

Finding of No Significant Impact (FONSI)

For the
Sunday Morning Belly Twister Timber Management Project

April 2015

Environmental Assessment (EA) Number DOI-BLM-OR-S040-2014-0001-EA

United States Department of the Interior
Bureau of Land Management, Oregon State Office
Salem District, Cascades Resource Area

T. 10 S., R. 1 E., section 35;
T. 11 S., R. 1 E., sections 1, 3, 15, 16, 17 and 27;
T. 11 S., R. 2 E., sections 5, 6, 7 and 8,
Willamette Meridian
Linn County Oregon

Crabtree Creek and Thomas Creek 5th field watersheds.
Middle Crabtree Creek, Beaver Creek and Neal Creek 6th field watersheds.

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Salem District

BLM



As the Nation’s principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/AE-15/025+1632

Contents

<i>Finding Of No Significant Impact (FONSI)</i> _____	3
1. Introduction _____	3
2. Finding of No Significant Impact _____	3
<i>Context</i> _____	3
<i>Intensity</i> _____	4

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

SUNDAY MORNING BELLY TWISTER TIMBER MANAGEMENT PROJECT

1. INTRODUCTION

The Bureau of Land Management (BLM) has conducted an environmental analysis for a proposal to commercially thin 1,500 acres of 40-102 year old forest stands and an alternative to commercially thin 1,435 acres of 40-102 year old forest stands and regeneration harvest 65 acres of a 102 year old stand. The project is located on BLM lands in T. 10 S., R. 1 E., section 35; T. 11 S., R. 1 E., sections 1, 3, 15, 16, 17 and 27; and T. 11 S., R. 2 E., sections 5, 6, 7 and 8; W.M. in Linn County, Oregon. The Sunday Morning Belly Twister (SMBT) Environmental Assessment (EA) (#DOI-BLM-OR-S040-2014-0001-EA) documents the environmental analysis of the proposed timber management alternatives. The EA is attached to and incorporated by reference in this Finding of No Significant Impact determination. The EA and unsigned FONSI were made available for public review and comment from December 17, 2014 to January 16, 2015 (*EA section 5.3*). I have reviewed the comments I received and considered those comments in making this Finding.

The analysis in this EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). The proposed timber management activities have been designed to conform to the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (*EA Section 1.3*).

2. FINDING OF NO SIGNIFICANT IMPACT

The Finding of No Significant Impact (FONSI) is defined in 40 CFR 1508.13 as a document briefly presenting the reasons why an action will not have a significant effect on the human environment which includes the natural and physical environment and the relationship of people with that environment.

If the agency “finds” that the action has “no significant impact”, the agency is not required to prepare an Environmental Impact Statement (EIS) for the project. 40 CFR 1508.27 defines the factors to consider in determining whether a project is anticipated to “significantly” impact the human environment. The following FONSI documents the BLM’s evaluation of the potential impacts of the Sunday Morning Belly Twister Timber Management Project (SMBT).

Based upon review of the SMBT EA and supporting documents, and evaluation of information presented in public comments on the EA, the proposed action is not a major federal action and would not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Therefore, supplemental or additional information to the analysis in the RMP/FEIS in the form of an environmental impact statement (EIS) is not needed. This finding is based on the following discussion:

CONTEXT [40 CFR 1508.27(a)] refers to the suitable scale for analysis. Potential effects resulting from the implementation of the proposed action have been analyzed within the context of the project area boundaries, and the following 6th field watersheds: Middle Crabtree Creek, Beaver Creek and Neal Creek. The 1,500 acre project would affect approximately 2.2 percent of the combined 67,587 acres in these three 6th field watersheds.

INTENSITY [40 CFR 1508.27(b)] refers to severity of impact. The following ten sections refer to the specific conditions/concerns addressed in §1508.27 and document the BLM's consideration of the intensity (severity) of the impacts as assessed in the SMBT EA.

1. Impacts that may be both beneficial and adverse [40 CFR 1508.27(b) (1)]: The effects of commercial thinning are unlikely to have significant (beneficial and/or adverse) impacts (EA Chapter 3) for the following reasons:

PROJECT DESIGN (EA section 2.3): An interdisciplinary team of resource specialists (IDT) developed the proposed treatments described in EA section 2.3.1.1 (proposed action, including the project design features described in Table 5) and EA section 2.3.1.2 (alternative action, including additional project design features described in Table 8) to conform to RMP Management Direction and be within the effects analyzed in the RMP/FEIS.

VEGETATION AND FOREST STAND CHARACTERISTICS (EA section 3.4): Effects to these resources would not have significant impacts because:

- A forest environment would be maintained in the project area by retaining green trees within thinned project units (EA Table 13);
- A component of legacy green trees would be maintained in the regeneration harvest units under the alternative action consisting of 10-12 green trees per acre, selected from larger than average trees and including all trees larger than 35 inches diameter;
- There would be no identifiable effects on T/E species or habitat within the project area because there are no known populations or habitat in the project area;
- There would be no identifiable adverse impacts to suitable habitat for Special Status Species (SSS) or any known or undiscovered SSS populations from this project because the nature of thinning the forest would not change these habitats in a way that would preclude those species. Potential undiscovered populations include seasonal fungi species; and
- Live *Bridgeoporus nobilissimums* (BRNO, a decay fungus found on true firs) fruiting bodies would be adequately protected by minimum 50 feet radius untreated buffers as determined in the 2007 Management Plan for the Snow Peak BRNO population. BLM anticipates that thinning overstocked timber stands to promote growth of larger diameter true fir would help ensure the survival of this species in managed stands.

Therefore, the project would not contribute to the need to list any BLM Special Status Species.

BLM examined past timber harvest areas near the proposed project area and found no evidence to indicate that adverse impacts from invasive/non-native species would occur as a result of the proposed project.

HYDROLOGY, FISHERIES AND AQUATIC HABITAT (EA sections 3.5; 3.6): Effects to these resources would not have significant impacts because the project effects on water quality would comply with Oregon Department of Environmental Quality (ODEQ) water quality standards as follows:

- In general, there would be no direct alteration of the physical features of project area stream channels or wetlands from timber harvest or logging operations except for culvert replacements on the haul routes as described below;

- The proposed action is unlikely to affect stream flow. The potential increases in stream flow from the alternative action are unlikely to exceed the threshold for peak flow augmentation. Therefore the project is unlikely to cause indirect effects to stream channels as a result of flow alteration or timing;
- The project would maintain current stream temperatures by retaining the current vegetation and shading in the primary shade zone (stream protection zones, or SPZ) and most of the current levels of shading provided by the secondary shade zone;
- It is unlikely that the proposed action would result in a discernible effect to the levels of turbidity or water clarity in project watersheds or that turbidity levels would reach levels that would impact aquatic organisms or cause additional treatment expense or technical difficulties for the downstream water providers. Water quality would be maintained because logging, road construction/renovation, culvert replacement, road maintenance and timber haul project design features (EA Table 4) and SPZs are expected to prevent sediment from reaching streams and causing sediment/turbidity that would exceed ODEQ water quality standards; and
- Water quality would also be maintained because road construction would occur on gentle, stable slopes so no mass movement would be expected which could increase sediment. Runoff from new roads would drain to stable, vegetated slopes where it would infiltrate into the soil rather than connect to stream channels to transport sediment or augment peak flows. Redesigning and improving 0.3 mile of the Church Creek Spur road in section 15 would ultimately improve channel processes.

No changes in project area hydrology due to project actions are likely to be detectable, including mean annual water yield, fog drip, base flow and peak flows.

The project would not impact stream channels, aquatic habitat or fish populations because it would not cause water quality impacts that exceed ODEQ water quality standards and would not detectably change project area hydrology.

SOILS (EA section 3.7): Effects to this resource would not have significant impacts because:

Project design features (EA Tables 5 and 8) limit machinery operations so that there would be an overall maximum increase of 12 percent of the project area in moderate to heavy compaction/disturbance of soils from all sources, which is within RMP standards (C-2, 10 percent from logging; and C-9, 2 percent from site preparation) which were analyzed in the RMP/FEIS.

No loss of growth and yield from thinning would be expected at the stand level because thinning treatments typically lead to acceleration of average tree growth and compacted soils affect less than half of the rooting area of individual trees.

No measurable loss in timber stand productivity is expected over the next rotation (the full cycle of stand establishment to regeneration harvest and establishment of the next stand, approximately one century) due to soil compaction and disturbance from logging operations in regeneration harvest units because of the limited scope of compaction (see above) and the long-term response of trees planted in compacted soils in this area.

Following completion of thinning (all acres in proposed action, 1435 out of 1500 acres in alternative action), the majority of organic matter, understory vegetation and root systems would remain.

Following completion of regeneration harvest (65 of 1500 acres in the alternative action) the majority of root systems would remain to provide soil stability and vegetation would provide ground cover within 1-3 years as vegetation resprouts and conifer trees are planted and established.

The project would not lead to any measurable increase in surface erosion and overall erosion would remain within the natural range of background erosion rates.

The project would maintain sufficient mycorrhizae populations because the root systems of most vegetation would remain undisturbed and past disturbance of the area has not apparently affected mycorrhizae populations.

WILDLIFE (*EA section 3.8*): Effects to this resource would not have significant impacts because:

Proposed treatments (and non-treatment) would have trade-offs of effects in both the short and long term which would be beneficial to some species and not beneficial to other species. The variation within proposed treatments and maintaining untreated forest stands adjacent to all treated stands would provide a range of habitat conditions to balance the trade-offs of effects.

Stands proposed for thinning are not presently functioning as late-successional or old growth habitat and no remnant legacy trees older than 200 years would be cut or removed.

Existing snags and coarse woody debris (CWD) would be retained on site. Fewer than 10 percent of existing large (≥ 15 inches and ≥ 15 feet tall) snags would be felled for safety or knocked over by logging operations. All snags felled or knocked over for safe and efficient logging operations would be retained as CWD. Fewer than 10 percent of CWD would be impacted by logging, based on 10 percent of the unit area being directly impacted by landings, skid trails and skyline corridors. All existing CWD would remain on site.

The project would not contribute to the need to list any SSS because of the limited scope of impacts to suitable habitat for SSS in the project watersheds, as described below in Intensity Point #9. The only suitable habitat for BLM Special Status species (SSS) which are known or likely to be present in the project area (treated units) is suitable habitat for spotted owls in units 8A&C. In the proposed action, up to 103 acres of suitable owl habitat in units 8A&C would be downgraded. Under the alternative action, 38 acres of suitable habitat would be downgraded and 65 acres of suitable habitat would be removed. The vast majority of the best owl habitat in the project watersheds would not be affected by the project. Proposed treatments would not significantly change species richness (a combination of species diversity and abundance) of the Migratory and Resident Bird community in the project vicinity. No species would be extirpated in stands as a result of thinning. A seasonal restriction on regeneration harvest (falling and yarding) during the primary nesting seasons for migratory birds would reduce unintentional take of nesting birds in those units and different species would use the early seral habitat after regeneration harvest.

See Intensity Point # 9 for effects to northern spotted owl.

AIR QUALITY AND FIRE HAZARD/RISK (*EA section 3.9*): Effects to this resource would not have significant impacts because:

After 3 to 5 years the fine fuels generated by thinning would be decayed in the units and the risk of surface fire would decrease to near current levels. Under the alternative action, fuels treatment for site preparation would immediately reduce the risk of surface fire to at or below current levels.

The thinning itself would decrease the risk of a canopy fire.

The proposed action would comply with State of Oregon Air Quality Standards by strict adherence to smoke management regulations.

CARBON STORAGE, CARBON EMISSIONS AND CLIMATE CHANGE (*EA section 1.8.3*):

Effects to this resource would not have significant impacts because the incremental increase in carbon emissions as greenhouse gasses that could be attributable to the proposed action is of such small magnitude that it is unlikely to be detectable at global, continental or regional scales or to affect the results of any models now being used to predict climate change. See Intensity point 7.

RECREATION, VISUAL RESOURCES, AND RURAL INTERFACE (*EA section 3.10*): Effects to this resource would not have significant impacts because:

Recreation visitation would be moderately restricted for short periods (weeks) in specific locations (units) during a 3 – 5 year period for safety, then should return to prior usage.

There are no authorized recreation trails to be impacted. Access to one social hiking trail to Snow Peak would be restricted for a few weeks during a 3-5 year period for safety during active logging operations, then be available again for use.

No long term changes (more than weeks within a 3-5 year period) to public access to any location within the project area would result from the project.

Changes to the landscape character would comply with Visual Resource Management (VRM) class 3 and 4 objectives since thinning would not significantly alter the visual character of the project area. Regeneration harvest under the alternative action would comply with VRM class 4 management objectives which allow major modifications of the visual landscape.

Proposed timber harvest operations would not increase OHV access to units because the project includes requirements to block OHV access points and make existing OHV trails unusable. Logging operations would obliterate any existing unauthorized OHV trails within harvest units.

2. Public Health / Safety [40 CFR 1508.27(b) (2)] - *The degree to which the proposed action affects public health or safety (EA sections 1.6, 1.7.2, 2.3, 2.3.1 Table 4, 3.4, 3.8, 3.9):* The proposed project would not adversely affect public health or safety because:

The public would not be allowed to enter hazardous work areas. Public access to much of the proposed project areas is and will remain restricted by private gates. Public access to hazardous work areas where there are accessible roads would be restricted by warning signs and temporary traffic control barriers, devices and/or personnel.

OSHA mandated health and safety regulations are applied to all project operations related to the proposed project implementation.

All actions of the proposed project must meet national and State of Oregon air and water quality standards, as provided for by the RMP FEIS.

3. Unique characteristics [40 CFR 1508.27(b) (3)] - *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:* Effects to these resources would not have significant impacts because:

The project, both proposed and alternative actions, would not affect historical or cultural resources because there are no known cultural resources within project units or other locations where they could potentially be impacted by project operations. On site cultural and historic surveys have been completed and have not produced evidence to support the previous or present existence of artifacts of significant cultural or historical value. See Intensity point 8. (EA section 3.11)

There are no park lands, prime farmlands or wild and scenic rivers to be impacted.

4. *Controversial Effects* [40 CFR 1508.27(b) (4)] - *The degree to which the effects on the quality of the human environment are likely to be highly controversial:*

The proposed project is not unique or unusual. The effects of both the proposed and alternative actions are well known, not highly controversial. BLM has experience implementing actions similar to both the proposed action and the alternative action and in similar areas. The proposed action and alternative action fall within management actions/direction of the RMP and were analyzed in the RMP FEIS.

5. *Uncertain Effects* [40 CFR 1508.27(b) (5)] - *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks:*

The effects of the project do not have uncertain, unique or unknown risks because BLM has experience implementing similar actions in similar areas without these risks. No potential unique or unknown risks were identified by the BLM or by comments submitted in response to scoping or public review of the EA, and project design features would minimize the risks associated with the project (EA sections 2.2.1, 2.3.1.1, 2.3.1.2). See # 4, above.

6. *Precedent* [40 CFR 1508.27(b) (6)] - *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:*

The proposed and alternative actions would not establish a precedent for future actions beyond the time frames analyzed nor would they represent a decision in principle about a further consideration for the following reasons:

The project is in the scope of proposed activities documented in the RMP FEIS and the scope of management actions/direction in the RMP.

BLM has experience implementing similar actions in similar areas without setting a precedent for future actions or representing a decision about a further consideration. See numbers 4 and 5, above.

7. *Cumulative Impacts* [40 CFR 1508.27(b) (7)] - *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:*

The Interdisciplinary Team (IDT) evaluated the project area in context of past, present and reasonably foreseeable actions and determined that there is a potential for cumulative effects on water quality and fisheries, peak flows and fisheries, and carbon storage and emissions. These effects are not expected to be significant for the following reasons:

WATER QUALITY/FISHERIES: The proposed action would be expected to temporarily increase stream sediment and turbidity as a result of culvert replacement, road maintenance, and road use (*EA Sections 3.5, 3.6*). These effects are not expected to be significant for the following reasons:

Any sediment increase resulting from thinning would be too small to be discernable relative to background sediment yields, would not be expected to exceed ODEQ water quality standards and would decrease quickly over time, returning to current levels within three to five years as vegetation increases (Dissmeyer, 2000).

The limited magnitude of sediment inputs (non-detectable on 7th field watershed scale, not visible more than 800 meters downstream of crossings) and duration (primarily major storm events during the first year following disturbance at culvert replacement sites) of this effect would likely be insignificant for water quality on the watershed scale. Cumulatively, the proposed action and connected actions would be unlikely to result in any detectable change for water quality on a 7th field watershed scale (even less effect on the larger 6th field watershed scale) and would be unlikely to have any effect on any designated beneficial uses, including fisheries. (*EA Section 3.5.1, 3.6.1*)

Road use restrictions, road design and maintenance, protection measures and monitoring of road conditions would prevent increases in turbidity that exceed ODEQ standards which were established to maintain water quality (*EA section 2.3.1, and Table 5*). When water quality is maintained within ODEQ standards, changes to sediment levels would not significantly impact fisheries, including listed fish habitat. (*EA sections 3.6.2.1, 3.6.2.2*)

PEAK FLOWS AND FISHERIES: Neither the proposed action nor the alternative action, combined with the effects of BLM's estimate of potential harvest on private lands over the next 10 years would augment peak flows to exceed the threshold for peak flow effects. (*EA sections 3.5.2.1, 3.5.2.2, 3.6.2.1, 3.6.2.2*)

The project alternatives carry no risk for contributing to any existing cumulative effect to watershed hydrology because the watersheds are currently at a low risk for impacts and there would not be any detectable direct or indirect effects to surface flows or ground water. (*EA sections 3.5.2.1, 3.5.2.2*)

Based on BLM analysis of recent, ongoing and potential future harvest on private industrial forest lands in the project watersheds, it is likely that much less than 60 percent of the closed forest stands on private land has been harvested within the last decade or would be harvested within the next decade. This analysis is based on field observations, general knowledge of private harvest cycles, BLM GIS data and analysis of BLM's 2012 aerial photography. (*EA section 3.5.2.2, Figure 28*)

One decade after harvest, open stands (those regeneration harvested under the alternative action) would grow to at least 30 percent closure and not contribute to augmenting peak flows. (*EA section 3.5.2.2*)

The project, both proposed and alternative actions, is at low risk for potential increases in peak flows so it would not affect stream channels, large wood or sediment levels in project area streams and therefore would not significantly affect fisheries. (*EA sections 3.6.2.1, 3.6.2.2*)

CARBON STORAGE AND CARBON EMISSIONS (*EA section 1.8.3*): Cumulative changes to the carbon storage and emissions contributed by the proposed and alternative actions would be too small, by several orders of magnitude, to affect inputs to known models of carbon cycling and climate change. The effects are not significant for the following reasons:

The incremental increase in carbon emissions as greenhouse gasses that could be attributable to the proposed action is of such small magnitude, as determined by analysis of projects harvesting similar volumes of timber, that it is unlikely to be detectable at global, continental or regional scales or to affect the results of any models now being used to predict climate change.

The net carbon emissions would be of short duration, as determined by analysis of similar projects.

8. Cultural Resources [40 CFR 1508.27(b) (8)] - *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:*

The project would not affect these resources because no districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places exist within or near the proposed project vicinity; no known cultural resources would be impacted by project operations; and any cultural resources discovered during project operations would be protected from further impacts as needed by standard contract provisions. See Intensity point 3. (EA section 3.11)

9. T & E Species [40 CFR 1508.27(b) (9)] - *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973:*

The proposed project is not expected to have significant adverse effects on ESA listed species or critical habitat for the following reasons:

ESA WILDLIFE - NORTHERN SPOTTED OWL (EA Section 3.8): Effects to the species are not significant because:

The proposed action modifies but maintains 1397 acres of dispersal habitat in the affected watersheds, and does not affect suitable owl habitat which is within and between known owl sites; habitat conditions are expected to improve as thinned stands mature (>20 years) in treated stands; and retained trees would increase in size and be available for recruitment or creation of snags, culls and CWD for prey species and nesting opportunities, particularly in Riparian Reserves. Seasonal restrictions on project activities within one quarter mile of centers of activity would prevent disturbance during the nesting season.

The proposed action downgrades 103 acres of suitable habitat to dispersal habitat outside of known owl sites and RA 32 habitat in the Bent Beekman block of the project area.

The alternative action removes 65 acres of suitable habitat which are part of the 103 acres in the Bent Beekman block which would be downgraded under the proposed action. The remaining 38 acres would be downgraded from suitable to dispersal habitat. The remaining 1397 acres of dispersal habitat in the project area would be modified by thinning, but remain dispersal habitat as in the proposed action. The alternative action implements management direction provided in the RMP and is within the effects analyzed in the RMP/FEIS.

BLM is protecting suitable habitat in Matrix (and other LUAs) by implementing Recovery Actions (RA) 10 and 32 from the Revised Spotted Owl Recovery Plan (2011) in addition to protecting spotted owl suitable habitat in LSRs, TPCC withdrawn areas and other "outs" (areas where timber harvest is not allowed for a variety of reasons).

RA 10 retains sufficient habitat within the provincial home range of owls to support breeding, feeding and roosting (pp. III – 42-27). RA 32 maintains or restores high quality habitat across the west side range of the northern spotted owl (pp. III – 67-68). The project would not alter any Recovery Action 32 Habitat. The project area does not include any RA 10 habitat, so none would be altered. These designations would protect a large majority of BLM suitable habitat in the project vicinity until the spotted owl shows recovery, as determined by the BLM Wildlife Biologist on the IDT. (This additional explanation of RA 10 and 32 habitat was provided by the BLM Wildlife Biologist. RA 10 habitat was not described in the EA since none is in the project area.)

The project would not affect habitat in the remaining 66,087 acres of the 67,587 acres combined project area watersheds.

ESA Consultation is described in EA section 5.1.1.

ESA FISH – UWR CHINOOK SALMON, UWR STEELHEAD TROUT (EA Section 3.6): Effects to ESA fish are not significant because the project is not expected to affect these species for the reasons stated in the Hydrology and Fisheries sections (EA sections 3.5, 3.6).

Effects of road maintenance and log hauling are not significant because project design features would prevent sediment from entering streams in quantities sufficient to exceed ODEQ water quality standards. The haul routes are designed and maintained to support year around use and direct most water and sediment onto stable slopes where it infiltrates rather than delivering it to streams. Condition related restrictions and monitoring would prevent generating and delivering sediment to streams.

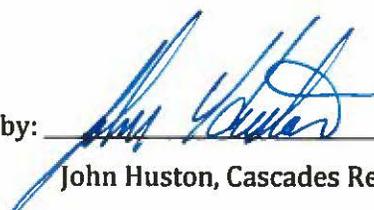
New road construction would be located in stable areas and would not contribute to degradation of aquatic habitat or extend the stream network through ditches on new roads draining into streams.

ESA Consultation for fish is described in EA section 5.1.

10. Law [40 CFR 1508.27(b) (10)] - Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment:

The proposed activities have been designed to follow Federal, State, and local laws (EA section 1.7).

Approved by: _____


John Huston, Cascades Resource Area Field Manager

Date: _____

4/15/2015