Middle Fork Coquille 2007 Commercial Thinning and Density Management Environmental Assessment

Deep Six Density Management
Decision Document

Bureau of Land Management
South River Field Office, Roseburg District Office
EA # OR-105-07-04

Decision:

It is my decision to authorize the Deep Six Density Management project, partially implementing Alternative Two described in the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA (pp. 5-14).

Six units totaling 171 acres will be treated. The units are located in Sections 1 and 11, T. 29 S., R. 9 W., W.M., allocated as Late-Successional Reserve The unit numbers and their corresponding designation in the EA are as follows: Unit 1 (29-9-1A), Unit 2 (29-9-1C), Unit 3 (29-3-1D), Unit 4 (29-9-1E), Unit 5 (29-9-11A), and Unit 6 (29-9-11B). Approximately one additional acre, located entirely within unit boundaries, will be cleared for road rights-of-way. Rights-of-way clearing will not require the cutting of any trees 20 inches or greater in diameter breast height. The project will yield an estimated 2,018 thousand board feet not chargeable to the Roseburg District allowable annual sale quantity.

Density management will be accomplished utilizing a combination of ground-based and cable-yarding equipment, as described in the EA (p. 11).

Ground-based equipment will operate on pre-designated skid trails on slopes of less than 35 percent, using existing skid trails to the greatest degree practical. Primary skid trails, including those already existing, and landings will collectively affect no more than 10 percent of the ground-based harvest area.

Cable-yarding equipment will be capable of maintaining a minimum of one-end log suspension to reduce soil compaction and displacement, and have a minimum of 100 feet of lateral-yarding capability to minimize the number of corridors and landings required.

Density management operations on units designated for ground-based yarding, or cable yarding where access is provided by unsurfaced roads will be seasonally restricted to the dry season, typically between mid-May and mid-October, although the operating season may be extended under a provisional waiver if the weather conditions remain dry.

As described in the EA (p. 12), felling and yarding of timber, other than for clearing road rights-of-way, is seasonally restricted from April 15 to July 15 during the bark slip period.

Access will be primarily provided by existing roads. These will be supplemented as follows. Three cross-drain culverts will be replaced on segments B and C of Road No. 28-8-31.2, and segment D will be renovated, extended 150 feet, and surfaced. One spur road 303 feet in length will be constructed, surfaced, and retained for future management access.

A segment of Road No. 29-9-1.0 will be renovated, and decommissioned after use. The intent is to decommission the segment in the same operating season in which it is renovated and used. If circumstances, such as prolonged fire closure or early onset of autumn rains, preclude use and decommissioning in this time frame, the road will be winterized and blocked to traffic, and decommissioned in the following dry season of operations.

Rationale for the Decision:

The Middle Fork Coquille 2007 Commercial Thinning and Density Management EA analyzed two alternatives in detail, Alternative One, the alternative of No Action (EA, p. 5), and Alternative Two, The Proposed Action (EA, pp. 5-14). The EA (pp. 14-16) also considered two additional alternatives not analyzed in detail, as one was not considered economically reasonable and viable, and the second was already addressed by the proposed action alternative.

Alternative Two will achieve objectives for density management in Late-Successional Reserves enumerated in the EA (pp. 3-4), whereas Alternative One will not.

Survey and Manage

On July 25, 2007, the *Record of Decision to Remove the Survey and Manage Mitigation Measure Standards and Guidelines from Bureau of Land Management Resource Management Plans Within the Range of the Northern Spotted Owl* was signed by the Assistant Secretary, U.S. Department of the Interior.

This decision amended resource management plans for western Oregon and eliminated the provisions of the Survey and Manage program set forth in the *Record of Decision for Amendments* (ROD) *to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.*

Consequently, for the aforementioned reasons the decision to eliminate Survey and Manage is effective on this project.

Public Comments

Comments on the completed EA were received from four organizations. These comments did not provide any new information or identify any relevant issues the BLM should have considered in the analysis. Some comments did not pertain to the project being analyzed. A selection of these comments is addressed below.

> "We wish that you would use variable density thinning prescriptions in all young stand thinning projects regardless of land allocation. Uniform spacing basically sets up the need for future thinning that the agency may not have sufficient funding, capacity, and public support to accomplish."

For density management in Riparian Reserves and in Late-Successional Reserves, as is the case with this project, variable density thinning is appropriate. In the General Forest Management Area, however, the objective is to maximize timber production which requires maintaining stands at full stocking levels.

With respect to funding to conduct future entries, the mission of the BLM is to manage those O&C lands allocated as commercial forest land for permanent, sustainable timber production. Funding is specifically budgeted for this purpose and is not considered an issue.

> "For the entire project in LSRs and RRs, the silvicultural prescription should retain all minor species to help restore the original diversity. Disease resistant Port Orford Cedar and Sugar Pine should also be planted in created gaps."

Reservation of all conifers other than Douglas-fir, as suggested, could compromise density management objectives, including the ability to apply heavy thinning and create gaps and openings in the Late-Successional Reserves intended to create stratification of canopy layers. However, consideration for minor species has been made. Ponderosa pine and sugar pine, if present, have been reserved and do not constitute any of the offered timber volume. Cedars greater than eight inches diameter breast height are marked for retention and do not count toward the prescribed basal area. An exception would be Port-Orford-cedar trees along roads which would be removed as a measure to reduce the risk of spreading root disease.

It is also unlikely that such a reservation would achieve species representation common to native stands in the watershed, which varies by vegetation zone and elevation. As described in the EA (pp. 18-19) and the Upper Middle Fork Coquille Watershed Analysis (pp. 27 and 29), Douglas-fir is the dominant species in all vegetation zones in the watershed.

To illustrate this point, a number of 1980s timber sales located in the Middle Fork Coquille fifth-field watershed were examined. Douglas-fir constituted 64 to 84 percent of the total tree count, averaging 75 percent. Grand fir and incense-cedar averaged approximately nine percent and eight percent, respectively. Western hemlock was the next most abundant at approximately three percent with ponderosa pine, sugar pine, western redcedar and Port-Orford-cedar accounting for approximately one percent each, though none of these species were present in all sales.

Douglas-fir accounts for 86.3 percent of all trees designated for cutting and removal in the Deep Six Density Management project. Grand fir and western hemlock account for approximately nine percent and 4.5 percent, respectively, with western redcedar accounting for slightly more than 0.1 percent. These percentages are well within the range of variability present in native stands as exhibited in the previously described harvest data.

As described in the EA (p. 7), the intent is to plant appropriate species such as ponderosa pine, western redcedar, sugar pine and incense cedar in openings and heavily thinned areas in Late-Successional Reserves, based upon site conditions. Except in areas along roads and streams, where there is a high risk for the spread of *Phytopthera lateralis* root disease, resistant Port-Orford-cedar would also be considered for planting.

> "Hardwood trees in particular, such as maple, yew, and some alder, contribute to the diversity of the LSR, especially when they occur in riparian areas. The EA states that "Density management in Riparian Reserves would aid in the retention of hardwoods as stand components". However, it does not say it will protect all important, large hardwoods, especially yew trees."

The stands being treated are only 42 to 49 years old, and large hardwood trees are not numerous. It is not practical from an operational standpoint to reserve all hardwoods. A minimum size of ten inches diameter breast height for retention was selected as it represents a size at which the likelihood of survival during thinning operations was considered reasonable.

Pacific yew is a conifer species, not a hardwood. It has no present commercial value to timber purchasers and timber companies. There is no incentive to cut yew trees, and the practice is typically limited to those occasions of operational necessity. Regardless, all yew trees are reserved by timber sale contract stipulations and are only cut where operationally necessary.

> "The EA states that "In Riparian Reserves, untreated areas could be used to afford protection" to snags. The word "would", not "could" is more protective. The EA should be clear that untreated areas would be created around significant snags. Instead, it sounds like only snags that just happen to be in untreated areas might, or might not, be protected."

The EA stated that untreated areas could be used to protect snags. The location of unthinned areas would be determined by the presence of important habitat features such as snags. To state that untreated areas "would" be used implies absolute protection of all snags, a commitment that cannot be made when safety and stand density objectives are taken into consideration.

The complete text of the discussion in the EA (p. 9) excerpted above states that in Matrix stands, snags would be protected where feasible and possible, by designation of rub trees. The statement does not preclude the use of rub trees for protection of snags in Riparian Reserves or in Late-Successional Reserves. The marking prescription for the Deep Six Density Management project designated snags greater than 16 inches diameter breast height and at least16 feet tall be marked for retention along with the first ring of live trees to act as rub trees.

> "The EA has designated 20" as the general DBH limit. The EA has also said there are virtually no trees greater than 15" DBH in the units that would be available for harvesting. What is the point of making a DBH limit larger then the largest trees (other than remnant older trees)?
>
> The BLM says that "Within the Matrix allocations there is no silvicultural basis for limiting the size of trees cut." That implies that in the Reserve allocation, there IS a basis for limiting the size of trees cut. Therefore, the BLM should put a meaningful DBH limit, to assure the public, and help guide the marking crew."

This statement misrepresents the discussion found in the EA (p. 16). The 20 inch diameter breast height limitation on the cutting of trees was specific to density management in Late-Successional Reserves, as prescribed by the *South Coast-Northern Klamath Late-Successional Reserve Assessment*. Even so, in a 2004 memorandum from the Regional Ecosystem Office it was acknowledged that proportional thinning across diameter classes may be necessary to achieve desired diameter distributions, which could include trees greater than 20 inches diameter breast height. We strive to reserve dominant and co-dominant trees, and this provision continues to be incorporated in the marking prescriptions for density management in the Late-Successional Reserves.

> "Our comments have always asked the BLM to keep the largest of the trees that would otherwise needs [sic] to be cut, for created snags."

As discussed in the EA (pp. 6, 7 and 16), the largest trees consisting of the dominant, co-dominant and older remnant trees are not the focus of thinning and will generally be reserved from cutting, subject to the exceptions of clearing of road rights-of-way and landing areas, and removing trees posing operational safety concerns subject to Oregon State laws and regulations.

In Late-Successional Reserves, it may be necessary to remove trees larger than 20 inches diameter breast height in the application of heavy thinning, and creation of gaps and openings. As described in the EA (p. 14), if the units are deficient in snags or down wood, they would be created to meet the recommended levels within 5 years of the completion of the project.

> "Once the EA mentions that a right-of-way is 20 to 25 feet. Is this the cutting width?"

In addition to the width of the running surface of temporary roads, which may be 12 or 14 feet, a lateral clearing of at least five feet either side of the road is required, along with a minimum of ten feet of overhead clearance. This means that all encroaching vegetation will need to be cleared within these limits. Whether or not this requires a 25-foot "cutting width" depends on the size and type of vegetation astride the road location. The road width may also vary if turnouts are needed or greater line-of-sight is required approaching a curve in the road.

> "The EA assures us that "Circumstances under which older remnant trees could be cut would be typically limited to: clearing of road rights-of-way; clearing landing areas; and removing the trees to address operation [sic] safety concerns . . ."
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> This is inadequate assurance that remnant trees will be protected. The use of the words "typically" allows anything within few sideboards. Also the BLM has offered no mitigations for old, large trees that could be in the road right-of-way. For instance, the BLM could offer to try moving the road, or going around the tree, or putting a landing in a different place. The BLM could at least *try* not to cut down any big trees left in the LSR.
>
> Before the decision is made, the BLM will KNOW how many older or larger trees are being cut down for operational purposes. The BLM should disclose this information in the decision documents."

As stated on page one of this decision, no trees 20 inches or greater in diameter breast height will be cut for rights-of-way clearing. The BLM attempts to avoid the need to cut large remnant trees, in exactly the manner suggested, because these are habitat components in the Late-Successional Reserves that we are attempting to protect and supplement through density management.

We are only able to determine the need to cut large trees in rights-of-way. We do not specify landing locations as the logging contractor has a much better idea of where landings will need to be located for the safest and most efficient operations.

> "The EA calls for up to one-half acre canopy gaps. The LSRA recommends no greater than .25-acre canopy gaps. The EA failed to explain why it is creating twice the size openings as the LSRA allows."

The BLM submitted a proposal to the Regional Ecosystem Office to create larger openings in Late-Successional Reserves located in the Klamath province. In 2004, the Regional Ecosystem Office reviewed the proposal and supporting data and granted approval for openings up to 1.5 acres in size and heavy thinning of up to 50 percent of the treated area.

> "The EA also failed to explain the purpose of the gaps. If it is to emulate native stand gaps created by small fires, disease, or other disturbance, it doesn't. Natural gaps leave an abundance of dead, wildlife trees. The BLM is proposing mini-clearcuts in this project."

This comment is inaccurate. The EA (pp. 3, 7, 48 and 52) identifies several objectives to be met by the creation of gaps and openings. Among these are: enabling establishment of multiple tree layers and diverse species composition, breaking up stand homogeneity, accentuating landscape diversity across the project area, promoting development of herbaceous and shrubs growth, and maintaining open-grown conditions that allow for development of full crowns and large limbs.

> "The EA considers the natural gas pipeline in cumulative effects because it passes through unit 29-9-11B. But the EA never explained why unit 29-9-11B would be thinned when a 100' wide corridor would be clearcut through it. The BLM should have considered the economic costs of thinning now, only to have to clearcut later."

> "One of our concerns about pipeline cumulative effects is that unit 29-9-11B is one of the "heavy thin" units. If there is going to be a 100' wide opening through the unit, shouldn't the BLM do a light thin elsewhere in the unit?"

The stand described was selected as a candidate for density management based on silvicultural considerations, independent of the pipeline proposal which has not yet been approved by the Federal Energy Regulatory Commission (FERC).

> "The EA says that "Within the pipeline right-of-way, an area 15 feet either side of centerline would be managed as non-forest land". This equates to a 30-foot wide permanent opening. However, Williams Pipeline company told us they needed to maintain a 70' wide permanent opening within the 100' wide initial clearcut opening. Williams Pipeline said this was so they could re-access the pipeline for upgrades or repairs or additional easements. Why is the BLM using only 30 feet in the effects analysis, if Williams needs 70 feet elsewhere? And as far as cumulative effects, the BLM should have considered all the future utility easements in this same corridor. Once the right-of-way is sold to the utility company, they can add other pipelines, buried cables, or over-head lines."

The EA was correct in stating that an area within the right-of-way, 15 feet either side of centerline, would be managed in a non-forested condition. Outside of this are, an area of 15 feet (or possibly 20 feet) would be allowed to grow back into brush and saplings (early-seral forest conditions) that would be cut or mowed back at estimated 15-year intervals.

BLM-managed lands crossed by the pipeline will not be sold to the pipeline company. The lands will continue to be administered by the BLM. The pipeline operator will not have the authority to construct any additional energy transmission or delivery facilities within the right-of-way. Siting of any additional utilities within the pipeline corridor will require a new application, preparation of an environmental impact statement, and the approval and issuance of a new right-of-way permit.

> "The EA says that "The Oregon Coast Coho salmon was proposed for relisting but found not to warrant listing…" A recent court ruling found fault with that decision. The decision document should update the public record with the new information."

The BLM is quite aware of the court ruling directing the National Marine Fisheries Service to reconsider listing of the Oregon Coast coho salmon, which is a matter of public record. This does not change, nor does the recent relisting, the analysis and conclusions of the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA as effects to coho salmon and Essential Fish Habitat are not at issue. As described in the EA (p. 31), a waterfall approximately 0.8 miles below the confluence of Twelvemile Creek and the Middle Fork Coquille River is a barrier to migration by coho salmon, and marks the extent of Essential Fish Habitat. This is over two miles distance downstream of any thinning and density management units discussed in the EA. The EA documents that no adverse effects to fish and aquatic resources (pp. 62-66), and water resources (pp. 68-70) will occur.

Port-Orford-cedar and Phytopthera lateralis

Healthy, uninfected Port-Orford-cedar was noted along a road accessing Unit 4 and downstream of Unit 6. Infected Port-Orford-cedar was located along a road accessing Units 1 and 2.

As described in the EA (p. 54), the *Record of Decision and Resource Management Plan Amendment for Management of Port-Orford-cedar in Southwest Oregon, Coos Bay, Medford, and Roseburg Districts* provides direction for assessing risk and controlling spread of Port-Orford-cedar root disease in order to maintain Port-Orford-cedar as an integral component of the vegetative communities of which it is a part. The risk key is used for site-specific analysis to assess the need for application of additional management practices. An assessment of the project area indicates no special mitigation is required, because:

- There are no uninfected Port-Orford-cedar within, near or downstream of any of the proposed commercial thinning and density management units or anticipated haul routes whose ecological, Tribal, or product use or function measurably contributes to meeting resource management objectives;

- There are no uninfected Port-Orford-cedar within, near or downstream of any of the proposed commercial thinning and density management units or anticipated haul routes that, were they to become infected, would likely spread infections to trees whose ecological, Tribal, or product use or function measurably contribute to meeting land and resource management plan objectives; and

- None of the proposed commercial thinning and density management areas are located within uninfested 7th-field watersheds (drainages).

As addressed in the EA (p. 55), although no additional mitigation is indicated, measures to reduce the risk of further spread of Port-Orford-cedar root disease will be implemented. These will include: equipment washing; restricting road construction and renovation to the dry season; restricting hauling on unsurfaced roads to the dry season; scheduling operations in uninfested areas prior to work in infested areas; and decommissioning and blocking unsurfaced roads upon completion of commercial thinning and density management operations.

Wildlife

As illustrated in Figure B-1, Appendix B of the EA, the units comprising Deep Six Density Management are overlapped by the Weaver Creek and Deep Creek **northern spotted owl** home ranges which have shown repeated occupation by a pair of spotted owls and/or reproductive success over the past five years. No units are located within Critical Habitat Units designated by the U.S. Fish and Wildlife Service for the survival and recovery of the spotted owl.

As described in the EA (p. 57), no effect to spotted owls from noise disruption is expected, as thinning operations will occur outside of the disruption threshold for known spotted owl sites or activity centers, or be seasonally restricted from March 1st to June 30th if within the disruption threshold of unsurveyed suitable spotted owl habitat. Seasonal restrictions could be waived if surveys indicate that spotted owls are not present, not nesting, or failed in nesting. This will ensure that noise disruption will not cause spotted owls to abandon nests or fledge prematurely.

Density management is not expected to negatively affect individual spotted owls or reduce the ability of the affected home ranges to support spotted owls and would benefit the species in the long term, as described in the EA (p. 58).

The U.S. Fish and Wildlife Service concurred with a not likely to adversely affect determination pursuant to section 7 of the Endangered Species Act of 1973 (Ref. # 1-15-05-I-0511).

The Deep Six Density Management project is located within Critical Habitat Unit OR-06-D, designated by the U.S. Fish and Wildlife Service for the survival and recovery of the murrelet. As illustrated in Table 3-4 of the EA (p. 26), while suitable nesting habitat for the **marbled murrelet** is adjacent to the Deep Six Density Management units, it is not present within the units. Consequently, as discussed in the EA (p. 58), there will be no direct effect to murrelets through modification of suitable nesting habitat.

Units 1, 2, 3 and 4 are within the Restriction Corridor within Habitat Zone 2. Suitable habitat in proximity to these units has not been surveyed. Operations on these units will be subject to seasonal restriction from April 1 to August 15, followed by Daily Operational Restrictions described in the EA (p. 13) between August 6 and September 15. Surveys have detected murrelet occupancy in suitable habitat located between Units 5 and 6. To address the potential for noise disruption operations on Unit 6 will be subject to seasonal restriction and Daily Operational Restrictions as previously described. The southern portion of Unit 5 located above Road No. 29-9-12 will be left as an untreated area. The remainder of Unit 5 does not lie within 100 yards of occupied suitable habitat and is free of any operational restrictions.

The U.S. Fish and Wildlife Service concurred with a not likely to adversely affect determination pursuant to section 7 of the Endangered Species Act of 1973 (Ref. # 1-15-05-I-0511).

Four Bureau Sensitive mollusk species were identified in the EA (p. 27) as possible occupants of the watershed. In the Deep Six Density Management project area only the **green sideband, Oregon shoulderband snails** and **spotted taildropper** were suspected. Habitat evaluation determined that suitable habitat for the Oregon shoulderband snail was not present. Surveys were conducted for the green sideband snail and spotted taildropper with negative results.

Botany

The Deep Six Density Management project units were surveyed for Special Status vascular plant, lichen and bryophyte species identified in the EA (p. 36 and Appendix C). The results of these surveys were negative. Consequently, no effects to any Special Status vascular plants, lichens or bryophytes are expected.

As described in the EA (p. 37), there are no known Special Status fungi species in the Deep Six Density Management project area that will be affected. As discussed in the EA (pp. 37 and 74), surveys for fungi species are not considered practical, so the presence of any Bureau Sensitive fungi in the project area is unknown. If present in the density management units, loss of sites could result as a consequence of the removal of substrate and modification of microclimate.

Aquatic Habitat, Fish, and Essential Fish Habitat

As described in the EA (pp. 62-63), the Deep Six Density Management project is not expected to have any effects on stream substrate and sediment. "No harvest" buffers at least 20 feet in width have been established on all streams. Equipment operations are prohibited within these buffers so that soils are not displaced or compacted. Non-compacted forest soils in the Pacific Northwest have very high infiltration capacities and are not effective in transporting sediment by rain splash or sheet erosion. Any potential sediment resulting from thinning operations will be intercepted by the vegetated "no-harvest" buffers and precipitate out rather than reach stream channels. These buffers will provide root strength sufficient to protect bank stability and prevent abnormal bank erosion that can contribute additional sediment to streams where it could become embedded in streambed gravels. No effects from sediment associated with road construction, renovation, use and decommissioning are expected either.

It is acknowledged in the EA (p. 63) that thinning will remove trees within a half site-potential tree height of streams which could result in a short-term reduction in available wood. This smaller diameter wood does not persist for long due to higher decay rates, however, and is more easily flushed from the system than large pieces. Current down wood will be reserved to provide for the short term, while density management will accelerate growth of large diameter trees to provide a long-term source of large wood for in-stream habitat.

The availability of pool habitat will be unaffected as no large wood will be removed from streams.

As described in the EA (p. 64), access to spawning and rearing habitat will be unaffected because road construction will be located on or near ridge tops, and will not involve construction or replacement of crossings that may act as barriers to fish passage.

As discussed in the EA (p. 65), direct effects to fish species from the harvest and hauling of timber could result from deposition of additional fine sediment and a temporary increase in turbidity. Density management is not expected to result in fine sediment reaching streams, however, because "no-harvest" buffers will filter out sediment from run-off. The effects of sediment generated by road related activities are expected to be so small as to not be measurable at the project scale.

For the aforementioned reasons it is not anticipated that the Deep Six Density Management project will not have any adverse effect on Essential Fish Habitat.

Water Quality

No measurable change in stream flows is expected in association with the Deep Six Density Management project because it involves only partial removal of vegetation on an area constituting only one-quarter of one percent of the total area of the Upper Middle Fork Coquille Watershed Analysis Unit. The project area is located below the Transient Snow Zone in the rain-dominated zone, so no peak flow effects associated with timber harvest and warm rain-on-snow events are expected.

The risk of new road construction influencing flows is also low. As described in the EA (p. 69), proposed road construction and reconstruction would consist of less than three miles in the Headwaters Middle Fork Coquille subwatershed and less than half a mile in the Twelve Mile Creek subwatershed. All new road construction will be sited on or near stable ridge tops and away from streams, and out-sloped to the greatest degree practical in lieu of the construction of ditch lines and installation of cross drains. Where out-sloping is not practical because of road grade, roads will be in-sloped and drain dips installed to assure that flow is dispersed onto adjoining slopes rather than concentrated in the drainage network. Consequently, the roads will be disconnected from the drainage network and have no potential for affecting stream flows.

Effects on sediment are addressed with respect to both thinning operations, and timber hauling. As discussed in the EA, (p. 70), "no harvest" buffers will prevent disturbance to stream channels and stream banks, and intercept surface run-off so that any sediment transported by overland flow will settle out before it reaches active waterways.

As described in the EA (p. 69), new roads will not be connected to the drainage network. Since road segments must be connected directly to stream channels in order to deliver sediment-laden water, these roads will not affect stream sediment. This eliminates potential effects on stream flow as water discharged onto forested slopes will infiltrate into the soil rather than run off.

As described in the EA (p. 63), to reduce the potential for sediment delivery from road surfaces along the haul route, ditch lines will be left vegetated where possible to filter sediment from road runoff, and water bars or drain dips will be installed where indicated to further route water off road surfaces and onto the forest floor.

As described in the EA (p. 70), variable width "no-harvest buffers" will conserve the vegetation that provides primary shade for stream channels. Consequently, stream shading will not be affected by density management and it is unlikely that stream temperatures will be affected in localized reaches, or cumulatively at the watershed scale.

Aquatic Conservation Strategy

Riparian areas, comparable to **Riparian Reserves**, have been designated on all perennial and intermittent streams in the Deep Six Density Management project area. Applicable management direction is being implemented. This includes: avoiding location of new roads and landings in riparian areas; minimizing disruption of natural hydrologic flow paths, including diversion of stream flow and interception of surface and subsurface flow; minimizing sediment delivery from roads; and maintaining fish passage at all road crossings.

The Deep Six Density Management project is not located in a **Key Watershed**, so no additional management direction applies.

As addressed in the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA (pp. 1, 18, 19, and Appendix D) recommendations and information from **Watershed Analysis** was considered and incorporated into the effects analysis. Additional information from Oregon Department of Fish and Wildlife Aquatic Habitat Inventory surveys was used, in conjunction with site-specific evaluations, in describing aquatic conditions.

As stated in the EA (p. 3) a primary objective of this project is achievement of LSRA objectives by protecting and enhancing conditions of late-successional forest ecosystems, which serve as habitat for late-successional and old-growth forest related species. Consequently, the project is considered a **Watershed Restoration** project, the only ACS component that is action-based, whereas the other objectives are location or process-based.

In consideration of these facts, and analysis in the Middle Fork Coquille 2007 Commercial Thinning and Density Management EA, it is my conclusion that the Deep Six Density Management project is consistent with the intent and direction for the Aquatic Conservation Strategy set forth in the 1994 *Record of Decision for Amendments* (ROD) *to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*, and the 1995 Roseburg District *Record of Decision and Resource Management Plan.*

Cultural/Historical Resources

Pedestrian surveys were conducted consistent with Oregon BLM/SHPO Cultural Resource Protocol. No cultural resources were identified and the Deep Dix Density Management project will have no effect on cultural and historical resources.

Noxious Weeds

All logging equipment, excluding log trucks and crew transport, will be pressure washed or steam cleaned prior to mobilization in and out of the project area to minimize the risk of introducing soil from outside the project area that may be contaminated with noxious weed seed or other propagative materials. Any equipment removed during the life of the contract must be cleaned before being returned to the project area.

Monitoring:

Monitoring of the effects of the proposed action, if implemented, would be done in accordance with provisions contained in the ROD/RMP, Appendix I (p. 84, 190, 193, & 195-199), and would focus on the following resources: Late-Successional Reserves, Water and Soils; Wildlife Habitat; Fish Habitat; and Special Status Species Habitat.

Protest Procedures:

As outlined in 43 CFR § 5003 – Administrative Remedies at § 5003.3 (a), protests may be filed within 15 days of the publication date of the timber sale notice. Publication of such notice on February 26, 2008, in *The News-Review*, Roseburg, Oregon, constitutes the decision date from which such protests may be filed. Protests shall be filed with the authorized officer and contain a written statement of reasons for protesting the decision.

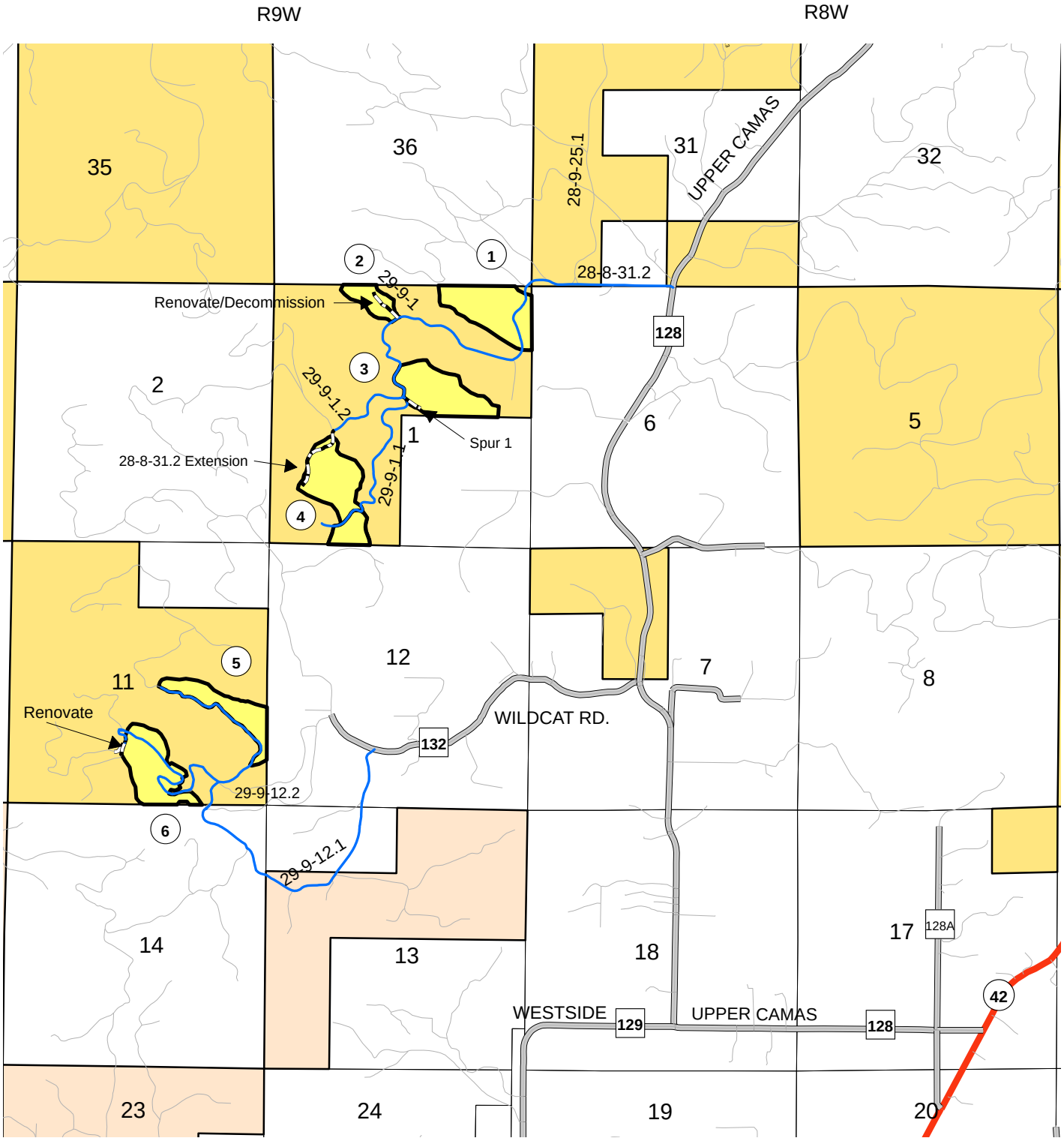
43 CFR 5003.3 subsection (b) states that: "Protests shall be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision." This precludes the acceptance of electronic mail or facsimile protests. Only written and signed hard copies of protests that are delivered to the Roseburg District Office will be accepted.

As set forth in 43 CFR 5003.3 subsection (c), protests received more than 15 days after the publication of the timber sale notice are not timely filed and shall not be considered.

_____ _____

Ralph Thomas Date
Field Manager
South River Field Office

DEEP SIX
DENSITY MANAGEMENT



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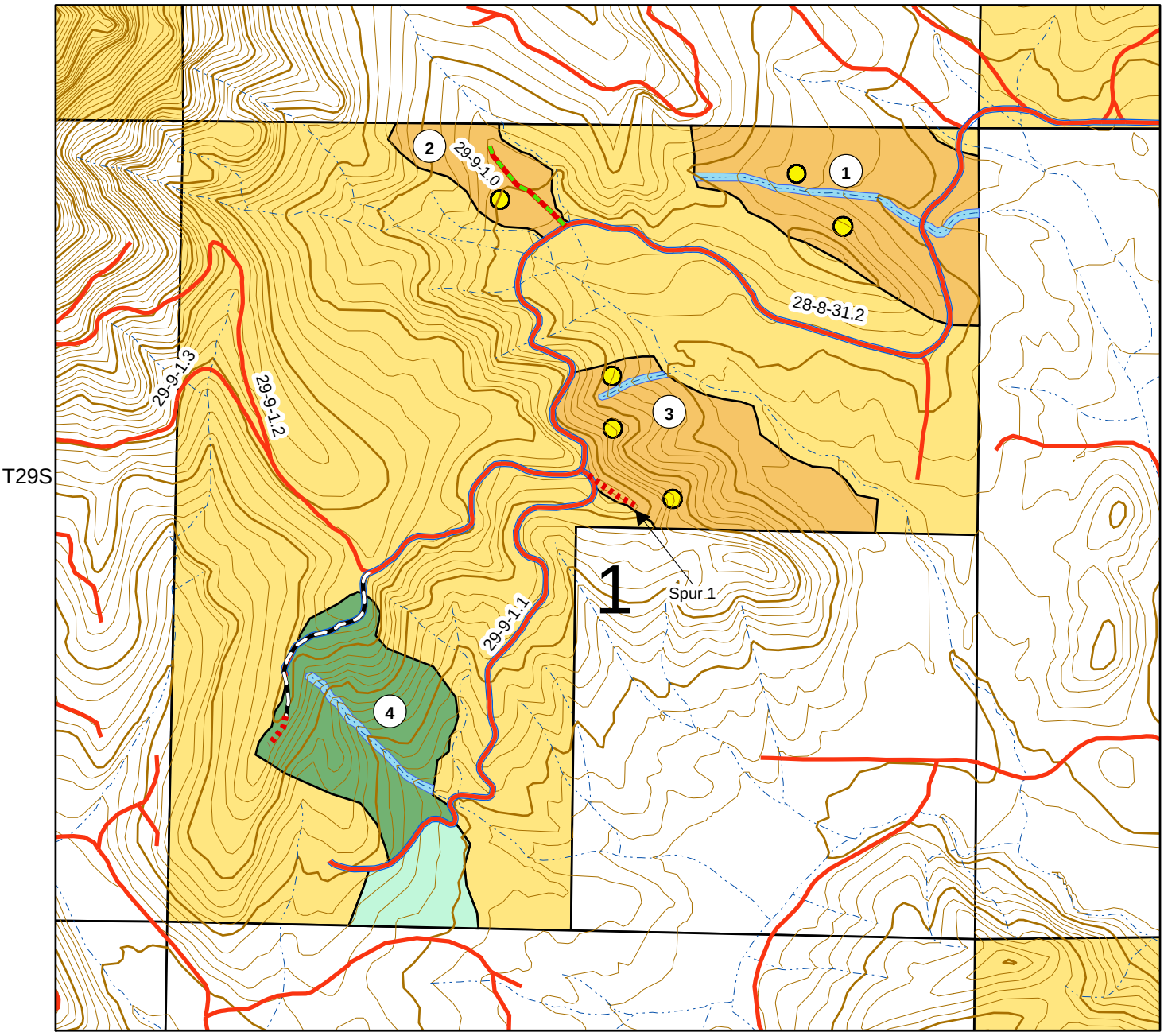
T29S, R9W
Willamette Meridian, Douglas Co., OR.

0 1 Miles

- Road Construction or Renovation
- Haul Route
- Existing Road
- Paved County Road
- HWY 42
- Density Mgmt Area
- BLM (Coos Bay Wagon Rd.) Land
- BLM (OC) Land
- Non BLM Land

1-16-2007

DEEP SIX
DENSITY MANAGEMENT



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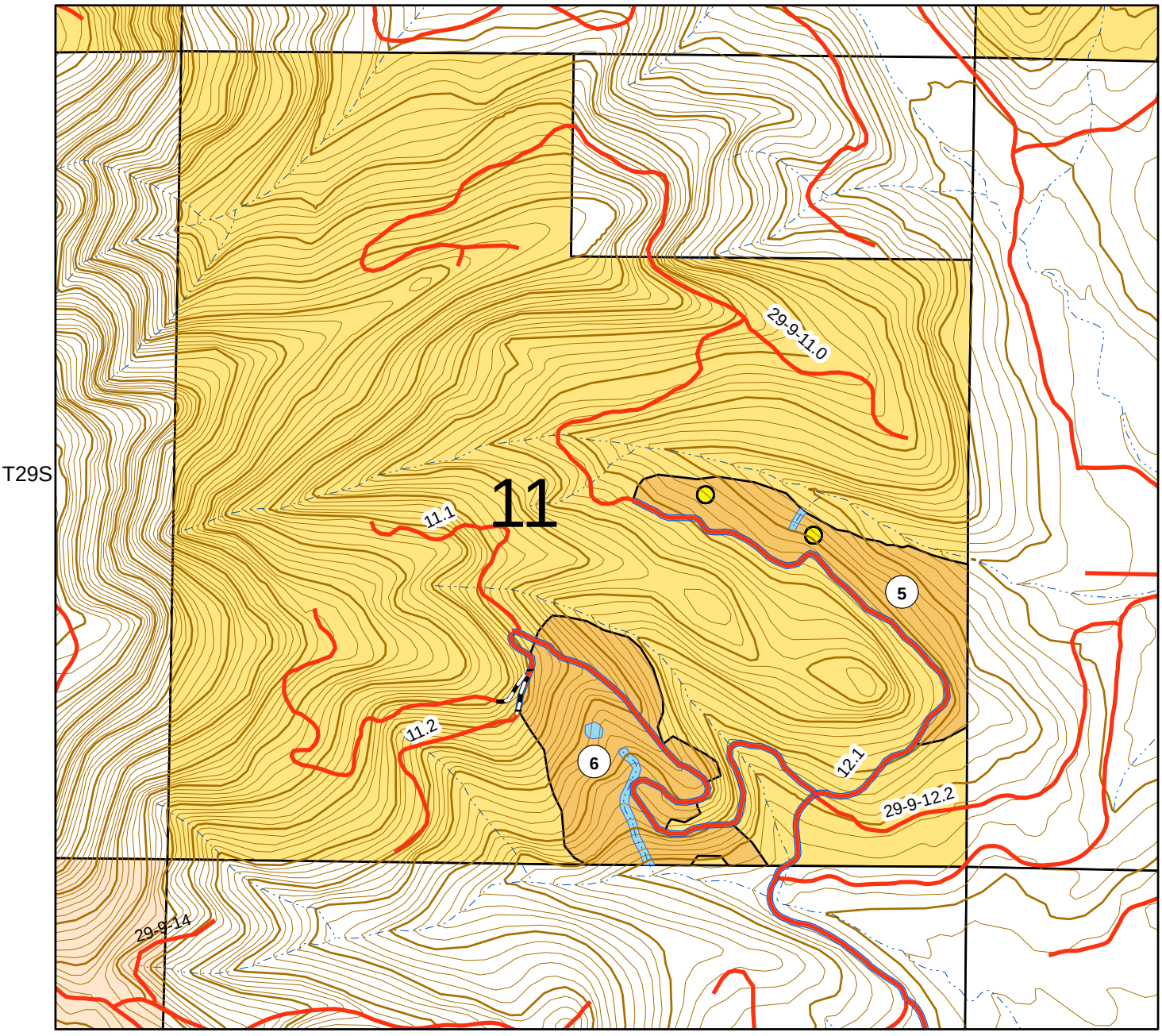
W E
S
T29S, R9W
Willamette Meridian, Douglas Co., OR.

0 1,000 Feet

Road to be Constructed and Rocked	1/4 Acre Openings
Existing Road to be Renovated,Rocked	Riparian Buffer
Temporary Road to be Constructed	Light Density Management
Haul Route	Moderate Density Management
Existing Road	Heavy Density Management
Stream	Non BLM Land
20' contours	BLM (Coos Bay Wagon Rd.) Land
	BLM (O&C Land)

DEEP SIX
DENSITY MANAGEMENT



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T29S, R9W
Willamette Meridian, Douglas Co., OR.

0 1,000 Feet

- Road to be Constructed and Rocked
- Existing Road to be Renovated,Rocked
- Temporary Road to be Constructed
- Haul Route
- Existing Road
- Stream
- 20' contours
- 1/4 Acre Openings
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- Light Density Management
- Moderate Density Management
- Heavy Density Management
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