



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

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### Memorandum

To: Jerry Perez, State Supervisor, Oregon and Washington Bureau of Land Management

From: *Acting for* State Supervisor, Oregon Fish and Wildlife Office  
Portland, Oregon *Jeffrey A. Dillan*

Subject: USFWS Comments on the Draft Resource Management Plan/Environmental Impact Statement for Western Oregon [OFWO Ref. # 15-764]

Dear Mr. Perez,

The U.S. Fish and Wildlife Service (Service) appreciates the opportunity to comment on the Draft Resource Management Plan/Environmental Impact Statement for western Oregon (DEIS). Our comments are provided pursuant to the National Environmental Policy Act (NEPA) 40 Code of Federal Regulations Part 1500-1508 and 43 C.F.R. 46.230. Our comments are also pursuant to the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.).

The Service would like to acknowledge the efforts of the Bureau of Land Management (BLM) to coordinate with the Service, among other Federal agencies and stakeholders, very early in the planning process to best provide an opportunity for our input and expertise to be considered during the planning process. This planning process has been collaborative and inclusive, and we believe that has and will produce a product that most effectively meets your purpose and need statement and will contribute significantly to the longevity of these revised plans.

Service employees have served on numerous teams and working groups, including the Cooperating Agencies Advisory Group, the terrestrial working group, the riparian technical working group and the manager's group. In addition to our comments on the DEIS we are also working with your staff on a Conservation Assessment and Conservation Review as part of the Section 7 consultation process. The Conservation Assessment is particularly valuable for addressing the conservation needs of those species whose ranges are small compared to the scale of the DEIS analyses. Many of those species are not addressed in the DEIS at a level of detail

that provides for an assessment of the impacts of the Resource Management Plan (RMP), which adds to the value of the Conservation Assessment/Review process.

### **Comments**

The BLM's purpose and need statement set the stage for an effective and defensible revision process. Although every agency's responsibility to contribute to the recovery of listed species is implicit in Section 7(a)(1) of the Endangered Species Act, BLM explicitly included as one of the purpose and needs, the "Conservation and Recovery of Threatened and Endangered Species." Using this as a foundation from which to work has provided the cooperating agencies a sturdy platform from which to participate in the process that allows us to meet our statutory goals.

The purpose and need statements have been interpreted by BLM to manage riparian areas exclusively for the benefit of listed fish and water quality. However, forested ecosystems provide substantial benefits for listed and non-listed terrestrial and semi-aquatic species, as well. While the Service has been an active member of the Riparian Technical Team, we believe this focus on aquatics has precluded opportunities for forest restoration projects in appropriate stands that would have otherwise been viable in a manner that would protect listed fish and water quality. To the extent BLM can manage riparian forests to restore homogenous stands and introduce heterogeneity, we believe this will improve stand conditions for many species, including the northern spotted owl (*Strix occidentalis caurina*) (spotted owl) and marbled murrelet (*Brachyramphous marmoratus*) (murrelet). We also believe this heterogeneity would improve the capacity for the riparian reserve to contribute large wood to the streams within the project area.

For comments specific to individual species, the Service contacted its species experts within Oregon and asked them to review the DEIS to see if there was enough information for us to proceed with section 7 consultation. If there was not enough information to comment on how the DEIS would affect their respective species, they were asked to note specifics about what should be added. Much of that specificity was developed during the more detailed Conservation Assessment/Review process; to the extent that the comments and recommendations we have made on the Conservation Assessment may inform the development of the FEIS, we will include those in this letter, as well. While the Conservation Assessment process addresses terrestrial species, the BLM, National Marine Fisheries Service and the Service are in the early stages of a similar process for aquatic species, termed the Early Review Process.

### Riparian Management and riparian-dependent species –

The Service does not support adoption of the Riparian Reserve strategy embodied in the Preferred Alternative, Alternative B.

The Service supports the riparian reserve approach embodied in Alternative A because it provides significant protection for stream shading, sediment delivery and aquatic species, while providing more opportunities for restoration forestry projects than the design in the other alternatives, including Alternative D. Specifically, allowing forestry activities outside of 50 feet from the stream on the intermittent, non-fish bearing streams for the benefit of large-wood production is an activity that the Service advocates as it is consistent with the restoration forestry recommendations in our Recovery Plan and Critical Habitat rule for the spotted owl, while also

providing benefits to listed fish and cold, clean water. Because we believe conducting these restoration forestry activities is important for riparian dependent species as well as older forest species such as the spotted owl and murrelet, we recommend the BLM structure the implementation of these activities in a manner that provides the best opportunity for them to be implemented. If using commercial timber contracts increases the likelihood of their implementation in a manner that increases the complexity of the stands while providing for large wood delivery to streams, we support that approach. If the BLM can set specific goals or targets for density management projects in appropriate stands outside the no-thin inner zones of the Alternative A riparian reserves, the Service supports that approach if it helps to ensure those projects will be paid for and conducted. If the BLM can bundle these projects in appropriate stands with nearby timber harvests, the Service supports that approach if it helps to ensure those projects will be paid for and conducted and as long as the association with the adjacent harvests does not change the design of the riparian reserve projects.

#### Natural Regeneration –

On pages 950 and 952 natural regeneration techniques are identified as an optional method for regenerating harvested stands. The Service applauds the incorporation of this practice as we believe it will lead to increasingly diverse and more natural stands in the long term. We realize this practice may increase the time necessary for a previously harvested stand to meet the dispersal and foraging needs of spotted owls. However, the structure of the resulting stands should provide a habitat benefit that outweighs that extended timeframe.

Page 952 states that up to 10 percent of the stockable stand may be left un-stocked. The Service encourages the BLM to consider a higher percentage available for natural regeneration for rare situations where up to 25 percent of the stockable stand may be desired to be left un-stocked.

#### Spotted owl –

We realize the pattern of BLM-managed lands make providing blanket connectivity across the landscape a challenge. However, the BLM has demonstrated in the DEIS the ability to facilitate this movement under two of the action alternatives and under the no action alternative scenario maps (pages 770-773). The Service recommends the BLM maximize the capability of the landscape to provide for spotted owl dispersal between the Cascades and the coast range, and between blocks of habitat within the coast range. The northern Coast Range is currently lacking in spotted owl habitat, and development of habitat for both resident and dispersing owls will help facilitate recovery.

Inclusion of structurally complex forest in the Late-successional Reserve (LSR) – The Service supports the definition of “Structurally-Complex Forest” included in the preferred alternative: “all stands identified by existing, district-specific information on structurally-complex stands.” In most or all cases the Service has been involved in the development of these district-specific plans and they are specific to the spatial changes in stand-type throughout the BLM’s ownership. We believe the inclusion of structurally complex forest in the LSR as defined by these district-specific processes and documents is consistent with the recovery of spotted owls and murrelets and we recommend the BLM adopt this definition.

### Effects to the spotted owl –

Our review of the potential impacts from each alternative, starting with the preferred alternative (Alternative B) follows. We also provide some line-specific comments following the discussion of each alternative.

### Alternative B/Preferred Alternative Background –

This alternative includes 556,335 acres in the harvest land base and 1,922,521 acres outside the harvest land base. An estimated 332 million board feet is estimated to be harvested in the first decade under Alternative B. Within the harvest land base 209,743 acres are also spotted owl critical habitat (38 percent of harvest land base is critical habitat). These critical habitat acres are distributed into the following timber harvest categories: Low intensity: 76,185 acres, Moderate intensity: 964 acres, and Uneven-aged: 132,594 acres. As of 2013, there were 283,635 acres of nesting/roosting habitat in the harvest land base (there is a high degree of overlap between the nesting/roosting acres and critical habitat). BLM’s decadal predictions of amounts of nesting/roosting habitat in the harvest land base show a net decrease of 9,300 acres of nesting/roosting habitat during the first decade, but increases in each subsequent decade (ranges from 273,945 acres in 2023 to 339,214 acres in 2063, currently at 283,635 acres).

**Table 1. Spotted owl critical habitat within the harvest land base under Alternative B.**

	Total Acres	Critical habitat (acres)	Percent critical habitat
Planning area	2,478,856	1,207,676	48
Harvest Land Base	556,335	209,743	38%
Moderate Intensity	210,087	964	<1%
Low Intensity	72,358	72,358	~100%
Uneven-aged	273,890	132,743	49%

Approximately 997,933 acres of spotted owl critical habitat are on BLM lands and not in the harvest land base (83 percent of critical habitat on BLM lands in the planning area is not in harvest land base, 17 percent is in harvest land base).

Under Alternative B, there are 175 known/historic spotted owl activity centers in the harvest land base. Of these sites, 48 (28%) have been documented as occupied in the most recent surveys (2013). Of the 175 known owl sites, 48 (28%) are at or above Recovery Action (RA)10 thresholds. Of the 48 occupied sites, 18 (38%) are at or above RA10 thresholds. These numbers indicate that many of the spotted owl sites in the harvest land base are currently deficient in habitat for spotted owls and less than 1/3 of the known sites in this region are currently occupied. Decadal projections of habitat change in the harvest land base indicate that the number of sites meeting RA10 thresholds increases for both occupied and total sites at each decadal increment. Under Alt B, the percent of the harvest land base that is comprised of nesting/roosting habitat decreases from 51 percent (283,635 acres) to 49 percent (273,945 acres) during the first decade,

but increases in subsequent 5 decades (57%-61%). These increases are the results of modeled ingrowth outpacing the effects of habitat loss to timber harvest and fire in the harvest land base.

In addition to the 175 known spotted owl territories on the harvest land base, there are an additional 663 spotted owl territories with activity centers outside the harvest land base but with 500 acre cores that overlap the harvest land base (a total of 838 spotted owl sites with core areas potentially impacted by harvest land base). There are 912 additional spotted owl territories with activity centers outside the harvest land base that have home ranges that overlap the harvest land base (a total of 1,087 spotted owl home ranges that overlap the harvest land base).

Within critical habitat, there are approximately 1,165 spotted owl sites (current and historic) that are at or above RA10 standards on BLM lands in the planning area (p. 822). The majority of these sites (1,027) are outside the harvest land base. Under Alternative B, this number increases to 1,200 in 2023, 1,270 in 2033, 1,290 in 2043, and levels off at 1,325 in 2053 under modeled projections.

On all BLM lands in the planning area, there are currently 1,450 spotted owl sites at or above RA10 thresholds. Under alternative B, this number increases steadily over time to 1,715 by 2063; however, this increase is less than the increases shown under Sub-alternative B, Sub-alternative C, and Alternative D.

In Alternative B, the harvest land base is located primarily in the southern Willamette Valley and Klamath Region. The Klamath Region is particularly important as a production area for spotted owls and with the Eastern Cascades-South, is one of the few areas showing relatively stable spotted owl populations over time.

Impacts to known spotted owl territories from timber harvest in the harvest land base are summarized in the following tables (data on harvest impacts provided by Eric Greenquist/Craig Ducey):

**Table 2. Number and percentage of spotted owl sites in the Alt B harvest land base experiencing a modeled harvest within their cores or home ranges by decade.**

**175 spotted owl sites occur in the Alternative B Harvest Land Base – these are the sites that are addressed in the summary tables below**

**138 (79%) of the 175 sites are in Critical Habitat**

**48 spotted owl sites had documented occupancy in most recent surveys (2013)**

**Within western Oregon, there are 838 spotted owl core areas (500 acres) that overlap the harvest land base for Alt B (this is 55 percent of the 1,505 owl territories on BLM lands). There are 1087 spotted owl home ranges that overlap the harvest land base for Alt B.**

**87,500**

**acres of core area in total**

<b>Decade</b>	<b>Cores (N=175 total activity centers in HLB)</b>	<b>Percent of cores affected by harvest (N=175)</b>	<b>Home Ranges (N=175)</b>	<b>Percent of Home Ranges affected by harvest (N=175)</b>
2013	0	0%	0	0%
2023	145	83%	171	98%
2033	140	80%	169	97%
2043	142	81%	167	95%
2053	132	75%	165	94%
2063	138	79%	164	94%

**Table 3. Acres of modeled harvest within spotted owl *cores* in the harvest land base by harvest type and decade for Alternative B.**

<b>Decade</b>	<b>Thinning</b>	<b>Selection (uneven- aged)</b>	<b>Salvage</b>	<b>Regeneration with Leave Trees (Two Age)</b>	<b>Total Acres (Nesting Roosting acres)</b>	<b>average acres impacted per core</b>	<b>average Percent of core affected</b>
2013	0	0	0	0	0		
2023	848	7,917	263	2,345	11,372 (3,963)	78	15.7%
2033	1,785	7,273	300	1,139	10,497 (4,453)	75	15.0%
2043	927	8,576	369	1,367	11,239 (5,218)	79	15.8%
2053	846	6,015	46	480	7,387 (3,847)	56	11.2%
2063	635	7,681	937	964	10,218 (4,944)	74	14.8%
Total Acres	5,040	37,461	1,915	6,295	50,712 (22,427)		

**Table 4. Acres of modeled harvest within spotted owl *home ranges* in the harvest land base by harvest type and decade for Alternative B.**

Decade	Thinning	Selection	Salvage	Regeneration with Leave Trees (Two Age)	total acres (Nesting Roosting acres)	average acres impacted per home range	Percent of HR (ave hr size of 4000 acres )
2013	0	0	0	0	0		
2023	2,473	19,971	1,199	5,438	29,081 (12,926)	170	4.3%
2033	5,013	18,282	827	3,042	27,164 (13,526)	161	4.0%
2043	3,923	20,500	1,546	2,841	28,809 (17,075)	173	4.3%
2053	2,881	18,494	410	2,240	24,025 (15,263)	146	3.6%
2063	2,697	19,871	2,979	2,170	27,717 (16,302)	169	4.2%
Total Acres	16,986	97,118	6,961	15,731	136,796 (75,091)		

NOTE: Acres in the cores are double counted in the home ranges.

Within the harvest land base, there are approximately 30,000 acres within spotted owl core areas and 126,000 acres within spotted owl home ranges. For these lands, 17,834 acres (58%) of the cores is currently (2013) nesting/roosting habitat and 56,705 acres (45%) of home ranges is currently nesting/roosting habitat. Decadal projections of habitat indicate that the net amount of nesting/roosting habitat in cores in the harvest land base will decrease by 579 acres during the first decade, but will increase each consecutive decade to a max of 23,099 in 2063. In home ranges, the net amount of nesting/roosting habitat decreases by approximately 500 acres during the first decade, but increases to a max of 74,125 in subsequent decades. Habitat increases are the result of BLM's modeled ingrowth exceeding habitat loss from timber harvest, fire, or disease.

## **Hexsim Predictions for Alt B.**

The Hexsim results clearly indicate that barred owl (*Strix varia*) presence is currently the driving force behind the observed declines in spotted owl populations over time. With the exception of the Klamath and East Cascades South areas, population declines are substantial under all scenarios (Alt A-D, no action, and no timber harvest). The Service has identified that both habitat conservation and some manner of mitigating barred owl impacts on spotted owls are necessary if spotted owl recovery is to be achieved.

**Population Sources (analysis conducted on no harvest alternative)** - This analysis indicates that the Klamath region and portions of the Coast Ranges are important sources for spotted owl production on BLM lands.

### **Population models/trends**

For most modeling regions, barred owl effects are swamping the effects of habitat changes, resulting in spotted owl populations showing steep population declines under all alternatives, the no action alternative, and the no timber harvest scenario. It is important to note that population projections for modeling regions are influenced by all lands containing spotted owl habitat within that region, not just BLM lands. When barred owl encounter rates are reduced (under the assumption of some type of management), populations show more stable trend in the north coast-Olympic (NCO), Oregon coast range (OCR), Klamath-Siskiyou west (KLW). For the other regions, the modified barred owl rate is either no change or an increase from the current rate, so population performance is not improved; however, for the more southern areas, spotted owl populations are not showing the level of decline that they are in northern areas.

East Cascades South (ECS), Klamath-Siskiyou West, and Klamath-Siskiyou East (KLE) modeling regions are the only regions that show substantial differences in spotted owl population performance among the alternatives (all alternatives plus no action and the no harvest scenario). It is worth noting that both BLM lands and the harvest land base make up a greater proportion of spotted owl habitat in the southern modeling regions (KLW, KLE, ECS) than the northern regions, where Forest Service and private ownership comprise more of the land base. These areas are also the areas with the smallest spotted owl population declines over time, with some areas actually showing increases.

In East Cascades South, Alt B performs less well than Alternative A, Sub Alternative B, Alternative C, Sub Alternative C., and Alternative D. In this region, Sub Alternative B had the best population performance.

In Klamath West, Alternative B, Sub Alternative B, Alternative C, Sub Alternative C, and Alternative D all performed similarly. Alternative A performed less well.

In Klamath East, Alternative B performed less well than Alternative A, Sub Alternative B, and Alternative D. Alternative C performed less well.

The HexSim results suggest that these modeling regions (ECS, KLW, KLE) currently have the most robust spotted owl populations and are thus very important for spotted owl recovery.

## FWS analysis of Alternative B –

There is a large amount (209,743 acres) of spotted owl critical habitat that may be impacted by low intensity or uneven-aged timber management under Alternative B. Total amounts of nesting/roosting habitat within the harvest land base show a decrease of 9,300 acres in the first decade (2023), but increase in each successive decade (2033-2063). Impacts during the first decade are concerning because spotted owl populations are currently declining at a high rate across the range of the species. Actions that threaten the continued occupancy and demographic performance of existing owls will have negative effects on recovery.

In the planning area and in harvest land base, the modeled predictions of spotted owl habitat show an increase in spotted owl habitat over time, and habitat increases are greater than the no action alternative. In addition, large blocks of suitable habitat are developed and maintained on the landscape under Alternative B. Decadal changes in habitat in known sites and across the planning area show overall increases in habitat over time, following a decrease of approximately 9,300 acres in habitat during the first decade.

The spotted owl sites within the harvest land base are important to spotted owl recovery. Most of these sites are in the Klamath region, which is one of the few source populations for spotted owls. A number of the areas of high spotted owl production are designated as LSR (Chapter 3, p. 801) which will aid in spotted owl recovery; however, many acres within the harvest land base are also high production areas for spotted owls. Additionally, many of these sites are currently deficient in habitat (less than 50 percent suitable habitat in core, 40 percent in home range). Of the 175 owl sites in the harvest land base, only 48 (28%) currently meet RA 10 thresholds. While there are 175 spotted owl territories with site centers located on the harvest land base, there are total of 838 spotted owl territories with core areas that overlap the harvest land base. Actions that decrease spotted owl occupancy/ demographic performance on these sites will have negative consequences for spotted owl recovery and timber harvest within spotted owl core areas and territories is expected to negatively impact population performance. Overall, habitat projections indicate that suitable spotted owl habitat should increase across most of the harvest land base over the next 5 decades. If timber management actions do not substantially decrease site occupancy or demographic performance (recognizing that potential barred owl management is expected to have a strong influence on outcomes), overall effects of timber management on spotted owls may not be great. However, the modeled impacts on spotted owl territories indicate that there will be significant impacts to a large number of spotted owl core areas and territories each decade in the harvest land base.

Of the 175 site centers in the harvest land base, 98 percent will be impacted by timber harvest and 83 percent of the core areas of these territories will also be impacted. It also appears that impacts will be disproportionately heavy on core areas relative to home ranges. While selection harvest (uneven-aged) and thinning are likely to promote development of future habitat, the short-term effects will be a reduction in suitable habitat within the affected owl territories and many of these home ranges are already deficient in suitable habitat (see above). The most recent surveys (2013) indicated that 48 of the 175 known territories were currently occupied. During the first decade (2013-2023), 83 percent of the total owl core areas were predicted to be affected by timber harvest. If this percentage is applied to known occupied territories, 40 of the 48 occupied territories would be affected by timber harvest. These actions have high potential to result in site abandonment or to prevent re-occupancy at these sites if they are not currently

occupied. Of the 175 sites within the harvest land base, 138 (79%) are also within spotted owl critical habitat.

There are a large number of spotted owl sites (N=663) with activity centers outside the Harvest land base (HLB) but with core areas overlapping the HLB that may be impacted by timber harvest. Additionally, there are 912 spotted owl home ranges with activities centers outside the harvest land base with home ranges that overlap the harvest land base.

This assessment identifies impacts to nesting/roosting habitat within the activity centers in the harvest land base. Effects to foraging habitat, however, have not been specifically addressed.

Modeled changes in amount of habitat within core areas and home ranges suggests that the cumulative impact on habitat within existing spotted owl sites in the harvest land base will be minimal over time. However, these numbers represent net change (harvest, fire, ingrowth) in habitat acres across the harvest land base, not how much may be harvested within individual owl sites. Harvest predictions within known owl territories indicate approximately 136,796 acres (29,081 in first decade) of harvest will occur in known owl territories over the next 5 decades. The reported net loss of 500 acres of nesting-roosting habitat during the first decade seems at odds with the amount of harvest that will occur within nesting-roosting habitat.

A key question is whether barred owl management can be used to recover spotted owl populations and to potentially offset the effects of habitat loss. We do not yet have the answer to this question. If barred owl management can be successfully implemented, overall population performance of spotted owls in the planning area could be enhanced under Alternative B if more sites become successfully re-occupied than are lost as a result of timber harvest. Population models show that without a reduction in barred owl effects, spotted owl population will continue to decline under all scenarios, including no timber harvest. In areas where barred owls are present, spotted owls have been shown to have stronger demographic performance in areas with greater amounts of suitable habitat (Wiens et al. 2014). We encourage maintaining and developing suitable spotted owl habitat across the range of the species to the maximum extent possible. Of particular importance are currently occupied sites and sites that have a high probability of reoccupancy with barred owl management. Maintaining sufficient suitable habitat across the landscape is essential for barred owl management to be a successful recovery strategy.

The other Alternatives –

### **Alternative A**

This alternative has 343,900 acres in the harvest land base and 2,134,856 acres not in the harvest land base. Within the harvest land base 1,982 acres are also spotted owl critical habitat (<1 percent of harvest land base is critical habitat). These critical habitat acres are distributed as follows: High intensity: 1,492 acres, Uneven-aged: 561 acres. There are fewer owl sites in the harvest land base (59) and fewer acres of nesting/roosting habitat (155,154 acres) than for Alternative B. Population performance is similar to or better than Alternative B in modeling regions where there is a detectable difference between alternatives. While fewer sites are impacted, less habitat develops over time under Alternative A relative to Alternative B.

### **Sub Alternative B**

Sub alternative B is identical to Alternative B except that it includes protection of habitat within the home ranges of known and historic spotted owl territories. For spotted owl conservation, this

alternative is the most effective choice. Maintaining existing spotted owl territories and habitat provides the best opportunity for recovery if barred owl effects on spotted owls can be reduced. In addition, sub-alternative B also provides the best east-west owl dispersal between the Coast Range and Cascades. While we realize that this is not the preferred alternative, we recommend adoption of these conservation measures wherever possible, particularly in currently occupied spotted owl sites. We also recommend prioritizing the retention of sites occupied by reproducing pairs while focusing timber harvest in unoccupied sites.

### **Alternative C**

Alternative C has the largest harvest land base of the alternatives (30%) with 553,857 acres of high intensity timber area and 184,715 acres of uneven aged management. There are 273 known and historic spotted owl territories in the harvest land base. Amount of nesting-roosting habitat within the harvest land base would decrease from 410,225 acres in 2013 to 330,306 acres in 2063. High intensity timber harvest is not consistent with maintaining spotted owl habitat or site occupancy. This is the least desirable alternative for spotted owl conservation and recovery.

### **Sub Alternative C**

Sub alternative C is identical to Alternative C, except that all stands over 80 years are included in the late-successional land allocation. This reduces the harvest land base from 741,332 acres in Alternative C to 495,507 acres in Sub alternative C. This alternative provides more protection for spotted owls than Alternative C. However, high intensity timber harvest is still the largest component of the harvest land base which is less compatible with spotted owl conservation than moderate intensity, low intensity, or uneven-aged management.

### **Alternative D**

Alternative D has the smallest amount of late successional reserves among the alternatives. In addition to uneven aged and moderate intensity timber areas, this alternative also includes owl habitat areas where timber harvest would be conducted in manner that maintains spotted owl habitat functions. It remains unknown how effective such timber management practices are at maintaining spotted owls in forested landscapes. The majority of studies that have examined impacts of timber harvest have found short-term negative impacts on both spotted owls and the small mammal species that comprise their diets.

BLM RMP – Line-Specific Comments

### **Volume 1**

Page xxxii – Summary

Summary statement indicates that spotted owl populations in the western Cascades and Klamath basin would have stable populations over the next 50 years. However, population levels do vary across the alternatives, and given the current dire situation this species is in, even relatively small differences among alternatives could have significant impacts on the viability of spotted owl populations in the Pacific northwest.

## Chapter 2 – Alternatives

The maps in Chapter 2 are difficult to use for evaluating timber management actions in the Klamath/West Cascades region. It would be helpful to keep the colors consistent across all maps. For example, if dark brown is used for high intensity timber management areas in Alt A, continue to use dark brown to represent high intensity management areas in all other alternatives. Access to shapefiles online is very helpful for being able to evaluate the different alternatives. Thank you for providing these.

## Volume 2

### Chapter 3 – spotted owl

#### Page 746 – Key Points

Although all alternatives MAY contribute to self-sustaining spotted owl populations in the western Cascades (see my note further down about western cascades – it does not meet the definition of a stable population) and Klamath basin, levels of risk do vary across alternatives. Barred owls are the driver of spotted owl population dynamics under current conditions; however, habitat remains of key importance for recovery.

The figure captions in this section are very difficult to follow which makes comparisons across alternatives difficult. It is difficult to track which figure number goes with each figure (particularly when there is a series of figures within a particular number). Each figure should have the modeling region and the year clearly displayed on the figure itself. If there is more than one image in a figure, it would be helpful if they were labeled a,b,c, etc. and clearly identified in the figure header. It would also be helpful to keep the line symbols the same for each alternative across all graphs (e.g. if you use a dashed line for Alt A on the first figure, use a dashed line for Alt A on all the figures in this section).

#### Page 779 – Barred owl encounter rates

The second paragraph of footnote 2 should read “The U.S. Fish and Wildlife Service is removing barred owls from four (not three) areas in California, Oregon, and Washington to evaluate the feasibility....”

Entire chapter – there are no estimates of variance for any of the modeled population numbers. It’s important to provide some measure of variation in these estimates from HexSim models.

#### Page 785 – North Coast and Olympic

Spotted owl populations show dramatic declines for all alternatives under current conditions. Reducing barred owl effects does have a significant (we assume since there are no confidence intervals) positive effect in many modeling regions.

#### Page 786 – Oregon Coast Range

Very similar to NCO, but reduced barred owl effect is greater (amount of reduction in barred owl encounter rate was also greater).

### Page 787 – West Cascades

How did BLM come to the conclusion that populations in the western Cascades would be stable? Stability is a description of the trend, not total numbers (which are still relatively high after 50 years compared to other regions). This area is declining at a very steep rate. It is not accurate to say that it is stable. The “modified barred owl encounter rate” is not significantly different than the current rate.

### Page 788 – East Cascades South

Appears stable under current conditions; however current conditions will likely change when the new meta-analysis comes out. We expect the pattern to look more like the modified barred owl rate graphs (e.g. higher barred owl effect). The modified barred owl encounter rate for this region was 6 percent higher than the current rate and showed a substantial decline in spotted owl populations over time.

### Page 789 – Klamath West, page 790 Klamath East

Klamath West is the only region that shows population increases over time under current barred owl effects. Modified barred owl encounter rate is 6 percent lower than current rates, and spotted owl populations show substantial increases under the modified rate. Klamath East shows signs of stabilizing over the next 40 years at a somewhat lower level. The modified barred owl rate is not substantially different than the current rate.

Maintaining healthy spotted owl populations in these 2 regions will be key for spotted owl recovery.

### Page 822-823 – Issue 1, Affected Environment

Overall changes in numbers of spotted owl sites meeting RA 10 guidelines for nesting/roosting habitat (RA 10) and changes in amount of “strongly-selected for” habitat in critical habitat (relevant to RA 32) are presented in Chapter 3. Under Alternative B, both show steady increases in amounts of habitat designated critical habitat over time. These analyses were for the entire planning area rather than the lands within the harvest land base.

### Management objectives and direction – Appendix B

The Management Objectives and Direction for the preferred alternative (pgs. 949-951) include language under low-intensity timber area (LITA) and moderate-intensity timber area (MITA) about protecting conifer stands and all spotted owl nesting-roosting habitat within nest patches and home ranges, respectively. Each of these “directions” is followed by “(high vs. low).” To our knowledge, “high vs. low” is not defined in the document. What that means, according to your staff, is that this direction (the retention of habitat) would be part of Sub-Alternative B, but not part of the Preferred alternative. The retention of this habitat within spotted owl nest stands, cores and home ranges would provide substantial benefits to the value and functionality of known spotted owl sites, although the fate of these areas is not clear given the language and apparent lack of clarity of what the verbiage means. We believe this could give the reader a false understanding of the effects of the Preferred alternative on spotted owls.

Alts A and C do not specifically address spotted owl habitat in the harvest land base. The section for Alternative B provides a description of many spotted owl habitat protection measures, but I was later informed that these apply only to Sub Alternative B. The text in Appendix B implies that these measures apply to Alt B.

Page 949 – Management direction for LITA

A nest patch is generally delineated with a 300-meter radius circle, but this says 200-meter. Please correct in all places where 200-meter radius circle is used in the document.

Page 950 – Management direction for LITA

In the LITA BLM will retain 15-30 percent of pre-harvest basal area, but when Riparian Reserves make up  $\geq 10$  percent of the stand area, BLM will retain near the lower end of this range.

It's not clear why Riparian Reserve (RR) acres are being included in this calculation just because the pre-harvest stand is within both the HLB and the RR. The better the condition of the stand that is part of the RR the less of its components will be retained in the HLB as the legacy for future stands where they are most needed. This will result in a more dramatic transition between RR and HLB which may reduce the quality of the riparian reserve. Spotted owls nest disproportionately in riparian areas and when their nest stands stretch outside the RR into the LITA, they will be more heavily impacted because the stand condition crosses that border. This seems inconsistent with promoting the longevity of those spotted owls in a reserved land allocation. While the goal of the RR is primarily for the benefit of listed fish and water quality (see our comments above) the benefits to terrestrial species of this land allocation should not be under-valued.

Page 950 – Management direction for LITA

The Service recommends incorporating recovery action 12 from the spotted owl recovery plan into the RMP. RA 12 reads:

- ***Recovery Action 12: In lands where management is focused on development of spotted owl habitat, post-fire silvicultural activities should concentrate on conserving and restoring habitat elements that take a long time to develop (e.g., large trees, medium and large snags, downed wood).***

Where BLM lands overlap critical habitat the Service believes there is value in maintaining these legacy components on the landscape as long as possible. Spotted owls are known to use burned areas and the down and standing dead trees contribute to the spotted owl prey base. In addition, these burned areas would be perfect opportunities to allow for natural regeneration to create diverse early seral habitat.

Page 951 – Management direction for MITA

In the MITA BLM will retain 5-15 percent of pre-harvest basal area, but when Riparian Reserves make up  $\geq 10$  percent of the stand area, BLM will retain near the lower end of this range.

As with our comments above regarding the LITA, this standard seems incongruous and we do not understand why riparian reserve acres influence the harvest unit prescription.

Page 962 – Snags and Down Woody Material

We recommend setting snag and down woody material levels based on plant association groups instead of a one size fits all approach. The listed retention levels seem much lower than what are recommended for the Oregon coast range portions of the Salem, Eugene, Roseburg and Coos Bay districts.

The Service looks forward to continuing to work with the BLM to find ways to minimize the effects of timber management on spotted owls within the planning area through this planning effort and into the future.

Red Tree Vole –

The Service strongly recommends that, within the north Oregon coast distinct population segment of the red tree vole (*Arborimus longicaudus*), BLM carry forward into their RMP the existing management that they are doing for the red tree vole under the Survey and Manage standards and guidelines of the NWFP. That is, doing pre-project surveys, identifying high-priority sites to provide a reasonable assurance of species persistence, and implementing existing red tree vole management recommendations that are regularly updated as new information is received. In our status review of the red tree vole, the Service determined that the species warranted listing under the Endangered Species Act but that listing was precluded by higher priority listing actions. In that review, we concluded that the reinstatement of the 2001 Survey and Manage standards and guidelines contributed to red tree voles and their habitat and that existing regulatory mechanisms (i.e. application of the 2001 survey and manage standards and guidelines) were adequate to provide for tree vole conservation on federal lands where they occur within the distinct population segment (FR 76, 63720, October 13, 2011, p. 63747). Substantially deviating from that management will likely increase threats to red tree voles in a part of their range where they are rarely found and where much of the surrounding landscape is not managed in ways conducive to tree vole persistence. We realize the BLM may not decide to incorporate a “Survey and Manage” program in its RMP; we are only suggesting that for this species the *approach* from the Survey and Manage program be applied to red tree voles.

Page 738, second paragraph under “Background” heading. There is new and published information on tree vole home ranges that should be added (Swingle and Forsman 2009).

Page 739, bottom incomplete paragraph. BLM says it forecast the number of stands occupied by red tree voles in the future by applying observed detection rates and mean size of occupied stands against the acreage of habitat in the harvest land base. However, the description of this process in the following 2 paragraphs does not follow, because you mention nothing about occupied stand size, but bring in a new variable, survey polygons, which is not explained and its relevance and place in this analysis is unclear.

Page 740, first full paragraph, first sentence. Does a 22.9 percent detection rate mean that 22.9 percent of the surveyed area had signs of tree voles, or that there was a 22.9 percent probability of detecting a vole if it was present?

Page 742, last paragraph, first sentence. BLM states there are 395 red tree vole observations. Are these truly observations of red tree voles, or of nests? Should be explicit throughout the document as to whether you are talking about voles, nests, or nest sites.

Page 962, 2<sup>nd</sup> open bullet under first solid bullet. BLM notes activities that are prohibited within tree vole habitat areas, but there is an extensive amount of work that is found within BLM's existing red tree vole management recommendations document (Forest Service and Bureau of Land Management 2000, entire) that should also be considered when managing red tree vole habitat areas and be incorporated into the final RMP. Same comment for the analogous bullet on page 983.

Page 962, 3<sup>rd</sup> open bullet under first solid bullet. BLM states that identified habitat areas may be designated as non-high priority and released for management direction if they occur south of Highway 20. Is there a process described in the RMP for determining how that designation would be made? Does this alternative incorporate the existing high-priority site processes currently used for red tree vole? The way this is written, it sounds like all sites would be released from management for red tree voles, which begs the question of why do the surveys in this area to begin with. Such a widespread release is of concern to the Service. Instead, we advocate for the existing process of retaining all sites as high priority (with case-by-case exceptions being made per BLM Instruction Memorandum No. OR-2012-036), and further developing a more purposeful assessment of the landscape to identify high-priority sites based on local understanding of such things as habitat condition and distribution, tree vole occurrence and distribution, and potential trends in tree vole habitat development or retention. Same comment for the analogous bullet on page 983.

#### Listed suckers –

There is very little information regarding the shortnose and Lost River suckers (*Chasmistes brevirostris* [SNS] and *Deltistes luxatus* [LRS], respectively) in the DEIS. The majority of the Service's comments are expected to be conveyed during the Early Review process.

Regarding the following statement: "very limited ability to affect these non-salmonid and resident salmonid fish species or their critical habitat through forest management, infrastructure maintenance, or habitat manipulations" (Page 218). This assertion is made because only 4.3 percent of critical habitat of the shortnose sucker (SNS) is on BLM lands. The Service believes more analysis is required here for a couple of reasons.

1. This quote mentions effects to the species and critical habitat, but the conclusions drawn only reference critical habitat.
2. The specific population of interest here is Gerber Reservoir in southeastern Klamath County. The reservoir and its tributaries are critical habitat for the SNS, and the area surrounding the reservoir is nearly entirely managed by BLM. This population of SNS is one of only three spawning populations remaining, providing important redundancy to

the species. In numbers, the BLM may have the ability to affect 33 percent of all spawning SNS populations.

3. The table referenced to support the exclusion of suckers from the analysis only includes miles of critical habitat. This appears to ignore the acreage of critical habitat for SNS in the reservoir. This reservoir likely comprises a small percentage of all SNS lake critical habitat, but it should be addressed because of its relative importance and because BLM management practices could affect this population of SNS even if the amount of stream critical habitat is relatively low.

On page 217 and in the literature cited section, the Klamath sucker Recovery Plan is cited with a 2012 date. This should actually be 2013.

#### Western Snowy Plover –

Under the Preferred Alternative of the Draft RMP, recreational activities, including the use of motorized vehicles, would be allowed in beach habitats occupied by western snowy plovers (*Charadrius alexandrinus nivosus*) (snowy plover). As the BLM acknowledges, the use of vehicles on beaches may adversely affect snowy plovers and their habitat. Vehicles can displace and sometimes kill foraging, roosting, brooding, or incubating adult snowy plovers. In breeding habitat they may cause destruction of eggs, chicks, and adults, abandonment of nests, and considerable stress and harassment to snowy plover family groups (Warriner et al. 1986, p. 25; Stern et al. 1990, p. 13; Fish and Wildlife Service 2007, p. 65). Since snowy plovers roost and spend time in sand depressions, including tire tracks (Fish and Wildlife Service 2007, p. 66), chicks that are unable to climb out of them are more vulnerable to the repeated use of tracks by vehicles. At wintering sites, disturbance from motorized vehicles may harass snowy plovers and disrupt their foraging and roosting activities, thereby decreasing energy reserves needed for migration and reproduction (Fish and Wildlife Service 2007, p. 66). Vehicles on coastal dunes may be destructive to dune vegetation, especially sensitive native plant species. They may affect remote stretches of beach where human disturbance would otherwise be slight if access were limited to pedestrians.

To adequately protect snowy plovers at the two sites where BLM lands support the species (the New River Area of Critical Environmental Concern [ACEC] and the Coos Bay North Spit [CBNS]), the Service recommends the BLM include a set of conservation measures in its RMP. These measures are largely excerpted from two existing consultations on BLM actions at both the New River ACEC and the Coos Bay North Spit (Fish and Wildlife Service 2008 and 2011), and represent either project design criteria, best management practices, conservation recommendations or terms and conditions included in those consultations. These measures represent current BLM management in these areas and we believe they are consistent with the conservation and recovery of the snowy plover in Oregon. These recommendations, nor the inclusion of them in the BLM's RMP, do not in any way alter those existing consultations or the BLM's responsibility for adhering to the proposed action, the reasonable and prudent measures or terms and conditions contained in them. These conservation measures are:

## **Coos Bay North Spit**

Nesting Season Management (March 15 to September 15) –

### Dry Sand Management

The BLM should coordinate with the Oregon Parks and Recreation Department (OPRD) to implement seasonal beach restrictions from 15 March to 15 September of every year on 1.5 miles of the Ocean Shore Recreation Area for protection of the snowy plover on South Beach approximately one mile north of the Coos River North Jetty north to 2.5 miles north of the jetty. The following seasonal beach restrictions should apply:

- Public use will be prohibited from the dry sand portions of the ocean beach. The wet sand portion of the beach is open to all visitors on foot and horseback, but all dogs should be on leash;
- Place signs delineating the closed area at each end of the closure on the beach during the snowy plover nesting season;
- Rope off the dry sand portion of the ocean beach that is under BLM jurisdiction from the Federal Aviation Administration (FAA) tower south to the Corps of Engineers boundary to clearly define seasonal closure and place decaled posts reading “No Entry Beyond This Point” approximately every 100 feet;
- Locate informational signs and maps related to the snowy plover restrictions at the three entry points from the Foredune Road to the beach north of the snowy plover nesting area;
- Portions of the BLM-administered beach outside of the restricted nesting area can remain open to public use year round, including street-legal vehicles (i.e., north of the FAA tower);
- If snowy plovers nest on the beach north of the FAA tower, the dry sand portion of the beach within 0.25 miles of the nest should be closed to all public entry while the nest is active.

### Inland Habitat Restoration Area Management

The BLM should implement seasonal beach restrictions from 15 March to 15 September on three inland Habitat Restoration Areas (HRAs) for protection of the snowy plover. These include approximately 72 acres located on the 1995 HRA (27 acres), 1998 HRA West (21 acres), and 1998 HRA East (24 acres). The following seasonal beach restrictions are needed:

- The Foredune Road, South Dike Road and Bayside Road are open year-round to All-Terrain Vehicles and street legal vehicles excluding the 0.9-mile section of the Foredune Road that bisects the HRAs during the snowy plover nesting season. The 0.5-mile reroute around the HRAs also remains open year-round;
- Vehicles are prohibited in the HRAs year-round;
- The perimeter of BLM HRAs will be signed and closed to all public use during the nesting season with decaled posts placed 200 to 300 feet apart;

### Administrative Use

Exceptions to the above mentioned beach access restrictions allow for permitted personnel including law enforcement officers and uniformed agency personnel to conduct snowy plover management activities associated with monitoring and compliance and the maintenance of ropes and signs. Personnel should conduct activities in accordance with the following limitations and responsibilities, as described in the biological assessment:

All BLM Personnel should:

- Keep vehicular access to the absolute minimum required to manage the area;
- Restrict vehicular use is to the lowest part of the beach at speeds of 15 mph or less;
- Prohibit vehicle use inside the dry sand closure;
- Strictly prohibit all vehicles within the HRAs;

BLM Law Enforcement Officers (LEOs) should:

- Patrol the North Spit as availability allows;
- Adjust the number of patrol hours up or down to correspond to periods of highest recreational use and on holiday weekends;
- Collect data on visitor use and compliance on standardized forms when violations are observed;
- Be assisted periodically by Coos County law enforcement officers, Forest Service rangers, and State Police; and
- Cite and issue warnings, when deemed appropriate, to visitors that are not in compliance with posted regulations.

BLM Compliance Monitors should:

- Patrol the North Spit as availability allows spending the majority of time in the proximity to snowy plover areas;
- Adjust the number of patrol hours up or down to correspond with periods of high or low snowy plover nesting activity (peak activity is usually June to late August);
- Schedule patrols to minimize overlap with LEO patrols in order to maximize BLM presence on the North Spit;
- Collect data on visitor use and compliance on standardized forms, record violations and alert LEOs when violations are observed;
- Perform public outreach by talking with the public about snowy plover biology and seasonal closures;
- Distribute maps of the North Spit, and
- Perform routine maintenance of signs, ropes, and other barriers.

The BLM should implement the following measures:

1. Avoid disturbance and minimize potential loss of nests or nesting snowy plovers:
  - a. Ensure efforts to manage recreation are enforced and effective through the following measures:

- i. Work with state Oregon Parks and Recreation Department to address high number of vehicle violations on South Beach during the nesting season.
  - ii. Ensure that individuals who patrol beaches, including law enforcement officers and volunteers, are trained in snowy plover biology and the measures required to reduce potential harm or disturbance to snowy plovers. Ensure that staff participate in law enforcement/snowy plover training and coordination meetings whenever available (e.g. workshops, refresher courses, video training).
  - iii. Compliance monitors/seasonal Interpretive Specialists shall continue to inform law enforcement personnel about the location of snowy plover nests and activities. Officers should focus their attention and time on areas where snowy plovers may be particularly vulnerable.
  - iv. Continue to work with the snowy plover working group and the law enforcement subcommittee to improve signage and resolve law enforcement issues.
- b. Monitor and evaluate compliance of recreation through the following measures:
- i. Monitor compliance with recreational restrictions and continue to collect data on standardized forms for comparison between years.
  - ii. Reduce impacts to snowy plovers by targeting efforts based on visitor compliance data (i.e., number or percent of violations relative to number of people/dogs during the course of the breeding season).
  - iii. Integrate annual compliance monitoring information into the upcoming year's management strategy.
  - iv. Ensure nests outside roped areas are protected. Either rope and sign the exposed nest, or contact the Service immediately to determine if any protection strategy is necessary.
2. Reduce impacts on foraging and resting snowy plovers and broods through the following measures:
- a. Disseminate information about the restrictions prior to March 15 of each year over the term of the proposed action.
  - b. Continue to conduct public outreach during compliance patrols.
  - c. Implement strategies for minimizing disturbance by targeting days and hours when disturbance and violations are most likely to occur, and by providing a Law Enforcement or Compliance Monitoring presence during those times.
3. Maintain snowy plover productivity at nesting areas through the following measures:
- a. Fund annual monitoring on BLM lands at Coos Bay North Spit, conducted by the Oregon Natural Heritage Information Center and cooperatively funded by State and Federal agencies. This project produces data essential to snowy plover recovery efforts, management actions, and assessment of productivity and take of the western snowy plover.
  - b. Participate in the development of predator action planning annually.
  - c. Manage predators of the snowy plover on BLM lands at Coos Bay North Spit.

### **Nesting Season Management (15 March to 15 September)**

1. Coordinate with OPRD to implement seasonal beach restrictions for portions of the New River ACEC (ocean beach and spit) from 15 March to 15 September each year. The seasonal beach restrictions will include the following measures:
  - a. Prohibit recreational use from the dry sand portions of the New River ACEC with the exception of the one-mile segment of BLM-administered land at Floras Lake;
  - b. Permit non-motorized public uses on the wet sand portions of the New River ACEC; the exception would be that dogs and kite-flying would be prohibited on the wet sand associated with snowy plover management areas;
  - c. Prohibit motorized vehicle use; and
  - d. Limit access to the New River ACEC by BLM and resource agencies cooperating on snowy plover management to:
    - i. walking on the dry sand to conduct law enforcement activities, to place and/or maintain ropes or signs, to conduct snowy plover monitoring efforts, or to implement predator management activities. Entry time should be limited to only that needed to complete the management activities, and a reasonable attempt should be made to mask any footprints upon leaving the area; and
    - ii. motorized vehicles (e.g., all-terrain vehicles (ATVs), street legal vehicles) on the wet sand to conduct law enforcement and required administrative activities (e.g., place and maintain ropes or signs) and to conduct snowy plover monitoring efforts, to implement predator management activities, or for emergency response.
2. BLM should continue to implement the Cooperative Management Agreement between BLM, Curry County and OPRD.
3. For the 0.4-mile segment of BLM-administered land directly south of Curry County land, the BLM should manage according to the following procedures:
  - a. Prohibit public access by signing and roping the dry sand portion of the beach with a 50-meter buffer if a snowy plover nest is discovered.
  - b. Non-motorized public uses should be permitted on the wet sand portions of the county-owned ocean beach and spit;
4. The remaining 0.6-mile segment of BLM-administered land on the ocean beach west of Floras Lake should also be managed as described in #3. This portion of the ocean beach should be open to non-motorized recreational use unless snowy plovers nest or brood young in the area.
5. BLM should manage breaches located outside of HRAs according to the following procedures:
  - a. If a snowy plover nest is discovered, the BLM shall prohibit public access by signing and roping the breach area;
  - b. Allow access as described in section 1d above. The adjacent wet sand beach should remain open to public use.
6. BLM should provide two authorized public access points to the New River ACEC ocean beach and spit at Storm Ranch boat ramp north of Floras Lake. Public use from these access points are exclusively for non-vehicular activities. The access road to the Storm

- Ranch boat ramp should be closed to all vehicles with exceptions for law enforcement, emergency responders, and personnel conducting ACEC related duties, snowy plover monitoring and predator management.
7. BLM should provide law enforcement coverage during the snowy plover nesting season to ensure compliance with ACEC regulations including seasonal beach restrictions. If the net effect does not provide adequate law enforcement coverage (e.g., increase in violations during or after a busy weekend or event), additional means to supplement the coverage should be pursued. Other law enforcement coverage may periodically be provided by Oregon State Police officers and OPRD beach rangers.
  8. Ensure compliance with seasonal beach restrictions according to the following procedures:
    - a. Conduct patrols based on times of highest snowy plover nesting activity (usually mid-June to late August) and observe and document public compliance with snowy plover restrictions;
    - b. Distribute educational materials (i.e., brochures and maps), be a public contact, and perform any required repairs or maintenance of signs, ropes, fences, barriers, etc.;
    - c. Wear a BLM uniform during patrols; contractors and volunteers will wear "Plover Monitor" clothing or other forms of identification to signify their status; and
    - d. Provide an annual compliance report to the Service, OPRD, and Curry County.
  9. Signs and symbolic fencing should be placed at several locations on the New River ACEC and lands owned by Curry County. BLM personnel will determine the placement of signs/ropes at the beginning of the breeding season and may adjust placement throughout the season due to the dynamic nature of the beach and corresponding presence of snowy plovers and snowy plover habitat. The description below provides guidelines for BLM's proposed approach to sign/rope placement:
    - a. Erect several types of signs, such as the standard "Do Not Enter" sign, for the snowy plover nesting season at key locations;
    - b. Place "Entering Snowy Plover Management Area" signs at the Storm Ranch and Floras Lake public access points;
    - c. Place signs, posts and ropes on the ocean beach and the eastern boundary of the HRA, across New River from Storm Ranch, as follows:
      - i. east to west from the wet sand of the beach to the river shoreline to delineate the north and south boundaries of the HRA;
      - ii. at intervals of approximately 100 to 200 feet north/south along the river, demarcating the east boundary of the HRA and alerting the public that the HRA is closed to all recreational activity during the snowy plover breeding season;
      - iii. at breach sites in the HRA, which should be marked with ropes and signs on the river side to remind the public that these areas are closed during snowy plover season; and
      - iv. at closer intervals across from the boat ramp or other identified areas as the need arises;
    1. Place "No Entry" signs, rope and posts at least 164 feet from a snowy plover nest if snowy plovers are detected on the BLM-managed land near Floras Lake, until such time that the nest fails or the birds fledge and leave the monitoring site;

2. Place signs, ropes, and posts on the north and south ends of the cooperative management area. The ocean side will have signs placed between the wet and dry sand, and will be roped if the site becomes occupied with snowy plovers; and
  3. Continue to post along the Counties' river segment, informing boaters of the snowy plover restrictions and not to disembark in the area. Other informational signing will be placed along the meadow trail alerting the public of snowy plover restrictions ahead on County property.
10. BLM and cooperating agencies should notify the public of the snowy plover seasonal beach restrictions prior to the start of the restrictions (15 March) and Memorial Day according to the following procedures:
- a. Issue two news releases describing the snowy plover management measures and general snowy plover information;
  - b. Post maps and the current beach restrictions on the message boards at the Floras Lake and Storm Ranch access points; and
  - c. Provide public outreach using seasonal on-site monitors (staff or volunteers) to distribute maps, brochures and up to date information. Monitors will focus their efforts in areas where visitors congregate, where problems have been reported or noted and where snowy plover breeding activity may be most vulnerable to impacts. Presentations, school programs and other methods of outreach will also be conducted when requested.
11. Avoid disturbance and minimize potential loss of nests or nesting plovers:
- a. Ensure efforts to manage recreation are enforced and effective:
    - i. Work with OPRD to reduce dog and vehicle violations on the New River ACEC during the nesting season.
    - ii. Ensure staff, including law enforcement officers and volunteers that patrol beaches, are trained in plover biology and required measures to reduce potential harm or disturbance to plovers. In addition, ensure plover monitors and law enforcement officers participate in coordinated law enforcement/plover training and coordination meetings when available (e.g., workshops, refresher courses, video training).
    - iii. Compliance Monitors/Interpretive Specialists shall continue to inform law enforcement personnel about the location of plover nests and activities. Officers should focus their attention and time on areas where and periods when plovers may be particularly vulnerable.
    - iv. Continue to work with the plover working group to improve signage and resolve law enforcement issues.
  - b. Monitor and evaluate compliance of recreation:
    - i. Monitor compliance with recreational restrictions and continue to collect data on standardized forms for comparison between years.
    - ii. Reduce impacts to plovers by using visitor compliance data (i.e., number or percent of violations relative to number of people/dogs during the course of the breeding season) during the season to strategically target areas that are a concern for public education and enforcement; and

- iii. Ensure nests outside roped areas are protected. Either rope and sign the exposed nest, or contact the Service immediately to determine if any protection strategy is necessary.
12. Reduce impacts on foraging and resting plovers and broods:
    - a. Disseminate information about the restrictions prior to 15 March of each year over the term of the proposed action.
    - b. Continue to conduct public outreach during compliance patrols.
  13. Maintain productivity of at least 1.0 fledged chick per male over three consecutive years:
    - a. Based on the productivity data observed at New River (Fish and Wildlife Service 2011, pp. 33-35), the breeding population will maintain a mean hatch rate of at least 49 percent and a fledging success rate of at least 39 percent over three consecutive years at New River ACEC (i.e., the lower confidence interval calculated for the mean hatch and fledge rates over 2002-2010).
    - b. Conduct or fund annual monitoring on BLM lands on the New River ACEC, that measures productivity in the following ways: hatch rate, fledging success rate, number of breeding adults, and number of fledged chicks per male. This project produces data essential to plover recovery efforts, management actions, and assessment of productivity and take of the western snowy plover.
    - c. Participate in annual predator management action planning for plover areas.
    - d. Manage predators of the western snowy plover on the New River ACEC.
    - e. Continue to implement habitat restoration, maintenance, and breaching activities as described in Fish and Wildlife Service (2008) and the New River Health EA OR 128-03-11.

### **Winter Season Management (September 16 to March 14)**

Management of CBNS varies seasonally. Some restrictions are present during March 15 to September 15 to protect nesting snowy plovers and other natural resources on the spit. The following is a description of those activities that are managed differently in the winter; otherwise, all activities remain the same year-round.

#### Inland Habitat Restoration Area Management

Inland areas should be open to non-motorized use. Signs pertaining to nesting area closures will be replaced by decal posts that explain BLM regulations. Regulatory and interpretive signs remain in place year-round. The Fore dune Road, South Dike Road and Bayside Road are open year-round to ATVs and street legal vehicles excluding the 0.9-mile section of the Fore dune Road that bisects the HRAs during the snowy plover nesting season. The 0.5-mile reroute around the HRAs also remains open year-round.

1. Conduct the following during winter season management (16 September to 14 March):
  - a. Removal of ropes, posts, fences, signs used to delineate snowy plover nesting areas;
  - b. Permit non-motorized public uses in all areas of the New River ACEC ocean beach and spit;
  - c. Prohibit motorized vehicles from the New River ACEC ocean beach and spit, except for access needed by BLM and resource agencies cooperating on snowy plover management or to provide emergency response;

- d. Open the access road to the Storm Ranch boat ramp to street legal vehicle traffic and non-motorized recreation;
- e. Provide two authorized public access points to the New River ACEC ocean beach and spit (Storm Ranch and Floras Lake);
- f. Provide law enforcement coverage to ensure compliance with the New River ACEC regulations;
- g. Conduct compliance monitoring patrols of BLM lands;

#### Western Lily –

To most effectively contribute to the conservation and recovery of the Western Lily (*Lilium occidentale*), the Service would like the BLM to specifically conduct the following activities:

- 1) prevent encroachment of competing vegetation by manually removing shrubs and trees
- 2) prevent lowering ground water levels as a result of actions that alter hydrological regimes
- 3) exclude deer and elk when heavy grazing is shown to be contributing to lowered productivity
- 4) prevent destruction or filling of sites by delineating and protecting population boundaries.

#### Cook's Desert Parsley and Gentner's Fritillary –

The majority of this section is comprised of project design criteria, conservation recommendations or terms and conditions excerpted from existing consultations. These recommendations, nor the inclusion of them in the BLM's RMP, do not in any way alter those existing consultations or the BLM's responsibility for adhering to the proposed action, the reasonable and prudent measures or terms and conditions contained in them. These conservation measures are:

#### Heavy equipment –

For all projects involving the use of heavy equipment, protect plant sites by a 100-foot radius buffer. Avoid all use of heavy equipment within this buffer. Heavy equipment includes, but is not limited to, tractors, dozers, loaders, graders, excavators, cranes, skid steers, and similar equipment. Pick-up trucks, ATVs, utility vehicles, and similar soft-wheeled vehicles may be used within a plant site on a limited basis in dry conditions in the dormant season, if authorized by the project botanist.

All projects involving heavy equipment use near plant sites should incorporate pre-disturbance surveys for non-native invasive plants. Project botanists will prescribe appropriate invasive plant treatments.

All heavy equipment used within Cook's desert parsley (*Lomatium cookii*) critical habitat or near listed plant sites should be cleaned prior to entering BLM lands. All dirt and vegetation should be washed from the equipment exterior, including any unattached accessory equipment, such as augers, scoops, and blades.

Projects involving heavy equipment in Cook's desert parsley critical habitat should be evaluated by a hydrologist prior to implementation. The hydrologist should evaluate potential effects of the

proposed actions on site hydrology and prescribe appropriate project design criteria (PDC) to minimize impacts, which may include (1) seasonal entry restrictions, (2) limiting the extent of disturbance, (3) temporary engineered solutions to reduce compaction and erosion, and (4) restoration of vegetation and hydrologic function.

Project Design Criteria for specific project types –

A. Abandoned Mine Land Actions

- Conduct one year of surveys of suitable habitat for projects that involve excavation or use of heavy equipment. Surveys are not required if a site is heavily disturbed and mostly free of vegetation.
- Protect all plant occurrences with site-specific PDC prescribed by the project botanist in cooperation with the project leader.
- Follow general PDC for Use of Heavy Equipment.

B. Cultural Resources Projects

- Conduct one year of surveys of suitable habitat for projects that involve excavation or use of heavy equipment. Surveys are not required if a site is heavily looted or otherwise disturbed and mostly free of vegetation.
- Protect all plant occurrences with site-specific PDC prescribed by the project botanist in cooperation with the project leader.
- Follow general PDC for Use of Heavy Equipment.

C. Fuels Management and Wildfire Suppression

Private land fuels reduction

- Recommend to landowners to treat fuels outside of the March 15 to July 1 growing season, when Gentner's fritillary (*Fritillaria gentneri*) is mostly dormant or conduct one year of pretreatment surveys if treating during the growing season.
- For treatments that include or are immediately adjacent to Cook's desert parsley critical habitat, encourage the implementation of PDC listed under Manual fuel reduction and hand piles below.

Prescribed burning

- Conduct one year of surveys for broadcast burning.
- Restrict broadcast burning within plant sites to the dormant season.
- Conduct one year of surveys for pile burning. If there is a documented Gentner's fritillary occurrence within 1,500 feet of the pile burn area, then an additional year of surveys must be performed.
- If indeterminate fritillary leaves are observed within the pile burn area, then those plants will be mapped and monitored for two growing seasons following treatment.
- Pile material at least 25 feet away from plant sites.
- Rehabilitate pile burn scars with native seed and mulch when adjacent to listed plant sites or in critical habitat.

Manual fuel reduction

- Conduct one year of surveys for manual thinning. However, if thinning will be followed by pile burning in Gentner's fritillary habitat, then follow survey requirement for pile burning under Prescribed burning above.
- Maintain 25-foot no-treatment buffers around plant sites during the growing season. Treatment inside of buffers in the dormant season is not likely to damage the plant.

Mechanical fuel reduction

- Conduct two years of surveys for Gentner's fritillary.
- Follow general PDC for Use of Heavy Equipment.

### Wildfire Suppression

- Situations involving risk to human health and safety, including firefighters or first responders, should trigger initiation of emergency consultation. If impacts occur under an emergency consultation addressing the response to a fire, the effects will be included in that consultation. Where wildfires do not pose a risk to human health and safety, apply the following PDCs.
- Resource Advisors/Environmental Specialists should advise Line Officers and Incident Commanders to minimize impact to listed species and their habitat during suppression activities, as long as doing so doesn't delay a response that is necessary for human safety.
- Maintain updated plant site and critical habitat locations readily accessible to fire staff in GIS format and in Resource Information Books.
- Follow general PDC for Use of Heavy Equipment.
- Coordinate with the Level 1 Team, who will inform the Service of impacts to listed species.
- Rehabilitate fire lines and staging areas with native seed and mulch, where needed to reduce non-native plant invasion, erosion, and other issues that could affect listed plant sites.

### D. Mining Operations

#### Notice-level mining activities

- Notify the operator that a Plan of Operation is required when the proposed activities are within designated critical habitat or when the proposed activities may affect listed plant sites.

#### Plan-of-operation mining activities

- Limit operations to reprocessing old mine tailings.
- Restrict project area access to existing official roads.
- Follow general PDC for Use of Heavy Equipment.

### E. Quarry Operations

- Conduct one-year Gentner's fritillary surveys for expansion of existing rock quarries into suitable habitat.
- Conduct two-year Gentner's fritillary surveys for development of new rock quarries.
- Follow general PDC for Use of Heavy Equipment.

### F. Range Operations

- Protect known occurrences if grazing is occurring within plant sites during the growing season. Protection measures may include changing the timing of release or the grazing system, fencing small populations, or modifying the allotment boundaries.
- Allow grazing during the dormant season without surveys or protection measures.
- Periodically monitor grazed sites.
- For new allotments or renewals for which two years of surveys have not previously been completed, conduct one year of surveys in suitable habitat. If there is a documented Gentner's fritillary occurrence within 1,500 feet of the allotment area, an additional year of surveys will be performed in suitable habitat.
- For renewal of allotments in which two years of surveys have previously been completed, conduct one year of surveys around known plant sites only. Project botanists should define the extent of the survey area based on past survey results, knowledge of the site, and knowledge of livestock use patterns.
- Conduct one year of surveys for construction of range improvements if the action has the potential to affect listed plants.
- Protect known sites during maintenance of existing improvements. Surveys are not necessary.

- Consult with permittee and the Service prior to augmenting existing populations or creating new populations of listed plants within allotments.

#### G. Recovery Actions

##### Research or recovery collections

- The Service recommends allowing the collection of listed plants (seeds, bulbs, and plants) only if the collector has obtained a permit from the Service and agrees to coordinate all actions with BLM.
- The Service recommends allowing collections of listed plants only for the purposes of research or recovery actions.
- The Service requests that you report all collection activities annually to the Service.

##### Augmentation of existing populations or creation of new populations

- Coordinate all population creation and augmentation activities with the Service.
- The Service requests that you report all population creation and augmentation activities and subsequent monitoring results annually to the Service.

##### Habitat improvement

- For projects that involve manual fuel removal, follow PDC for C. Fuels Management and Wildfire Suppression, subpart Manual Fuel Treatments.
- For projects that involve prescribed fire, follow PDC for C. Fuels Management and Wildfire Suppression, subpart Prescribed Fire.
- For projects that involve the use of herbicides within and around listed plant sites:
  - The actions should be allowable under the implementing District's most current NEPA document that covers the use of herbicides to treat vegetation.
  - Treat non-native invasive plants and native woody vegetation primarily during the dormant season using post-emergent herbicides applied by backpack sprayers, spray bottles, wicks, and other selective equipment and techniques (e.g., cut-stump, hack-and-squirt, direct inject).
  - Use post-emergent herbicides during the growing season only if adequate protection of listed plants can be assured through the use of highly selective techniques or protective measures, such as covering listed plants with tarps or buckets during application.
  - Use pre-emergent herbicides only in controlled experiments coordinated with the Service.
  - Monitor the effects of all herbicide use for a period of two growing seasons and report findings annually to the Service.

#### H. Recreation Projects and Administrative Site Maintenance

- Conduct one year of surveys for construction or expansion of trails, campgrounds, parking lots, toilet facilities, or other recreational facilities.
- Follow general PDC for Use of Heavy Equipment.
- Project botanists should cooperate with project leads to prescribe site-specific protection measures to protect plant sites from project actions.
- Surveys are not necessary for maintenance activities, sign installation, fence installation, hazard tree falling, and closing illegal trails.
- For projects that involve the use of herbicides near listed plant sites, we recommend applying the following PDC:
  - The actions should be allowable under the implementing District's most current NEPA document that covers the use of herbicides to treat vegetation.

- Treat vegetation only during the dormant season (of the listed plant species) using post-emergent herbicides. The use of pre-emergent herbicides for recreation purposes is not covered.

#### I. Research and Monitoring Actions

- Balance the value of research or monitoring data against potential site impacts associated with repeated site entry, particularly for intensive plot designs. Adjust designs and schedules accordingly.
- Report monitoring data and research results annually to the Service.

#### J. Road and Bridge Maintenance and Construction

##### New construction

- Conduct one year of surveys along the proposed corridor. If there is a documented Gentner's fritillary occurrence within 1500 feet of the corridor or indeterminate leaves are located, an additional year of surveys should be performed.
- New road construction is not recommended within Cook's desert parsley critical habitat.
- Follow general PDC for Use of Heavy Equipment.
- Protect known plant sites by aligning road prisms to maintain 100-foot buffers.

##### Maintenance

- Surveys are not necessary.
- Follow general PDC for Use of Heavy Equipment.
- Protect all plant occurrences with site-specific PDC prescribed by the project botanist in cooperation with the project leader.

#### K. Rights-of-way (ROW) Permitting for Roads

##### New construction for ROW permits

- Follow PDC listed above for Road and Bridge Maintenance and Construction, subpart New construction.

##### Road maintenance for ROW permits

- Follow PDC listed above for Road and Bridge Maintenance and Construction, subpart Maintenance.

#### L. ROW Permitting for Other Uses

##### Utility and communication site construction

- Conduct one year of surveys along the proposed corridor or site.
- New construction is not allowed within suitable dispersal or germination habitat for Cook's desert parsley.
- Follow general PDC for Use of Heavy Equipment.
- Protect known plant sites by aligning utility or site footprints to maintain 100-foot buffers.

##### Utility and communication site maintenance

- Surveys are not required.
- Follow general PDC for Use of Heavy Equipment.
- Protect all plant occurrences with site-specific PDC prescribed by the project botanist in cooperation with the project leader.

##### ROW Permits for events or other uses

- Conduct one year of surveys along the proposed use corridor or site, except minimum impact permits, for which surveys are not required.
- We recommend avoiding the issuance of event permits in suitable dispersal or germination habitat for Cook's desert parsley with the exception of minimum impact permits.
- Protect all plant occurrences with site-specific PDC prescribed by the project botanist in cooperation with the project leader.

#### M. Silvicultural Treatments

- Conduct one year of surveys for all silvicultural projects.
- Avoid reforestation in suitable dispersal or germination habitat for Cook's desert parsley.
- Avoid planting trees within 100 feet of plant sites.
- Avoid applying fertilizer within 25 feet of plant sites.
- Avoid trapping gophers within 25 feet of plant sites.
- Restrict manual thinning and brushing within 25 feet of plant sites to the dormant season.
- For Gentner's fritillary, retain 40 percent combined canopy cover of trees and shrubs within 25-foot plant site buffers.
- Pile material from thinning, brushing, and pruning at least 25 feet away from plant sites.
- For mechanical work, follow general PDC for Use of Heavy Equipment.
- For non-native invasive plant treatments with herbicide, follow PDC for Non-native Invasive Plant Control. Other chemical site preparation is not permitted.

#### N. Special Forest Product Harvesting

- Surveys are not necessary.
- When possible, send harvesters to areas that have previously been cleared for listed plants.
- Avoid burl harvesting within 100 feet of known occurrences or in suitable dispersal or germination habitat for Cook's desert parsley.
- Project botanists should review firewood cutting areas and commercial permits for special forest product harvesting and assign site-specific PDC to protect plant sites and critical habitat. Firewood Permits: No firewood permit gathering should be allowed within known occurrences. Road segments close to known occurrences may need to be closed to prevent incidental impacts.

#### O. Tree Harvesting

- Conduct two years of surveys, except for salvage sales and incidental tree harvests under permit, which only require a one-year survey for both commercial and non-commercial harvests.
- Avoid tree harvest activities in suitable dispersal and germination habitat for Cook's desert parsley. Permit felling of hazard trees; however, the trees should be left on site unless they can be accessed by a self-loader from a roadway.
- Exclude harvest activities, including falling, skidding, and yarding, from within 25 feet of plant sites.
- Avoid locating anchor trees within plant sites.
- Avoid burning landing slash within 25 feet of plant sites.
- Construct landings at least 300 feet from plant sites. Permit use of previously existing landings when more than 100 feet away from plant sites.
- Realign new proposed logging road corridors, truck turn-arounds, and staging areas to maintain 100-foot buffers. Permit use of existing roads, even when located less than 100 feet from plant sites.
- Follow general PDC for Use of Heavy Equipment.

#### P. Watershed Restoration

##### Road closures

- No surveys are required for actions within the existing road prism.
- Follow general PDC for Use of Heavy Equipment.

##### Road obliteration

- Conduct one year of surveys if the action will involve disturbance of intact natural habitat outside of the road prism; otherwise, no surveys are required.

- Follow general PDC for Use of Heavy Equipment.

#### Cross-drainage culvert replacement or repair

- No surveys are required for actions within the existing road prism; otherwise, conduct one year of surveys.
- Follow general PDC for Use of Heavy Equipment.

#### Stream structure and culvert placement/repair

- Conduct one year of surveys if the action will involve disturbance of intact natural habitat outside of the stream channel; otherwise, no surveys required.
- Avoid tree falling within plant sites.
- Follow general PDC for Use of Heavy Equipment.

#### Meadow and floodplain restoration

- For projects that involve manual woody vegetation removal, follow PDC for C. Fuels Management and Wildfire Suppression, subpart Manual Fuel Treatments.
- For projects that involve prescribed fire, follow PDC for C. Fuels Management and Wildfire Suppression, subpart Prescribed Fire.
- Avoid planting trees or shrubs within 100 feet of plant sites.
- Avoid falling trees within plant sites.

### Q. Non-native Invasive Plant Control

#### Roadside herbicide application

- Surveys are not required within existing road prisms.
- Follow implementing District's most current NEPA document that covers the use of herbicides to treat vegetation.
- When spraying within 1,500 feet of known plant sites, treat only during the dormant season or otherwise protect listed plants by:
  - Instructing contract crews on identification of listed plants that may occur within project areas.
  - Maintaining a minimum 50-foot buffer around known plant sites.
  - Limiting spraying to when there is no measurable wind.
  - Using only spot treatments (no broadcast treatments).
  - Using selective equipment (backpack sprayers, hand bottles, wicks) and techniques (cut-stump, hack-and-squirt, direct inject, foliar spot spray).

#### Herbicide application in natural communities and plantations

- Surveys are not required when work is being conducted by trained BLM botanists and cooperators; however, one year of surveys are required for treatments performed by contract weed crews (excluding direct-inject and hack-and-squirt methods), unless the workers will be accompanied by a trained botanist.
- Follow implementing District's most current NEPA document that covers the use of herbicides to treat vegetation.
- For treatments within or immediately adjacent to plant sites:
  - Work will be supervised by a trained BLM botanist with weed treatment experience.
  - Treat primarily during the dormant season using spot treatments of post-emergent herbicides applied by backpack sprayers, spray bottles, wicks, and other selective equipment and techniques (e.g., cut-stump, hack-and-squirt, direct inject).
  - Use post-emergent herbicides during the growing season only if dormant season treatments are not effective and when there is no measurable wind. Protect listed plants by implementing these types of protective measures:

- Within the treatment site, visibly mark all listed plants or patches with pin flags or similar markers.
- Use only spot treatments (no broadcast treatments).
- Use selective equipment (backpack sprayers, hand bottles, wicks) and techniques (cut-stump, hack-and-squirt, direct inject, foliar spot spray).
- In the case of foliar spot treatments, use spray shields or cover listed plants with tarps or buckets during application.
- Use pre-emergent herbicides only in controlled experiments coordinated with the Service until effects are fully known and full-scale implementation is approved by the Service.
- Monitor the effects of all herbicide use for a period of two growing seasons and report findings annually to the Service.

### Gray Wolf –

In an effort to most effectively contribute to the conservation and recovery of the gray wolf (*Canis lupus*), the Service would like the BLM to begin its seasonal restriction within one mile of an active den on April 1st instead of April 30th. The Service believes that extending this restriction to July 15 (as opposed to August 31) would be sufficient to protect the young of the year as they are likely to have left their den sites by then.

### Marbled Murrelet –

The Preferred Alternative states there will be no disruption to murrelets. The Service would like to see it state that no disruption would apply to both known and predicted murrelet sites. It could also be stated that predictive murrelet sites would be disrupted from harvest if it was permitted under an option in lieu of intensive surveys for murrelets, when conducting projects in stands < 80 years old.

Other comments to individual components focus on: 1) lack of surveys in Zone 2, 2) lack of adequate protection to murrelet habitat (300 foot buffer), 3) lack of a definition for occupied murrelet site, 4) lack of adequate protection for murrelet critical habitat, and 5) providing an option when not surveying for murrelets that will be neutral or beneficial to murrelets.

#### 1) Lack of surveys in Zone 2

As stated in the murrelet recovery plan, protecting occupied nesting habitat is a priority for recovering the species. Please extend the survey requirements for murrelets into both zones, unless through coordination with the Service another approach is agreed upon (e.g. an emergency situation)

#### 2) Lack of adequate protection to murrelet habitat (300 foot buffer)

The 300 foot buffer should protect stands adjacent to occupied habitat regardless of their age. Additionally the buffer should be applied to unsurveyed potential habitat and unoccupied potential habitat when within the reserve system or murrelet critical habitat. We recommend protection measures that will minimize effects from changes in wind firmness, microclimate and

predation to nesting habitat from treatments within 300 feet of all occupied habitat and unsurveyed potential habitat, and unoccupied habitat when in the reserve system or critical habitat.

### 3) Lack of a definition for occupied murrelet site

The term “site” may be confusing since it could be a survey site or an occupied site under the Pacific Seabird Group survey protocol for murrelets. We suggest defining an occupied murrelet site as:

When a survey site has an occupancy behavior detected, then all contiguous potential habitats within a ¼ mile (or the current recommended minimum habitat needed to protect nesting murrelets based on the best available science) of the project stands are designated as an occupied murrelet site. Contiguous potential habitats are defined as any potential habitat adjacent to or within ~328 feet (the equivalent of 100 meters) or less of other potential habitat or the project area stands.

### 4) Lack of protection for murrelet critical habitat

Management direction should be more effective at preventing the loss of Primary Constituent Elements (PCEs). PCEs are needed for the survival and recovery of the murrelet. Currently BLM anticipates that PCEs would be adversely affected by moderate- and low-intensity timber harvest and uneven-aged management.

### 5) Providing an option when not surveying for murrelets that will be neutral or beneficial to murrelets

The conservation assessment has two options in lieu of intensive surveys for murrelets, when conducting projects in stands < 80 years old. We recommend replacing with option 2 and 3 from the North Coast Level 2 policy on managing murrelet structure in younger stands. Though please correct the typographical error of “canopy closure” to “canopy cover.” Additionally the option of “With the advice of the U.S. Fish and Wildlife Service, manage the nesting structure in a manner that does not adversely affect nesting murrelets “ would allow flexibility as new information becomes available. We understand the south coast has a different option 2, but that option is not fully protective of murrelet nesting structure and as such is not a viable option when surveys have not been performed to demonstrate the absence of the murrelet.

### Fisher –

The fisher (*Martes pennanti*) is currently proposed for listing under the Endangered Species Act. Any discussion about the incidental take of fisher or effects determinations would only apply if the species were listed.

To avoid the take of fisher, the BLM would have to show that fishers are not present in the area or incorporate meaningful conservation measures that would lead one to a determination that the proposed action would not take the species as defined in the Endangered Species Act (Section 3(19)). To reach a “not likely to adversely affect” determination, BLM would need to demonstrate that the effect of the habitat removed is insignificant, discountable, or wholly

beneficial to the species. The Service is still in the process of assessing how best to apply a section 7 analysis to fishers, so it is premature for us to describe specific situations that avoid take or adverse effects. We look forward to working with the BLM on developing a framework to guide section 7 effects determinations. To that end, we recommend looking at the draft interagency fisher conservation strategy (Finley et al. 2011, entire) and the draft Southern Sierra fisher strategy (Spencer et al. 2015, entire) to provide some ideas on which to model future effects analysis approaches.

Finally, by restricting the definition of fisher habitat as young, mature and structurally-complex forest stands in the 11 sub-basins that represent the current range of the species, the BLM may be limiting the effects analysis to these watersheds alone. Because the Service is advocating for reintroducing fishers into areas of the distinct population segment that are not known to be currently occupied the BLM may want to consider that effects to fishers may occur outside of currently known occupied areas.

#### Greater Sage-Grouse –

##### General Comments:

Because the BLM is also currently involved in revising an RMP specific to the management of the greater sage grouse (*Centrocercus urophasianus*), we suggest contacting Joan Suther (BLM GRSR RMP revision team lead) for additional language and cross-coordination on sage-grouse issues in this EIS process.

Since sage-grouse once occurred in the Klamath Basin, the Service recommends including a discussion of actions that would be taken to bring about their return (e.g., restoration of populations, etc.).

##### Specific Comments:

In the first paragraph of the discussion of the sage-grouse population in Oregon, the Service recommends use of Oregon Department of fish and wildlife (ODFW) data. Using ODFW data would more accurately define the population size in Oregon. The current ODFW estimate is less than 20,000 birds for Oregon.

In the first paragraph, we recommend removing the hunting discussion as hunting is not considered a large threat and this discussion does not contribute significantly to the document.

We suggest increasing the discussion of habitat loss as well as conservation options, as these are within the scope of the analysis because the loss and fragmentation of sagebrush habitat is the primary cause of decline of sage-grouse (Fish and Wildlife Service 2013). Starting with a discussion on the current condition of the sagebrush habitat would better lay the foundation and provide context for the planning area. Is having sagebrush the only criteria used to delineate sage-grouse habitat?

In the second paragraph we suggest including additional information about conifer invasion of sage brush habitat, as pines can invade sagebrush as well as juniper. This paragraph would

benefit greatly from the addition of references for livestock grazing claims that are being made (Bob Hopper in the BLM SO would be a good source).

Under Affected Environment and Environmental Effects, we do not believe removing grazing will increase juniper expansion. Please provide citations to support the statements in latter half of this section. We also recommend expanding the discussion on treating invasive species and restoring habitat as an alternative to grazing practices (not suggesting remove grazing here, just that grazing is not the only way to treat invasive species).

Conclusion –

The Service appreciates the opportunity to comment on this draft environmental impact statement for the BLM's plan revisions in western Oregon. The Service considers itself a partner with BLM in finding pragmatic ways for both our agencies to meet our legislatively mandated needs and looks forward to working collaboratively as we move forward. In addition to cooperating on this NEPA effort we will continue to work with your staff on the Conservation Assessment/Conservation Review process to help refine BLM's management direction to best meet the purpose and need statement. As mentioned before, many of the comments contained in the letter serve a purpose for both processes.

If you have any questions regarding this letter or its contents, please contact Brendan White of the Oregon Fish and Wildlife Office at 503-231-6179.

Electronic cc: Richard Hardt, BLM  
Eric Greenquist, BLM  
Jim Thrailkill, FWS

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