and 33 to the confluence with stream 27.2; and the south and east sides of stream 27.1.

Fisheries

Threatened and Endangered Species

No ESA listed fish species are associated with this project.

There is **no critical or essential fish habitat** designated within tributaries of the Long Tom River associated with this thinning.

- Haul over road 17-7-34.10 road is restricted to dry season haul beginning north of the junction with road number 17-7-33.3 due to three stream crossings with direct delivery.

Wildlife

Threatened and Endangered Species

Northern Spotted Owls (NSO):

- Maintain dispersal habitat, large remnant trees, hardwoods, trees with defects, and improve the quality of forest habitat (increase amount of conifer and hardwood trees in the middle-story, and shrubs, grasses, and forbs in understory).

Marbled Murrelets (MAMU):

- Maintain large remnant trees
- There are trees with potential nesting structure within the harvest area; they will be protected from harvest or damage and are marked with yellow paint.

Botany

Threatened and Endangered Species

No federally listed Threatened or Endangered plant species were located during surveys, and no effects to these species are anticipated. No mitigation measures are necessary.

Bureau Sensitive Species

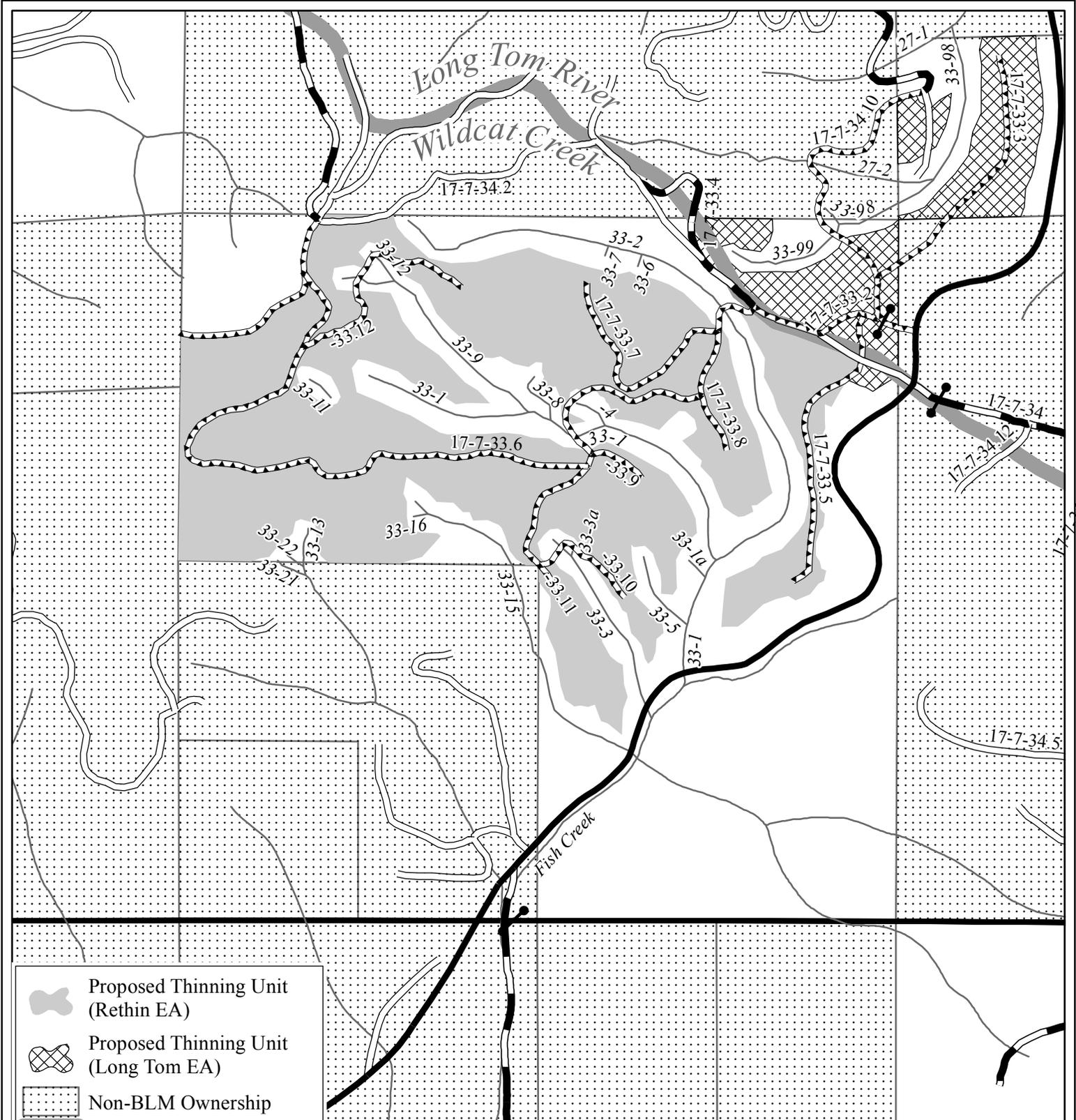
No Sensitive plant species were located during surveys. No mitigation measures are necessary.

Noxious Weeds and Invasive Non-native species

- Clean all yarding and road construction equipment prior to arrival on BLM-managed lands to lessen the spread of noxious weed seed.
- Sow native grass seed on decommissioned, tilled roads after operations have been completed.
- Control existing false brome infestations prior to project activity, monitor for at least 5 consecutive years after timber sale implementation, and control infestations discovered through monitoring as appropriate.
- Do not place deep slash on natural surfaced decommissioned roads, to allow continued monitoring and treatment of false brome in the area.

Fuels

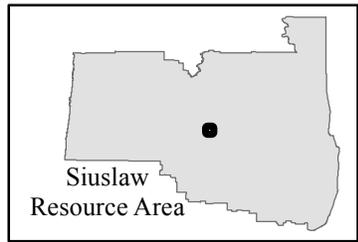
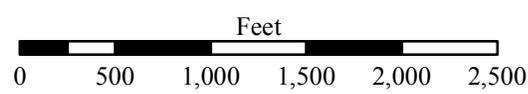
- Grapple piling within the harvest area along the Road No. 17-7-34.10. Piling would occur within 25 feet of the road and all material greater than 6" in diameter will be left out of the piles.
- Slash concentrations and piles along temporary roads may be scattered over the road surface to discourage OHV use and/or decrease erosion.
- All piles should be covered and burned or utilized.
- Burn piles in the late fall when favorable smoke dispersion conditions are common and risk of fire spread is low.

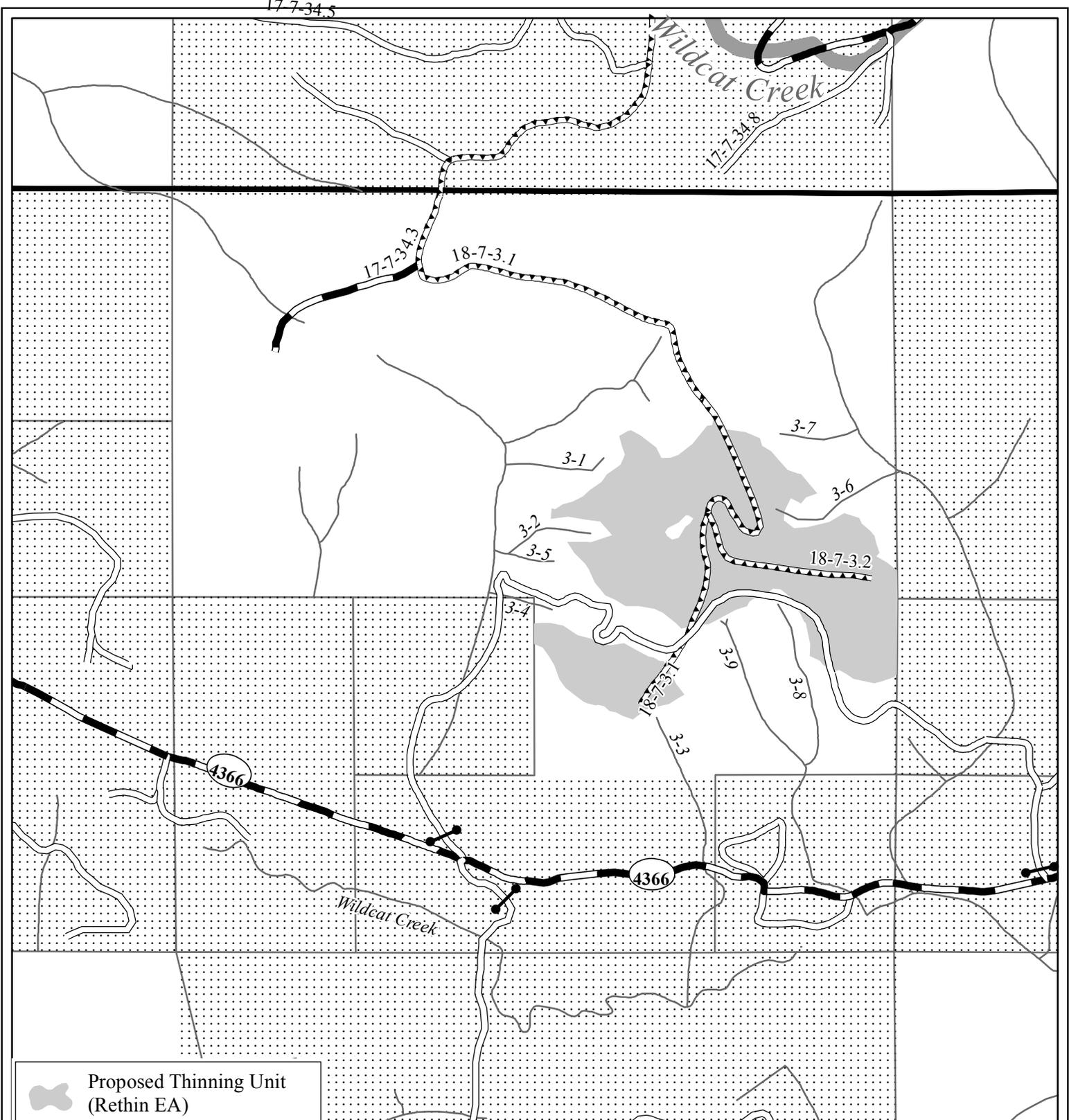


-  Proposed Thinning Unit (Rethin EA)
-  Proposed Thinning Unit (Long Tom EA)
-  Non-BLM Ownership
-  Watershed Boundary
-  Highway
-  Road - Rock Surface
-  Road - Other Surface
-  Road to Improve/Renovate
-  Gate
-  Stream

Wild Fish Unit 1

T.17 S., R.7 W., Sec. 33





-  Proposed Thinning Unit (Rethin EA)
-  Non-BLM Ownership
-  Watershed Boundary
-  Road - Rock Surface
-  Road - Other Surface
-  Road to Improve/Renovate
-  Gate
-  Stream

Wild Fish Unit 2

T.18 S., R.7 W., Sec. 3

