



U.S. Department of the Interior
Bureau of Land Management

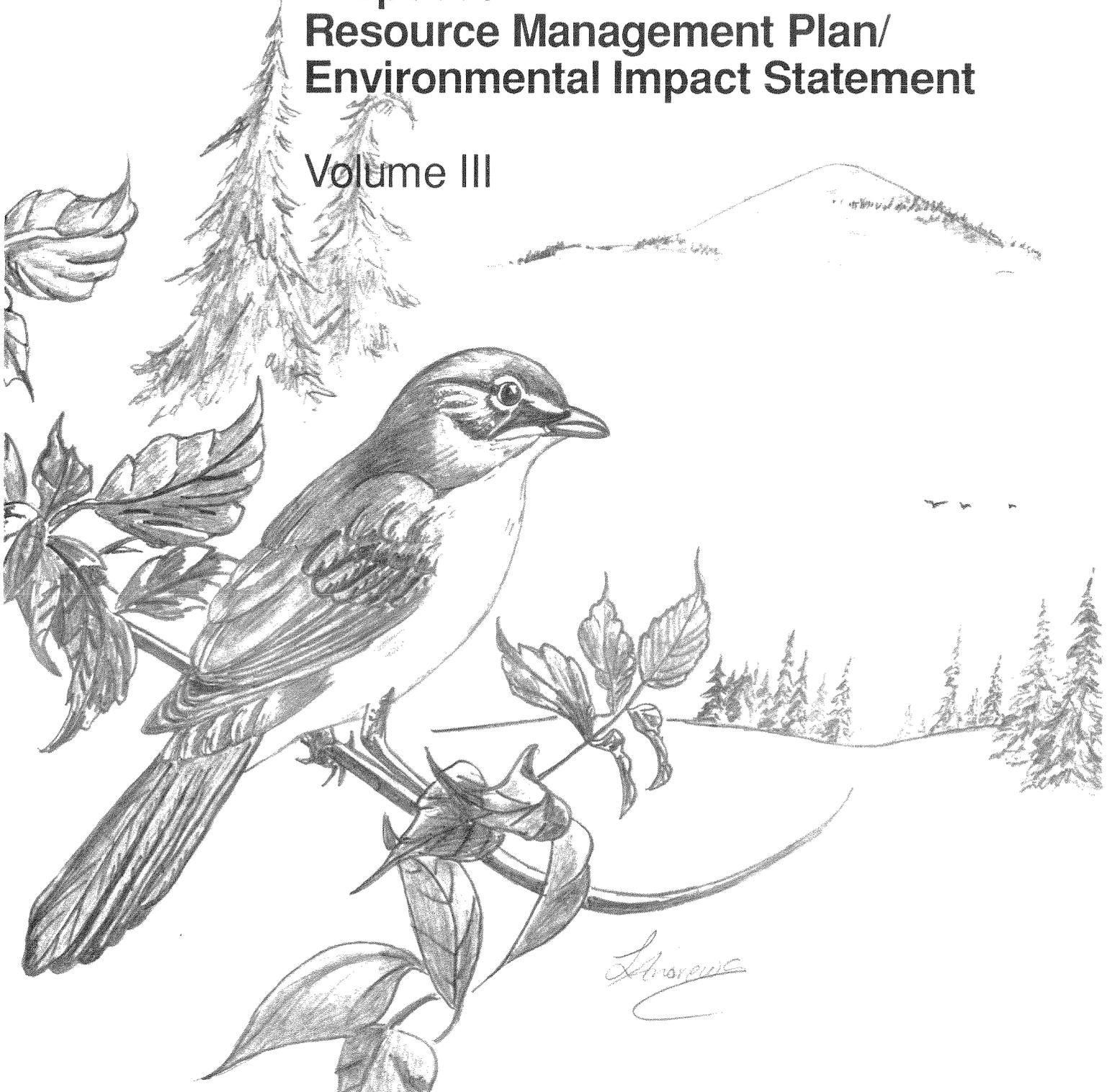
Roseburg District Office
777 N.W. Garden Valley Boulevard
Roseburg, Oregon 97470

October 1994



Roseburg District Proposed Resource Management Plan/ Environmental Impact Statement

Volume III



Shoreline

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

BLM/OR/WA/ES-94/34+1792

Appendix H Comment Letters from Federal, State, and Local Government



BILL MARKHAM
SPEAKER PRO TEMPORE
HOUSE OF REPRESENTATIVES

City of Roseburg

OCTOBER 1, 1992

Myrtle Creek, on hearing

November 25, 1992

TESTIMONY OF BILL MARKHAM ON THE ROSEBURG BLM 10 YEAR MANAGEMENT PLAN

THANK YOU FOR THE CHANCE TO TESTIFY BEFORE YOU CONCERNING THE DRAFT FOR YOUR NEW 10 YEAR MANAGEMENT PLANS. I AM BILL MARKHAM, STATE REPRESENTATIVE FROM HOUSE DISTRICT 46. THE MANAGEMENT PLANS YOU ARE PROPOSING HAVE A DIRECT AND VERY REAL IMPACT ON THE PEOPLE WHOM I REPRESENT. IT IS SAD TO SEE THAT YOU HAVE GIVEN SO LITTLE THOUGHT TO THESE PEOPLE AND PLAN TO TAKE OVER 1000 OF THEIR JOBS.

TO PUT IT SIMPLY I AM EXTREMELY DISAPPOINTED BY YOUR DRAFT PLANS. THEY ARE NOT GOOD PUBLIC POLICY AND SHOW AN EXTREME DISREGARD FOR THE PEOPLE OF OUR REGION, THE HEALTH OF THE FOREST AND THE LAWS WHICH DIRECT THE LANDS YOU ARE CHARGED TO MANAGE.

THE DRAFT 10-YEAR PLAN WHICH YOU PROPOSE COMPLETELY IGNORES THE O&C ACT WHICH DIRECTS MANAGEMENT ON THE BULK OF LANDS UNDER YOUR CHARGE. THE O&C ACT IS CLEAR .. THE O&C LANDS ARE HELD IN TRUST BY THE FEDERAL GOVERNMENT FOR THE 10 O&C COUNTIES. THESE LANDS ARE TO BE MANAGED TO PRODUCE THE HIGHEST SUSTAINABLE LEVEL OF FOREST PRODUCTS FOR THE GENERATION OF REVENUES TO THE COUNTIES CONCERNED. PROVISIONS IN YOUR PLAN WHICH CREATE OLD GROWTH SET-ASIDES, VISUAL AREAS AND RURAL INTERFACE AREAS FLY IN THE FACE OF YOUR MANAGEMENT OBLIGATIONS.

THE MANAGEMENT AREAS NAMED ABOVE ARE CLEARLY DISCRETIONARY IN NATURE. THERE IS NOTHING IN LAW OR REGULATION WHICH DIRECTS YOU TO ESTABLISH THEM. IN FACT MANY, INCLUDING MYSELF, ARGUE THAT THEY ARE NOT PART OF WHAT YOU HAVE BEEN INSTRUCTED TO DO UNDER THE O&C ACT OF 1937. YOU MUST REMOVE THESE DESIGNATIONS FROM THE LANDS TO WHICH THEY HAVE BEEN APPLIED AND RETURN THESE AREAS TO FULL, SUSTAINABLE TIMBER PRODUCTION. HIDING BEHIND THE ENDANGERED SPECIES ACT, WHILE

DOUGLAS, NORTH JOSEPHINE, AND N.W. JACKSON COUNTIES
DISTRICT 46
STATE CAPITOL, SALEM, OREGON 97310-1347
Phones: Salem, 378-8790 Riddle 874-2834
PO Box 300 Riddle, Oregon 97469

PAGE 2.

IT MAY BE TEMPTING, IS NOT APPROPRIATE IN THIS CASE. THE LAND YOU HAVE SET-ASIDE FOR OTHER THAN TIMBER PRODUCTION MUST BE RETURNED TO FULL MANAGEMENT.

ANOTHER LAND DESIGNATION WHICH IS NEAR AND DEAR TO MY HEART IS THE CREATION OF EXCESSIVE NO CUT BUFFER STRIPS ALONG ALMOST EVERY STREAM. IT IS MIND BOGGLING THAT YOU WOULD PROPOSE TO SET-ASIDE OVER 250 FEET ON EACH SIDE OF A STREAM FOR BUFFERS. THE OREGON FOREST PRACTICES ACT, A MODEL FOR THE NATION, REQUIRES NO WHERE NEAR THIS LEVEL OF PROTECTION AND IS ACCEPTED AS A BEST MANAGEMENT PRACTICE. YOU MUST REMOVE PROVISIONS FOR BUFFER STRIPS ALONG STREAMS WHICH ARE IN EXCESS OF LEVELS CALLED FOR IN THE FOREST PRACTICES ACT FOR OREGON. THIS ALSO APPLIES TO THE NUMBER OF SNAGS/GREEN TREES AND DOWN WOODY MATERIAL WHICH YOU DESIGNATE FOR RETENTION.

IT IS CLEAR THE DRAFT PLAN YOU HAVE DEVELOPED IS EXCESSIVE IN BOTH THE MITIGATION MEASURES THEY TAKE AND THE LAW YOU MUST FOLLOW. FOR THE SAKE OF THE THOUSANDS OF JOBS YOU REPRESENT, BUT HAVE IGNORED, YOU MUST RADICALLY ALTER YOUR DRAFT MANAGEMENT PLAN. YOU HAVE NOT PUT PEOPLE INTO YOUR EQUATION FOR THE MANAGEMENT OF THE FOREST. THE FAMILIES, COMMUNITIES, CHILDREN, SCHOOLS AND LIVES YOU IMPACT MUST BE CONSIDERED.

THE DRAFT BLM PLAN FOR THE ROSEBURG BLM CAN BE TERMED AS NOTHING LESS THAN DRACONIAN. IN FACT IF I DON'T BLINK VERY HARD I BELIEVE THEY COULD VERY WELL BE MISTAKEN FOR THE WILDERNESS SOCIETY BLUEPRINTS ON HOW TO MAKE OREGON NOTHING MORE THAN A GIANT NATIONAL PARK.

I URGE YOU TO BALANCE YOUR PLAN BETWEEN THE NEEDS OF PEOPLE AND THE NEEDS OF NATURE. THIS DRAFT EFFORT COMPLETELY IGNORES THE NEEDS OF MAN FOR THE WHIMS OF NATURE.

THANK YOU FOR THIS OPPORTUNITY TO TESTIFY.

Bureau of Land management
777 NW Garden Valley Blvd.
Roseburg, OR 97470

RE: **BLM DRAFT MANAGEMENT PLAN**

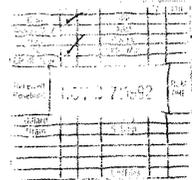
Enclosed please find a copy of Resolution No. 92-19, regarding the BLM's Ten-Year Land and Resource Management Plan. The Roseburg City Council adopted the resolution at its regular meeting on November 23, 1992.

Sincerely,

Nancy Cobb
Nancy Cobb
Recorder's Secretary

Enclosure
nc

cc November 23, 1992, Council File
Chrono File



RESOLUTION NO. 92- 19

A RESOLUTION IN SUPPORT OF CONTINUED MANAGEMENT OF O&C TIMBERLANDS

WHEREAS, the Bureau of Land Management has requested public input on its ten-year land and resource management plan; and

WHEREAS, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O&C timberlands; and

WHEREAS, the natural resources provided through aggressive management of federal lands under the O&C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County; and

WHEREAS, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment; and

WHEREAS, O&C lands continue to provide a reliable employment base for many Oregon communities; and

WHEREAS, O&C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities; and

WHEREAS, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base;

NOW, THEREFORE, BE IT RESOLVED, the Roseburg City Council supports the continued management of these lands in accordance with the O&C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values; and

BE IT RESOLVED that the Roseburg City Council supports the principles of multiple use for these O&C lands which include management for timber, water, recreation and wildlife; and

BE IT FURTHER RESOLVED that the Roseburg City Council encourages legislation that would enact a balanced management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

APPROVED BY THE COUNCIL OF ROSEBURG, OREGON, AT ITS REGULAR
MEETING ON THE 23rd DAY OF November, 1992.

Shirley D. Murphy
City Recorder



**CONFEDERATED TRIBES OF
COOS, LOWER UMPQUA & SIUSLAW INDIANS**

455 S. 4th • Coos Bay, OR 97420 • (503) 267-5454



November 3, 1992

Mr. James A. Moorhouse, District Manager
Bureau of Land Management, Roseburg Dist.
777 Northwest Garden Valley Blvd.
Roseburg, Oregon 97470

Dear Mr. Moorhouse:

The following pages outline our response to the BLM Roseburg District's Draft Resource Management Plan and Environmental Impact Statement. The response is supported by unanimous consent of the Tribal Council and Planning Committee of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians. While conscious of a safe and clean environment, the Tribes are critically concerned about the local economies within the Tribes' territory.

In addition to our position on which alternative to support, we are including maps and information to assist you in locating our areas of interest. Also, we have commented on issues of concern to the Confederated Tribes.

We appreciate the opportunity to comment.

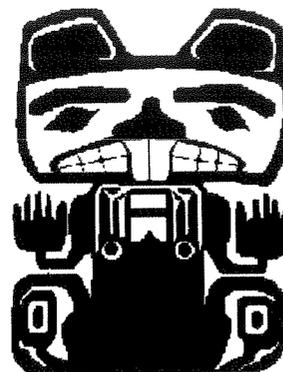
Sincerely,

Skip Brainard

Skip Brainard
Council Chairman

SB/ea

attachments



INTRODUCTION

The Confederated Tribes' aboriginal territory spans large areas of the BLM Eugene, Coos Bay, and Roseburg Districts. Additionally, it touches on the BLM Salem District to the north. All BLM land-related actions within the aboriginal territory and Tribal Consolidation Area, both defined in the text, are matters of concern to the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, as the Tribes' aboriginal territory is a major key to their identity. With such a long-term interest in their ancestral homeland, the Tribes offer these comments regarding the BLM Roseburg District Draft Resource Management Plan and Environmental Impact Statement. The Tribes do so, not as members of the general public, but as a recognized tribal government pursuant to Public Laws 98-481 and government-to-government relationship, as outlined by the President of the United States.

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**A TRIBAL RESPONSE
TO
THE BLM ROSEBURG DISTRICT
DRAFT RMP/EIS**

THE CONFEDERATED TRIBES OF COOS, LOWER UMPQUA AND SIUSLAW INDIANS

A Federally Recognized Tribe Under Public Law 98-481

Additionally, the only document ceding tribal rights of ownership of the aboriginal territory to the United States was the Treaty of 1855, drafted by the US Government. This treaty, after being approved by Congress, but never signed into law by the President, has yet to be settled. Thus, all lands within the aboriginal territory of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians can still be considered "Indian Country".

ALTERNATIVE SUPPORTED BY THE CONFEDERATED TRIBES

Recognizing the continuing decline in revenues to local economies, the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians support Alternative B. Local economies have been eroded significantly in the recent past and cannot continue to weather the sharp decline in revenue. In reviewing the socioeconomic conditions (pages XXIV and XXV of the Summary) resulting from the different plans, the "Preferred Alternative" does not provide for sufficient revenues to affected local communities. Conversely, Alternative B provides for an additional five million dollars income to those communities impacted by the planning areas. While this sounds like quite a boost to the local economy, one should keep in mind the timber industry has been on a steady decline for several years and this does not make up for the revenues lost as a result.

In looking at jobs supported, the Preferred Alternative will only sustain a total of 1,050 jobs, which is less than half the jobs currently supported (2,400) under the No Change Alternative. Alternative B will support a total of 2,640 badly needed jobs, or a net increase of 140 positions.

GENERAL COMMENTS

Consistency with State, Tribal and Other Federal Plans

Summary, page xvii, contains a section entitled, "Consistency with State, Local, Tribal and Other Federal Plans". The Confederated Tribes appreciate tribal governments being included in this section. The Confederated Tribes are in the process of preparing a Tribal Land and Resource Management Plan. When completed, the plan will be used to compare the desired management style of the Tribes with that of federal, state, and other local governments within the Tribes' territory.

Cultural and Paleontological Resources

This section, although it outlines the development of Memoranda of Understandings with tribal governments, does not accurately address the governmental bodies of federally recognized Indian tribes. The appropriate tribes are listed, but instead of speaking of them as the governing bodies of federally recognized tribes, they are merely listed as "Indian groups". This would be somewhat akin to listing the United States Government as a "group of white boys". BLM Roseburg District should be

Page 3

AREA OF INTEREST WITHIN CROW 15 MINUTE QUAD

reminded that federally recognized Indian tribes have a government-to-government relationship with the United States, and should not be treated as the "general public" when issues arise on land still considered Indian Country.

Land Tenure Issues

The Confederated Tribes have concerns regarding the transfer of federal land to private ownership. Once the land goes into private ownership, it is hard to protect the Tribes' interests (cultural and other) in that parcel.

Additionally, since the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians are a governmental body, and the treaty of 1855 (the only document that would have given the United States clear title to the land) has never been ratified, it is expected that the tribes would have the opportunity to acquire the land, either by transfer to the BIA or other means, should it be considered for disposal.

Land Use Authorizations and Rights-of Way

The Tribes should be contacted for review of any activity (including land use authorization, granting of right-of-way, or road construction) permanently altering the land, minerals, vegetation on, or access to its' aboriginal lands.

Cultural Resources

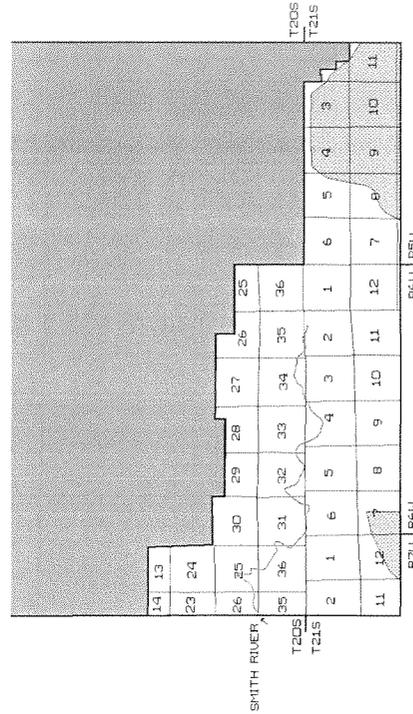
This section should include interaction/consultation with appropriate tribal governments regarding cultural/archaeological issues. For the convenience of the BLM Roseburg District, maps of the areas of interest within the Roseburg District are included with this document. The white areas in the identified sections are portions of the aboriginal territory, and the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians should be consulted regarding cultural resource issues within those areas.

Tribal Consultation/Notification

The tribal office should receive copies of Environmental Assessments, FONSI's, Environmental Impact Statements and other notifications of actions affecting the area of interest including, but not limited to timber sales, brush clearing, mineral and other leases, and any decision affecting the use of these lands. The complete Tribal Consolidation Area is defined as follows:

- T. 15 S., R. 6-12 W., WM
- T. 16 S., R. 6-12 W., WM
- T. 17 S., R. 7-12 W., WM
- T. 18 S., R. 5-12 W., WM
- T. 19 S., R. 4-12 W., WM
- T. 20 S., R. 4-12 W., WM
- T. 21 S., R. 4-13 W., WM
- T. 22 S., R. 9-13 W., WM
- T. 23 S., R. 8-13 W., WM
- T. 24 S., R. 8-13 W., WM
- T. 25 S., R. 8-14 W., WM
- T. 26 S., R. 7-14 W., WM
- T. 27 S., R. 7-14 W., WM
- T. 28 S., R. 11-14 W., WM

The maps on the following pages identify areas of interest within the various fifteen minute

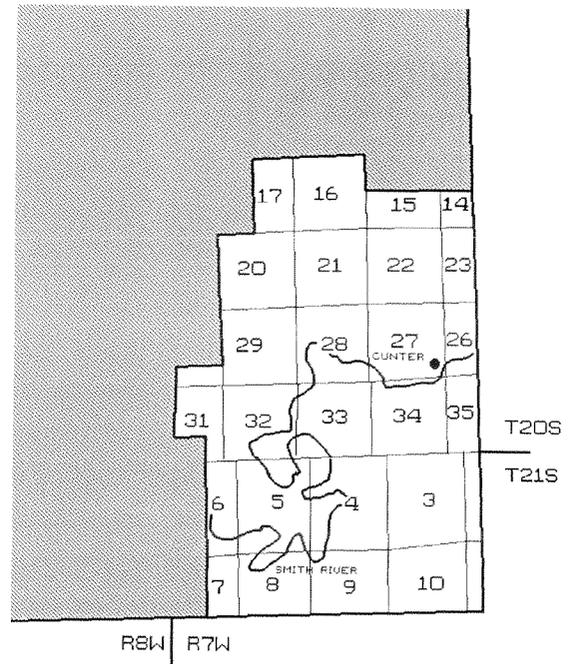


(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN ROMAN NOSE 15 MINUTE QUAD

The maps on the following pages identify areas of interest within the various fifteen minute quad maps. White areas within the identified sections are portions of the aboriginal territory, while shaded areas within the identified sections are within the Tribal Consolidation Area. Diagonal lines note areas of the Tribal Consolidation Area outside the BLM Roseburg District. Consultation/notification should occur as shown on the table below.

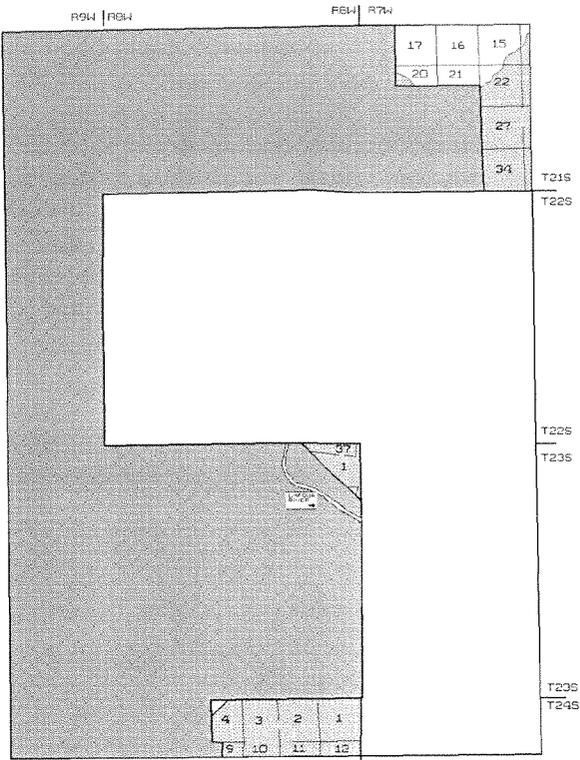
ACTIVITY	ABORIGINAL TERRITORY (White portion of sections)	TRIBAL CONSOLIDATION AREA (Shaded Identified Sections)
NEPA Notification Process	✓	
Minerals/Land Lease Notification	✓	✓
Water Rights Activities	✓	
Cultural Resource Activities	✓	
Timber Sale Notifications	✓	✓
Surplus Real Property	✓	✓
Small Forest Products Sales	✓	✓



(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN ELKTON 15 MINUTE QUAD

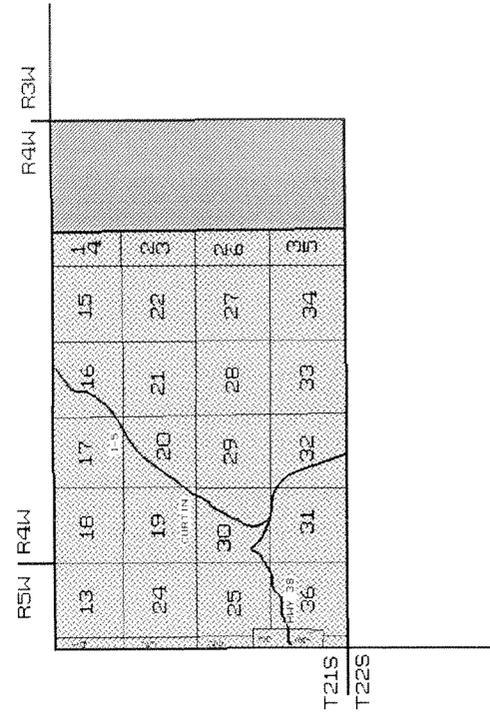
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(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN ANLAUF 15 MINUTE QUAD

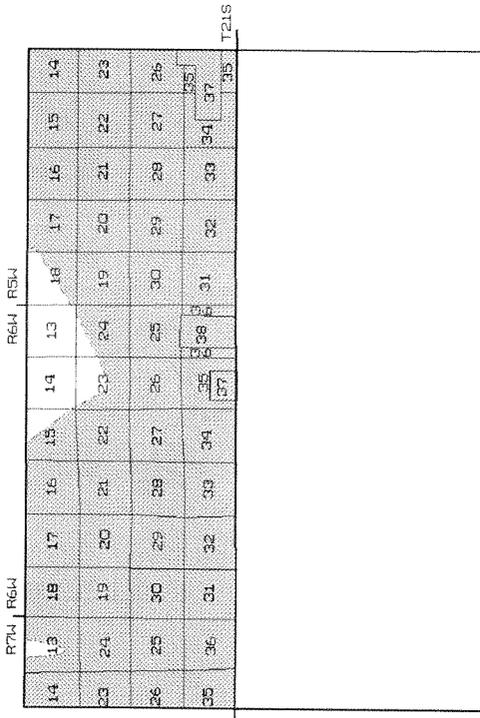
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(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN DRAIN 15 MINUTE QUAD

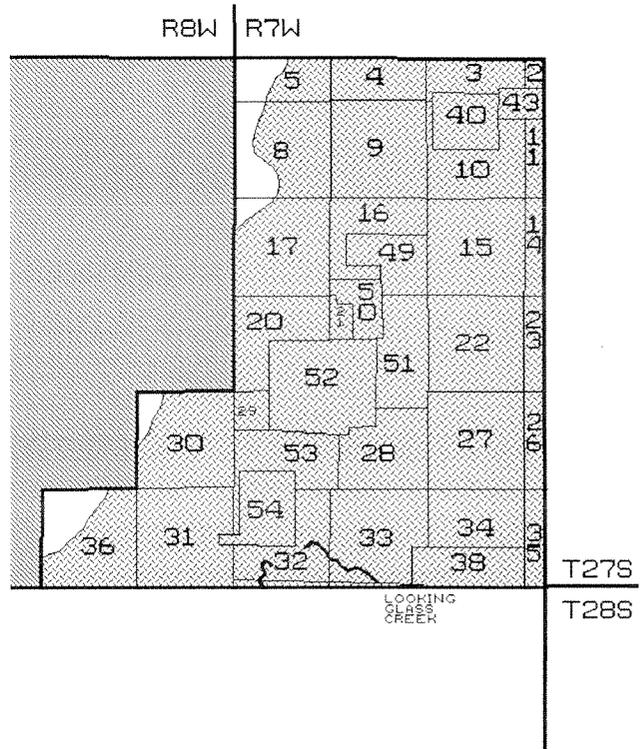
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(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

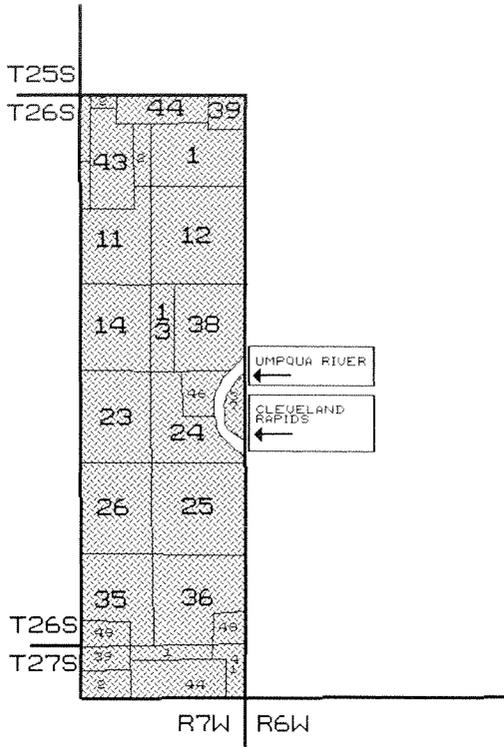
AREA OF INTEREST WITHIN CAMAS VALLEY 15 MINUTE QUAD

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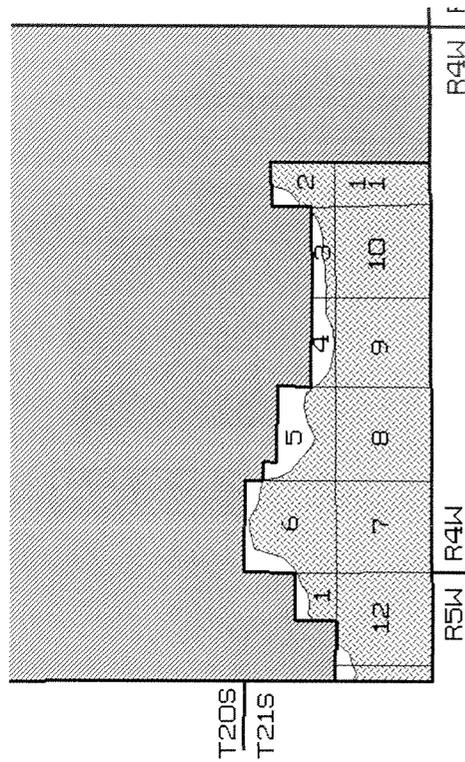
(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN SUTHERLIN 15 MINUTE QUAD



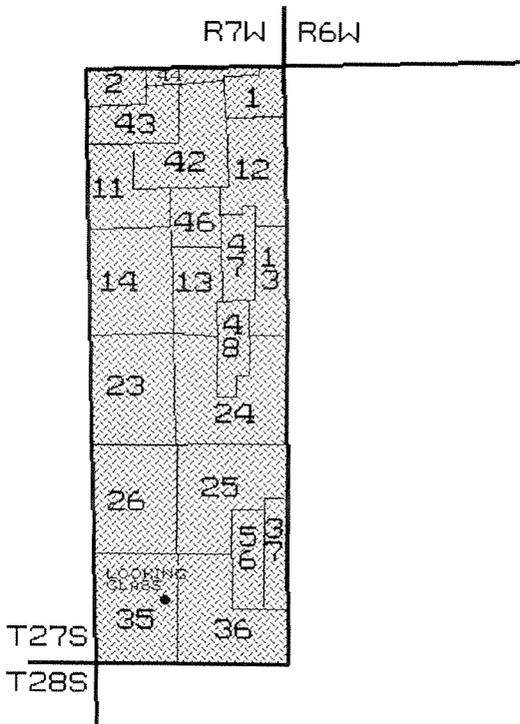
(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN COTTAGE GROVE 15 MINUTE QUAD



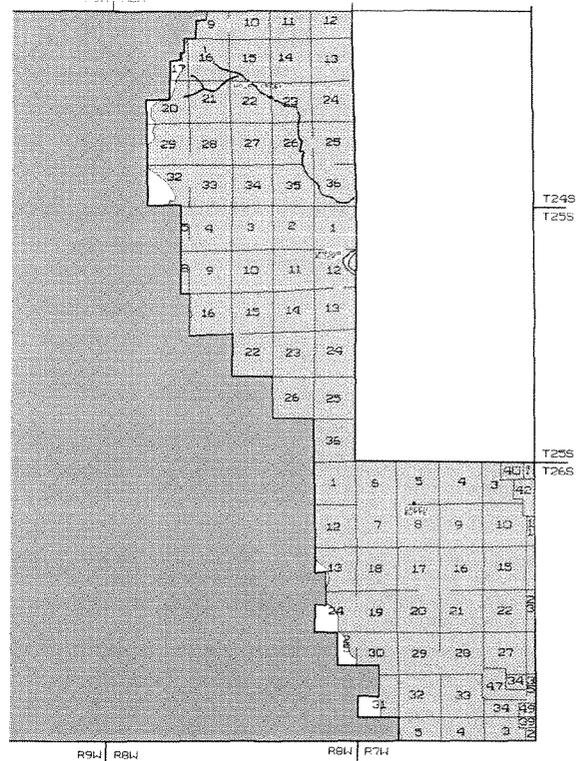
(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN ROSEBURG 15 MINUTE QUAD

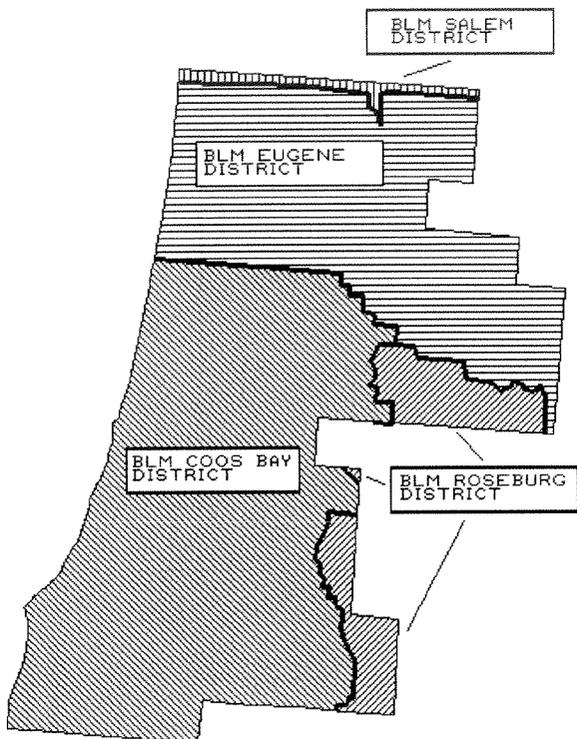


(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)

AREA OF INTEREST WITHIN TYEE 15 MINUTE QUAD



(IDENTIFIED SECTIONS INDICATE AREAS OF INTEREST)



resources, to the detriment of our quality of life. Furthermore, these O & C lands play a significant role in the well being of our rural community. Local county governments rely on receipts to their general fund from the sale of BLM timber to provide basic social services. In the wake of Measure 5, local governments cannot afford reduced revenues. Who will pay for all the social service needs with increased unemployment caused by your proposed reduction in the timber sale levels?

Over the last forty years, the O & C Counties have re-invested over a billion dollars into these forest lands. After fifty years of timber harvesting, the standing inventory has actually increased. Your own analysis of the timber sales program's biological potential shows that the BLM could actually increase timber sale levels by over 30 percent, but your proposal would reduce them by 50 percent without any certainty that the volume will be sold. Such a reduction is totally unacceptable.

Your draft Resource Management Plan and Environmental Impact Statement attempts to sell the preferred alternative as meeting the public's demands from these lands. The reality is that we, the public, want to maintain timber sale levels and funding to local county governments. The National Forests already have preserved 70 to 80 percent of their land base for wildlife, recreation and wilderness experiences, far in excess of demand. So there is no justifiable reason for the BLM to do the same. The fact is that your proposed plan is being dictated by a flawed Endangered Species Act. An Act which does not balance the needs of society with the biologists' perceived requirements for wildlife.

Your proposed plan to lock up such a significant portion of O & C lands is a result of your continued reliance on the belief that spotted owls require large tracts of old growth to survive. The BLM's own research has clearly demonstrated this is not the case. The key to the owl's survival is habitat structure, something the BLM recognizes can be created through forest management activities. However, your plan chose to ignore the research and recommended unjustified preserves.

Finally, your plan ignores the cumulative effect of the growing number of constraints on timber harvesting from private and public forests across the nation. The United States could actually be running out of forest products and not realize it! The environmental costs of relying on foreign, unsustainable sources for forest products has been overlooked by the plan. The Resource Management Plan also



November 19, 1992

Jim Moorhouse, District Manager
BUREAU OF LAND MANAGEMENT
777 N. W. Garden Valley Boulevard
Roseburg, Oregon 97470

RE: Comments on Draft Resource Management Plan and Environmental Impact Statement

Dear Mr. Moorhouse:

Please accept this letter as my comments to the draft Resource Management Plan and Environmental Impact Statement for the Roseburg District.

As the mayor of Canyonville, I represent many families whose livelihood depends on the timber industry. Many are loggers and sawmill workers. I am a logger, myself, so I am very personally affected by what happens to the BLM timber sale program. Most property owners in my community are struggling to pay their property taxes. If Douglas County loses the present level of O & C funding, taxes will escalate to such a level I don't see how we will be able to handle it.

We cannot accept this draft Resource Management Plan because it goes far beyond the goals and objectives for which Congress created the O & C lands and is nothing more than a spotted owl plan. Furthermore, the proposed plan will have devastating impact on my job, my community and my local county and city governments.

First of all, it appears that the BLM has forgotten that Congress originally intended for these valuable timberlands to be private property. Only because the railroad was involved in land fraud, did the land revert back to public ownership. Congress passed the O & C Sustained Yield Act to make the counties whole once again. Your proposed plan reneges on this commitment to our local community.

The O & C Sustained Yield Act states that BLM lands are to provide a flow of timber and clean water. Your proposed 10-year plan goes far beyond this mandate by setting aside large areas to provide for wildlife, recreation and other

ignores the other environmental costs--higher energy consumption, increased CO2 emissions, accelerated depletion of nonrenewable resources--of relying more on substitute building materials.

Thank you for this opportunity to comment. Please give our concerns full consideration because the Final Resource Management Plan will directly impact our ability to provide for our families.

Sincerely,

Alan G. Peters
Alan G. Peters, Mayor
CITY OF CANYONVILLE, OREGON

- cc: Manuel Lujan, Jr. Secretary of the Interior 18th & C Streets, NW Washington, DC 20240
- Honorable Peter Defazio 1233 Longworth HOB Washington, DC 20515
- Cy Jamison, Director Bureau of Land Management 1800 C Street NW Washington, DC 20240
- Honorable Mark Hatfield 711 Hart SOB Washington, DC 20510
- D Dean Bibles State Director Bureau of Land Management P. O. Box 2965 Portland, OR 97208
- Honorable Bob Packwood 101 SW Main, Suite 240 Portland, OR 97204

File	11/16/92
Assoc. of	
Approved	NOV 20 1992
By	
Date	11/16/92
Time	
Initials	

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RESOLUTION NO. 281

RESOLUTION IN SUPPORT OF CONTINUED MANAGEMENT OF O & C TIMBERLANDS

WHEREAS, the Bureau of Land Management has requested public input on its ten-year land and resource management plan, and,

WHEREAS, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C timberlands, and,

WHEREAS, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and,

WHEREAS, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and,

WHEREAS, O & C lands continue to provide a reliable employment base for many Oregon communities, and,

WHEREAS, O & C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and,

WHEREAS, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base,

NOW, THEREFORE, THE CITY OF CANYONVILLE RESOLVES AS FOLLOWS:

That the City of Canyonville supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values, and,

That we support the principles of multiple use for these O & C lands which include management for timber, water, recreation and wildlife, and,

Resolution 281 (Page 1 of 2 Pages)

That we encourage legislation that would enact a balanced management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

ADOPTED by the Canyonville City Council at the regular meeting held on November 16, 1992.

Alan J. Peters
Approved: Alan J. Peters, Mayor

ATTEST:

Gwendolyn O. Deaton
Gwendolyn O. Deaton, City Recorder

Resolution (Page 2 of 2 Pages)

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WINSTON-DILLARD PUBLIC SCHOOLS

165-E Dyke Road • P.O. Box 288 • Dillard, Oregon 97432
Phone (503) 679-3121 • FAX (503) 679-4819

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Ken Wood, Vice Chairman
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H. James Burton, Ph. D., Superintendent
Maureen Haugen, Ed. D., Dir. of Curriculum and Instruction
Beth Stinnett, Dir. of Support Services

December 5, 1992

Bureau of Land Management
777 NW Garden Valley Blvd.
Roseburg, OR 97470

Dear Sirs:

Enclosed please find our resolution in support of continued management of O & C timberlands in the better interest of our local community.

Sincerely,

J. Burton
Dr. Jim Burton, Superintendent
Winston-Dillard School District

Enclosure

JB:se

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Winston-Dillard School District #116
P.O. Box 288
Dillard, OR 97432

RESOLUTION #92-4
A Resolution in Support of Continued Management of O & C Timberlands

WHEREAS, the Bureau of Land Management has requested public input on its ten-year land and resource management plan, and,

WHEREAS, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C timberlands, and

WHEREAS, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and

WHEREAS, the counties has invested more that one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and

WHEREAS, O & C lands continue to provide a reliable employment base for many Oregon communities, and

WHEREAS, O & C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and,

WHEREAS, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base,

THEREFORE, be it resolved that Winston-Dillard School District #116 supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber, water, recreation and wildlife, and,

BE IT RESOLVED, that we support the principles of multiple use for these O & C lands which include management for timber, water, recreation and wildlife, and

BE IT FURTHER RESOLVED, that we encourage legislation that would enact a balanced management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

BY The Winston-Dillard Board of Directors
Richard Randol
Chairman
H. James Burton
Superintendent

12/3/92
Date

12/13/92
Date

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United States Department of the Interior

BUREAU OF MINES
WESTERN FIELD OPERATIONS CENTER
EAST 360 3RD AVENUE
SPOKANE, WASHINGTON 99202-1413

November 13, 1992



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Memorandum

To: James A. Moorhouse, District Manager--Roseburg District, Bureau of Land Management, Roseburg, Oregon
From: Chief-Branch of Engineering and Economic Analysis
Subject: Roseburg District Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS)

We would also like to see discussion in the text on how these areas are managed for minerals in comparison to management guidelines for other resources present. Does ACMF designation give precedence to mineral exploration and development in that area?

Use of GIS support in the RMP process alone has made the Roseburg District RMP/EIS an excellent document. This has allowed greater resource conflict identification and impact assessment than was possible in the past. The table format used to show GIS-generated data on impacts to acreage of high and moderate mineral resource potential, by alternative, is clear and concise and adds to the overall quality of the document.

Thank you for involving us in your management planning process. We hope these comments are useful to you in preparing the best RMP/EIS possible. If you should have any questions, please contact Michael Dunn at (509) 353-2664.

For John R. Norberg

Although the Bureau of Land Management (BLM) did not identify mineral resources as a major issue for detailed study and assessment in the Roseburg District RMP/EIS, we believe that because this is the guiding document for resource management within the District for many years to come, it should contain sufficient detail on all resources, including minerals.

In our review of this document we have noted some significant concerns we would like to address. Based on the analysis shown on Table 4-32, the preferred alternative will have the most impact on mineral resources. Your data shows that the difference between the no action alternative, with the least impacts, and the preferred alternative is not great.

For example we have difficulties verifying the numbers elsewhere in the report. They do not appear to be consistent. Mineral withdrawals (closures) shown in Table 2-8 total 3,210 acres for the No Action alternative, and on page 2-20 proposed new withdrawals total 1,262 acres.

existing withdrawals should be constant from alternative to alternative, all but one, or all, of these values seem incorrect. If the numbers are not in error, then a better explanation of where these numbers came from is needed.

We are much more concerned, however, about the number of acres "open with additional restrictions" from Table 2-8. This category is much more difficult to verify in that it represents opinion as to which special-use designation areas are restrictive to mining.

Other areas restrictive to mineral development apparently not used in the assessment include special status species habitat (1/4-mile to 1/2-mile buffer zones around nesting areas); nonwithdrawn recreation sites managed to preserve values; cultural resource plans which include mining areas in the southern portion of the district (p. 2-14); and maybe even the rural interface areas.

Another area of concern is in Appendix 2-7, Proposed Restrictions on Mineral and Energy Exploration and Development Activity. Only standard requirements under Locatable Minerals Surface Management 43 CFR 3809 were listed. Along with this information the additional restrictions likely needed to mitigate impacts in management areas such as ACECs, W&SRs, VRM IIs, and special status species habitat should be identified.

There are a couple of noteworthy aspects about this document deserving mention. We would like to commend you for the use of GIS data bases in your assessments and for designation of Areas of Critical Mineral Potential (ACMP). We are extremely enthusiastic about the ACMP list. Although ACMFs were only briefly mentioned, we applaud recognition of the singular importance of minerals where they are known to occur, and we would like to see more information about these area designations.

93

Fiscal Year: 1992-93
Resolution: #BC93-01

SUTHERLIN SCHOOL DISTRICT 130
BUDGET COMMITTEE
RESOLUTION IN SUPPORT OF CONTINUED MANAGEMENT OF O & C TIMBERLANDS

57

WHEREAS, the Bureau of Land Management has requested public input on its ten-year land and resource management plan, and,

WHEREAS, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C timberlands, and

WHEREAS, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and

WHEREAS, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and

WHEREAS, O & C lands continue to provide a reliable employment base for many Oregon communities, and diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and,

WHEREAS, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base,

THEREFORE, be it resolved that the Sutherlin School District Budget Committee supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values, and,

BE IT RESOLVED, that we support the principles of multiple use for these O & C lands which include management for timber, water, recreation and wildlife, and,

BE IT FURTHER RESOLVED, that we encourage legislation that would enact a balanced management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

This resolution approved and adopted at a meeting of the Budget Committee of Sutherlin School District #130 held November 19, 1992.

Budget Committee Chairman
R. A. Smith, Superintendent

CITY OF YONCALLA

2640 Eagle Valley Road
P.O. Box 508 - Yoncalla, OR 97499-0508
Phone and FAX: (503) 849-2152



RESOLUTION NO. R-9293-03

A RESOLUTION IN SUPPORT OF CONTINUED MANAGEMENT OF O & C TIMBERLANDS

Whereas, the Bureau of Land Management has requested public input on its ten-year land and resource management plan, and

Whereas, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C timberlands, and

Whereas, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and

Whereas, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and

Whereas, O & C lands continue to provide a reliable employment base for many Oregon communities, and

Whereas O & C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and

Whereas, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base,

Therefore, be it resolved that the City of Drain supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values, and

Be it resolved that we support the principles of multiple use for these O & C lands which include management for timber, water, recreation and wildlife, and

Be it further resolved that we encourage legislation that would enact a balance management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

Passed by the City Council, of the City of Drain, Douglas County, Oregon this 14th day of December, 1992.

ATTEST: Bill Ewing, City Admin.
Wes Anderson, Council Pres.

December 14, 1992

To: Bureau of Land Management
777 NW Garden Valley Blvd
Roseburg, Or 97470

From: Kathleen Finley
City Recorder

Attached, please find Resolution 92-07 supporting continued management of O & C Timberlands as passed by the Yoncalla City Council.

Thank You

cc: Douglas County Timber Operators, Inc
3000 Stewart Parkway, Suite No 208
Roseburg, Oregon 97470

RESOLUTION 92-07

A RESOLUTION IN SUPPORT OF CONTINUED MANAGEMENT OF O&C TIMBERLANDS



ELKTON PUBLIC SCHOOLS

District No. 34 Elkton, Oregon

Elkton High School
Charles 'Steve' Farrell, Supt./Principal
P.O. Box 390
Elkton, OR 97436
(503) 584-2228 • Fax 584-2227

Elkton Elementary School
Bill Gehling, Principal
P.O. Box 440
Elkton, OR 97436
(503) 584-2115

Elkton School Dist. Business Office
Julia Swearingen, Fiscal Officer
P.O. Box 390
Elkton, OR 97436
(503) 584-2228

December 17, 1992

Mr. Jim Moorhouse
District Manager
Bureau of Land Management
777 N.W. Garden Valley Blvd.
Roseburg, Oregon 97470

Dear Mr. Moorhouse:

Please accept this letter as Elkton School District's Board of Director's comments on the BLM draft Resource Management Plan and Environmental Impact Statement. We are elected members of the community and are charged with providing the best possible education for the children of our district. A reduction in Federal Forest Fees would be a further reduction in revenue for our district. In fact, the revenues we received in this fund are already down approximately \$20,000 over the prior two years, i.e., \$70,000 from \$90,000. This does not reflect the increase in unemployment or the decline in living-standards experienced by some of our patrons who have been employed in the wood-products industry.

Our school district is already deeply affected by Ballot Measure 5 and expects to be impacted negatively even more over the next few years. Due to reductions in revenue, our district has eliminated music for grades K-12, one full time teaching position, and two instructional assistants.

Finally, we live in a rural county and are dependent upon services provided through our county. This summer, the county Road department helped our district by resurfacing the grade school parking area and bus lane and charged us for only materials. Our high school students almost daily use resources from the Douglas County Library through interlibrary loan. Three of our bus routes are almost solely operated on county roads and we need these maintained for safe transportation of our students.

We, the Board of Directors of Elkton School District request that this plan be given reconsideration. The plan, as currently proposed, will have a devastating impact on our school district.

Sincerely yours,
Jeff Smith
Board Chairman
P.O. Box 390
Elkton, Oregon 97436

ELKTON SCHOOL DISTRICT No. 34 IS AN EQUAL OPPORTUNITY EMPLOYER

WHEREAS, the Bureau of Land Management has requested public input on its ten-year land and resource managements plan, and

WHEREAS, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C Timberlands, and

WHEREAS, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and

WHEREAS, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and

WHEREAS, O & C lands continue to provide a reliable employment base for many Oregon communities, and

WHEREAS, O & C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and,

WHEREAS, these lands should continue to provide economic stability, health and productive forests and reliable employment base,

THEREFORE, be it resolved that the Yoncalla City Council supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values, and,

BE IT RESOLVED, that we support the principles of multiple use for these O & C lands which include management for timber, water and wildlife, and,

BE IT FURTHER RESOLVED, that we encourage legislation that would enact a balanced management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

APPROVED BY THE MAYOR THIS 14TH DAY OF DECEMBER 1992.

PASSED BY THE CITY COUNCIL THIS 14TH DAY OF DECEMBER 1992.
MAYOR [Signature] ATTEST: [Signature]

RES 92-07 DOCOTOP



CITY OF YONCALLA

2640 Eagle Valley Road
P.O. Box 508 Yoncalla, OR 97499-0508
Phone and FAX: (503) 849-2152

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United States Forest Pacific Forestry Sciences Laboratory
Department of Service Northwest Research
Agriculture Station Corvallis, Oregon 97331

Reply To: 4060-3

Date: December 21, 1992

Mr. Jim Moorhouse
District Manager
Bureau of Land Management
777 NW Garden Valley Blvd
Roseburg, Or 97470

RE: Comment on Draft Resource Management Plan and Environmental Impact Statement

Dear Mr. Moorhouse:

Please accept this letter as the City of Yoncalla and Yoncalla Rural Fire Protection District's comments to the Draft Resource Management Plan and Environmental Impact Statement for the Roseburg District. Small cities and special districts depend heavily on grants from the county to maintain the infrastructure and to make improvements. We maintain most of our streets with county grants and our fire station in Scotts Valley would not have been possible without seed money from the county. Every nickel the county timber receipts are cut is deeply felt by us little folks. Additionally, the depletion of timber related jobs is deeply felt. We cannot accept this draft Resource Management Plan because it goes far beyond the goals and objectives for which Congress created the O & C lands and is nothing more than a spotted owl plan. Furthermore, the proposed plan will have a devastating impact on the community and our local county government.

First of all, it appears that the BLM has forgotten that Congress originally intended for these valuable timberlands to be private property. Only because the railroad was involved in land fraud, did the land revert back to public ownership. Congress passed the O & C Sustained Yield Act to make the counties whole once again. Your proposed plan reneges on this commitment to our community.

The O & C Sustained Yield Act states that BLM lands are to provide a flow of timber and clean water. Your proposed 10-year plan goes far beyond this mandate by setting aside large areas to provide for wildlife, recreation and other resources, to the detriment of our quality of life. Furthermore, these O & C lands play a significant role in the well being of our rural community. Local county governments rely on receipts to their general fund from the sale of BLM timber to provide basic social services. In the wake of Measure 5, local governments cannot afford reduced revenues. Who will pay for all the social service needs with increased unemployment caused by your proposed reduction in the timber sale levels?

Over the last forty years, the O & C Counties have reinvested over a billion dollars into these forest lands. After fifty years of timber harvesting, the standing inventory has actually increased. Your own analysis of the timber sales program's biological potential show that the BLM could actually increase timber sale levels by over 30 percent, but your proposal would reduce them by 50 percent without any certainty that the volume will be sold. Such a reduction is totally unacceptable.

Your draft Resource Management Plan and Environmental Impact Statement attempts to sell the preferred alternative as meeting the public's demands from these lands. The reality is that we, the public, want to maintain timber sale levels and funding to local county governments. The National Forests already have preserved 70 to 80 percent of their land base for wildlife, recreation and wilderness experiences, far in excess of demand. So there is no justifiable reason for the BLM to do the same. The fact is that your proposed plan is being dictated by a flawed Endangered Species Act. An Act which does not balance the needs of society with the biologists' perceived requirements for wildlife.

Your proposed plan to lock-up such a significant portion of O & C lands is a result of your continued reliance on the belief that spotted owls require large tracts of old growth to survive. The BLM's own research has clearly demonstrated this is not the case. The key to the owl's survival is habitat structure, something the BLM recognizes can be created through forest management activities. However, your plan chose to ignore the research and recommended unjustified preserves.

Finally, your plan ignores the cumulative effect of the growing number of constraints on timber harvesting from private and public forests across the nation. The United States could actually be running out of forest products and not realize it! The environmental costs of relying on foreign, non-sustainable sources for forest products has been overlooked by the plan. The Resource Management Plan also ignores the other environmental costs--higher consumption, increased CO2 emissions, accelerated depletion of nonrenewable resources--of relying more on substitute building materials.

Thank you for this opportunity to comment. Please give our concerns full consideration because the Final Resources Management Plan will directly impact our ability to provide the services needed and a reasonable timber related work force.

Respectfully,

Albert D. Appligato, Jr
Mayor

James Moorhouse, District Manager
Bureau of Land Management
777 NW Garden Valley Road
Roseburg, OR 97470

Dear Mr. Moorhouse:

I have recently gone through the Draft Resource Management Plan for the Roseburg District of the Bureau of Land Management and have some comments to make in regards to the plan. My comments pertain to established and/or proposed Research Natural Areas on the district.

I was pleased to see that the District has gone forward with the proposals for Bear Gulch and Red Pond ACEC/RNAS and the additions to Beatty Creek, North Myrtle Creek and Tater Hill ACEC/RNAs. I do not understand what happened to the Bushnell-Irwin Rocks proposed ACEC/RNA. In the plan under adverse impacts it states failure to represent two Oregon Natural Heritage Plan cells, oak sadsrone woodland in the Umpqua Valley and first to third order stream system in the Umpqua Valley. It is unclear what this means. It has been clearly documented that the best available site to fill the two above-mentioned cells is Bushnell-Irwin Rocks proposed ACEC/RNA. Furthermore the proposed ACEC/RNA does not impact any other resources as all the harvestable timber around the area has been cut. The Pacific Northwest Interagency RNA Committee and Dick Vander Schaaf (The Nature Conservancy), contractor to the BLM, have worked closely and long with the District on this proposal; many compromises have been made to the original 1988 proposal. It is not clear what has happened to have the proposal dropped.

In a more general sense there is very little in the plan or the appendices that addresses the general management direction for ACEC/RNAs. It is not clear in reading the plan what can and cannot take place in an RNA other than prohibition of ORV use. I think this kind of information would be very useful to the public and to BLM managers as they proceed to implement the plan in the future. I would be glad to help in providing some wording of this kind.

I encourage the District to please reconsider the Bushnell-Irwin Rocks proposal. If you have any questions about my comments, please do not hesitate to call me at 503 750-7360.

Sincerely,

Sarah E. Greene

SARAH E. GREENE
Research Natural Area Scientist
Pacific Northwest Region

cc C. McCaffrey
R. Holmes

790

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October 29, 1992

Mr. Bob Warren
Special Assistant for Forest Policy
Governors Forest Planning Team
155 Cottage Street
Salem, OR 97310

DEPARTMENT
OF GEOLOGY
AND MINERAL
INDUSTRIES

Dear Bob:

ADMINISTRATIVE
OFFICE

This is the DOGAMI draft comment letter covering all six west side BLM districts. The body of the letter contains generic comments about our mineral concerns which apply to most or all the Resource Management Plans (RMP). Enclosed are lists of comments and issues specific to each of the six districts.

Land available for mineral and energy exploration and development should be kept at a high level in the preferred alternative, and decisions to withdraw land should be founded on an open analysis with proper accommodation of current environmental protection and reclamation requirements. In the development of alternatives, mining could then be given a more fundamental role. Minerals have a place at the BLM planning table equal to that of other resources.

There is a need to better quantify the value of the resource and to factor the resource value into the BLM alternatives. Specifically, mineral withdrawals have been made without the benefit of a mineral inventory first. Such an inventory should be conducted before withdrawals are recommended.

Part of the inventory could be our GIS mineral layer called Mineral Information Layer of Oregon by County (MILOC). All the BLM districts have been provided with an electronic copy of this data and DOGAMI geologists have been in touch with BLM geologists in several of the districts about inventories and other concerns we have.

A part of the underlying problem is that all too little money has been budgeted for mineral assessments before decision making starts. In addition to the inventory of historic mining activity, a sophisticated evaluation of the land is needed to estimate the economic potential of future mineral activities and the economic benefits to be derived from such activity. This could be added to the future mineral development scenario sections in volume II of the RMP's.

On non-federal land in Oregon, there is a process to balance conflicting potential uses on a parcel of land before the parcel is zoned or a particular use permitted. On BLM lands, there are cases of mineral withdrawal based upon staff professional judgement without an open process similar to the state process to balance conflicting uses. Before the BLM zones or earmarks an area as an ACEC or an historic trails area, for example, a balancing of uses, as well as an inventory of resources, should be performed.

In several of the BLM documents, the DOGAMI permit process for mines and wells is not mentioned or is referenced inconsistently. DOGAMI permits exist on federal land as well as other lands, and should be properly cross referenced in these RMP's.

Coos Bay District

1. Table 3-M-3 (p. 3-93) has the Open and Closed categories reversed compared with other tables on the page.
2. State DEQ permits are mentioned, but not DOGAMI permits.
3. BLM adds its own requirements, in addition to what is required by state law, for claim staking and marker maintenance.
4. Mineral claim occupancy is limited to May 15 to November 15 (Appendix II-k, p. II-K-17). Exceptions should be allowed on case-by-case basis.

Klamath District

1. Cross-references to state regulatory permits and authority is inconsistent.

DLO:ch/blmisue.doc/3

ATTACH #

ATTACH #

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BLM ISSUES AND COMMENTS
BY DISTRICT

Oregon Department of Geology and Mineral Industries

Salem District

1. Table S-1 omits leasing acreage for energy minerals (oil + gas, geothermal).
2. Table S-1 acreage closed to mining doesn't appear to agree with Tables 2-6 to 2-8 for acreage closed to mining. 6100 acres are closed due to wilderness and special areas.
3. Cross-references to state authority should be improved by mention of specific agencies throughout the document.

Eugene District

1. Table S-1 omits leasing acreage for energy minerals (oil + gas, geothermal).
2. Appendix 4, p. 4-57 (Vol. II) should mention, under Locatable Mineral Resources common to all alternatives, the discussion about silica sand which is mentioned in Appendix 4, p. 4-60, under alternatives NA and A. The discussion of silica sand should appear in both sections, as it is germane to all alternatives. To say silica sand exploration is allowed in NA and A is misleading; it should be clearly stated that it would not be allowed under the PA.
3. Cross-references to state authority should be improved by mention of specific agencies throughout the document.

Roseburg District

1. Reclamation of small-scale streamside mining should be addressed.
2. Lease stipulations and notices are often inflexible (for example, Visual Resource Management Areas, classes I & II) and may prohibit mineral exploration or development where determination of best use has not considered mineral values (Appendix 2, p. 2-35 to 2-41).
3. Reference to state regulation should be made in all appropriate sections as in first paragraph of Appendix 2-7 (p. 2-33).
4. Appendix 2 (p. 2-43) restricts mining claim occupancy to May 15 to November 15 due to stream flow. Exceptions should be made possible by BLM.

Medford District

1. Reclamation of small-scale streamside mining should be addressed.
2. There is a pollution issue in the Bear Creek drainage due to agricultural phosphates that needs to be addressed.
3. The Topography and Geology section (Chapter 3, p. 3-2) is vague and contains errors. The opening sentence of Energy and Minerals (Chapter 2, p. 2-21) is confusing.
4. In wild and scenic river areas where the disturbance standard is "minimal visual impairment," mining activities should be considered as allowable if that standard can be met.
5. Appendix 2 (p. 2-116) restricts mining claim occupancy to June 15 to September 15 due to stream flow. Exceptions should be possible.
6. References to related state regulatory and permitting responsibilities are inconsistent: in some sections DEQ is mentioned; DOGAMI is not referenced.
7. Withdrawals from mineral entry already exist for many Research Natural areas and are sought for historic mining districts in the Jacksonville and Galice Creek areas, for administrative sites, for reaches of streams with fish improvements, and for developed recreation sites, apparently without analysis of mineral potential.

ATTACH # 1-3

A Resolution in Support of Continued Management of O & C Timberlands

Resolution Number #3

Whereas, the Bureau of Land Management has requested public input on its ten-year land and resource management plan, and,

Whereas, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C timberlands, and

Whereas, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and

Whereas, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and

Whereas, O & C lands continue to provide a reliable employment base for many Oregon communities, and

Whereas, O & C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and,

Whereas, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base,

LENDALE SCHOOL

Therefore, be it resolved that the DISTRICT #17 supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values, and,

Be it resolved that we support the principles of multiple use for these O & C lands which include management for timber, water, recreation and wildlife, and,

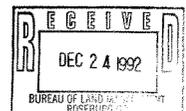
Be it further resolved that we encourage legislation that would enact a balanced management plan into law by the Congress of the United States of America and remove management decision from the federal court system.

By *Chris W. Beach*
Board Chair

Return by December 21 to:

Bureau of Land Management
777 NW Garden Valley Blvd.
Roseburg, OR 97470

This 22nd day of Dec 1992.



BOARD OF COMMISSIONERS

DOUG ROBERTSON DORIS WADSWORTH JOYCE MORGAN

Courthouse • Roseburg, Oregon 97470 • (503) 440-4201

December 18, 1992



James A. Moorhouse
District Manager
Bureau of Land Management
Roseburg District Office
777 N.W. Garden Valley Blvd.
Roseburg, OR 97470

RE: Draft Roseburg District Resource Management Plan

Dear Mr. Moorhouse:

The Board of Commissioners of Douglas County would like to take this opportunity to express our appreciation for the opportunity to review and comment upon your "draft" Resource Management Plan for the Roseburg District of the Bureau of Land Management.

We have reviewed the draft Resource Management Plan and have developed the enclosed comments and questions. In addition we have participated with the Association of O & C Counties in a coordinated review by all of the O & C Counties. We adopt the coordinated comments of the Association of O & C Counties as part of our comments as well.

The Board of County Commissioners is committed to working with the Bureau of Land Management in the development of a final resource management plan that supports the local communities and concurrently provides for the long term sustained yield of these lands.

Respectfully submitted
THE BOARD OF COUNTY COMMISSIONERS
DOUGLAS COUNTY, OREGON

Handwritten signatures of Doris Wadsworth, Doug Robertson, and Joyce Morgan with their respective titles: DORIS WADSWORTH, CHAIR; DOUG ROBERTSON, COMMISSIONER; JOYCE MORGAN, COMMISSIONER.

taxes. During 1991 the county received \$50,182,067 in federal timber receipts, of which \$25,858,768 was derived from the O & C lands alone. In contrast the local property taxes provided \$2,959,168 to run county government during this same time period.

While historically the county had the option of raising taxes to offset a reduced timber harvest, that option is no longer available. With the adoption of the constitutional cap on local property tax (Measure 5), it is legally impossible for Douglas County to increase its tax base.

In addition since 30% of the property tax roll valuation is directly linked to the forest products industry (ie. sawmills), if these operations are shut down or curtailed the impacts upon the county government will be increased far beyond the loss in timber receipts.

Recently several analysis have been conducted as to the effect of declining timber harvests on Douglas County, including future economic development as well as social impacts. These reports indicate major economic and social problems for Douglas County with little opportunity to mitigate.

In the recent "Assessment of Economic Strengths, Weakness, Opportunities, and Threats (SWOTS) analysis for the south county, ECO Northwest found that "Southern Douglas County does not possess, and does not have ready access to, some key ingredients necessary for future economic growth." (P.7)

The analysis also noted that "(t)he decline in timber industry employment, payroll, and tax payments will continue to tear at the economic, social and political fabric of the community" and that "(t)he past decline in timber industry employment and payroll and uncertainty about future declines, may hamper the community's willingness to invest in its future, may generate additional social problems, such as domestic violence, and may increase the need for social services" (p. 11)

The results of the ECO Northwest report for Southern Douglas County was mirrored in the analysis of Barney & Worth entitled "Douglas County Task Force, Final Report, Douglas County Strategic Assessment Task Force on Economic Development", wherein the authors

1. Measure 5 limited non-school entities to a tax rate of \$10/\$1000 of valuation. While Douglas County as a taxing entity is currently only at \$1.10/\$1000, the combined total of all taxing entities is already above the constitutional limit. There is no legal means to increase taxes to offset a reduction in BLM receipts.

2 COMMENTS OF THE DOUGLAS COUNTY BOARD OF COMMISSIONERS

Recycled Paper

COMMENTS OF THE

BOARD OF COMMISSIONERS
OF
DOUGLAS COUNTY

AS TO THE

ROSEBURG BUREAU OF LAND MANAGEMENT'S
DRAFT RESOURCE MANAGEMENT PLAN

On behalf of the citizens of Douglas County, the Board of Commissioners of Douglas County ("Board") submits the following comments on the draft Resource Management Plan for the Roseburg District of the Bureau of Land Management ("BLM"). Douglas County appreciates this opportunity to offer comments and to continue its participation in the BLM's planning process.

I.
INTRODUCTION

The BLM manages several different categories of land within Douglas County, each has its own management direction and impact upon the county. The economic base of Douglas County is dependent upon these forest lands. In addition the local governments are heavily dependent upon the receipts from these lands to operate local government.

With approximately 51% of the land base of Douglas County within federal ownership and over 64% of the County's operating income derived from federal lands the County, out of necessity, is very concerned over the management decisions made relative to the BLM managed lands.

The dependence upon timber receipts is clearly illustrated by comparing the funding for county government derived from federal timber receipts as opposed to the funding derived from local

1. Revested Oregon & California Railroad lands, Revested Coos Bay Wagon Road lands, and the Public Domain lands.

2. In the period of 1984-88 the O & C lands alone contributed an average of \$16,772,700 annually. These receipts have increased over the last few years to where the 1987-91 average is \$24,448,300 annually. The Coos Bay Wagon Road lands have also contributed substantially to local schools and government.

1 COMMENTS OF THE DOUGLAS COUNTY BOARD OF COMMISSIONERS

noted that "(t)he timber industry remains the chief source of economic strength and livelihood in Douglas County. Its continued health is critical to our economic future" (1990 p.2)

While county government is heavily dependent upon the timber receipts, the general economy of the county is also timber dependent. Over 70% of the economic activity within the county starts with the harvesting of timber. Considering all industry within the county, over 75% of the jobs and 85% of the payrolls are derived from the direct, indirect, and induced effects of activities of the timber and wood products sector.

Not only are the O & C lands important for the economic health of the community, they also play critical role with respect to the social health and quality of life in Douglas County. As Dr. Robert Lee stated in his report on the O & C lands, a 15 percent reduction in O & C revenue would force the affected counties to reduce essential services thus causing a substantial deterioration in the quality of life. This curtailment of county services would coincide with a period of rapid growth in the demand for services caused by increased unemployment and economic dislocation such as human services, public health care, mental health counseling and housing assistance.

Lee Hockman, Administrator of the Douglas County Department of Health and Social Services testified recently before the Endangered Species Committee that the needs for his agency's services increase in times of unemployment and that reductions in O & C revenues to the county would result in reduction or elimination of those services.

Recently Dr. John Beuter noted that "Douglas County has a timber dependent economy. It began that way, remains so today, and likely will continue to be in the future." He was correct, timber has been the mainstay and foundation of Douglas County's economy.

Similar observations were reported in the Bureau of Land Management's "Strategies for the 1990's: Timber, Tourism, and Community Economic Stability in the O & C". This study noted: "(t)he data point to a heavily timber-dependent local economy that has suffered substantially in the recession and is slow to rebuild. The dependency of this timbered land on the BLM is high, and shows signs of continuing to be so. The Roseburg timbered land is very vulnerable to any changes in the timber market." (emphasis added)

This dependence upon timber has not been an accident. It was the result of commitments made earlier in this century by Congress relative to both the Forest Service managed lands and the lands managed by the BLM.

It is within this environment and history that Douglas County makes the following comments:

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II. Historical Framework for Management of the O & C lands.

The revested Oregon & California Railroad lands were originally part of a grant to aid in the construction of railroads from California to Portland and from Portland to Astoria and McMinnville. In 1916 title to these lands was subsequently re-vested by Congress in an attempt to resolve a Supreme Court case concerning the Oregon & California Railroad's violation of the covenants contained in the granting acts.

Prior to revestment these lands were the subject of numerous lawsuits both in federal as well as state courts. The controversy over these lands was finally resolved by Congress via the Chamberlain-Ferris Act of 1916. Under this Act the lands were re-vested in the United States, however, in recognition of the claims by the State of Oregon and the various affected counties, the Act apportioned a percentage of the proceeds from these lands to the counties and the State of Oregon.

This apportionment has at various times been singled out as a raid by the State of Oregon upon the public treasury. However this argument ignores the history of these lands. To understand their true place in Oregon's history one must remember that the granting acts originally dedicated these lands for the purpose of settlement and upbuilding the State of Oregon. The O & C lands are in essence a trust fund to compensate Oregon for the railroad's failure to properly dispose of the land and the federal government's subsequent retention of the land, thereby thwarting the purposes of the original grants.

While the Oregon & California railroad grants were obviously designed to provide the financial means for building the railroad, they had the dual purpose to aid in settling the land. The O & C Railroad grant expressly required the railroad to sell the grant

During the ensuing debates Congress clearly recognized that far more than a failed railroad was at issue. By failing to abide by the settlers' clause the railroad defeated one of the purposes of Congress in making such grants, namely, to give the empire a path westward and for prosperous commonwealths take the place of a wilderness.

The railroad was the agent of Congress to effect the settlement of the grant lands. By refusing to sell the grant lands to actual settlers the railroad was untrue to its trust, thereby retarding the settlement and development of the State of Oregon.

In as much as the original purpose of the granting acts was the welfare of the State of Oregon, Congress desired that this purpose be resumed. This original purpose could only be accomplished by devoting the grant lands or their proceeds to the original purpose of hastening the development of the State.

Congress determined that Oregon should reap the full benefit originally intended to be conferred on the State by the granting acts, viz., the devotion of the lands, or the proceeds therefrom to the upbuilding of the state.

However it was obvious to everyone that due to the standing timber these lands were worth far more than the \$2.50 per acre mandated in the granting act. The dilemma was how to prevent speculators from acquiring the lands, thereby preventing the original goal of the grant - settlement by bona fide settlers.

Of importance to this deliberation was the fact that the Supreme Court had not ruled that Congress could retain the lands. It merely enjoined further sales until Congress developed legislation to dispose of the lands to the actual settlers contemplated in the original act. To resolve this issue Congress directed that the timber be removed and the cutover land be sold to the bona fide settlers. The proceeds were to repay the railroad, counties, and the federal government.

8. Act of April 10, 1869 (14 STAT 239) and Act of May 4, 1870 (16 STAT 94).

9. Act of June 9, 1916 (39 STAT 218).

10. Sen. Rept. No. 494 64th Congress, 1st Session, May 18, 1916, p.41.

11. While under the control of the O & C Railroad the annual fire assessment and local taxes were not paid. The federal government recognized that these taxes and assessments were a serious encumbrance on the land, an encumbrance that would have to be paid before the lands could be sold to actual settlers.

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Oregon California Railroad v. U.S. 35 S. Ct. Rept. 908, 920, 922 (1914)

12. Sen. Rept. 494, p. 41

13. id. 41-42

14. id. 42

15. id. 42

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lands to actual settlers. It could not retain them or convey them to financial institutions as had earlier railroads.

When the O & C Railroad failed to sell the lands to bona fide settlers the Supreme Court ruled that the failure to sell was a breach of the settlers' covenant in the grant. The Supreme Court enjoined further land sales until Congress had the opportunity to develop legislation that would accomplish the purposes of the act - sale to bona fide settlers. The Supreme Court expressly noted that if Congress did not act it would remove the injunction and the District Court could proceed with disposition of the land to actual settlers. Often overlooked in the debates over the O & C lands is the fact that the Supreme Court did not rule that the federal government could retain title, in fact its ruling was designed to get the lands into the hands of bona fide settlers in fulfillment of the original Oregon and California Railroad grant.

8. "... shall be sold by the company to actual settlers . . ." 16 STAT 94, sec. 4.

9. in the first grants to railroads there were no restrictions upon the disposition of the lands. They were given as aid to enterprises of great magnitude and uncertain success, and which might not have succeeded under a restrictive or qualified aid. However, a change of times and conditions brought a change in policy, and while there was a definite and distinct purpose to aid the building of other railroads, there was also the purpose to restrict the sale of the granted lands to actual settlers. These purposes should be kept in mind and in their proper relation and subordinates. Oregon & California Railroad et al. v. United States 35 S. Ct. Rept. 908, 917-918 (1914)

10. Given the Government's interest in the exact observance of these covenants the Court enjoined the railroad from further sales in violation of the covenants and enjoined them from any disposition of them whatever, and from cutting or authorizing the cutting or removal of any of the timber thereon until Congress shall have a reasonable opportunity to provide by legislation for their disposition in accordance with such policy as it may deem fitting under the circumstances, and at the same time to secure to the defendants all the value the granting acts conferred upon the railroads. p. 925-926.

The Court did not rule that Congress had the authority to reserve these lands, it merely stated Congress could develop new legislation for the disposal of the lands and timber.

11. The court did not rule that Congress had the authority to reserve the lands, it merely stated Congress could develop new legislation for the disposal of the lands and timber. The suit was to enforce a continuing covenant, not a condition subsequent.

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While the original act called for the outright liquidation of the Government's interest in the land and the timber thereon no provision was made for the administration of the land on a conservation basis. The act provided that the timber should be sold as rapidly as reasonable prices can be secured on a normal market and the cut over lands disposed of for agricultural purposes. Clearcutting was the technique of choice with no consideration for the effect on community industries. The Supreme Court concurred with this original procedure.

This policy was later found to be wasteful and destructive of the social interests of the state and nation. These findings, coupled with the fact that the counties were not being fully reimbursed for the tax monies owing, resulted in the O & C Act being amended to incorporate reservation of the lands and adoption of a sustained yield program of timber management. However with this change the counties could not reap the full benefit originally intended by the granting acts. To rectify this violation of the granting act, the receipts formula was incorporated into the sustained yield program. The formula was designed to compensate the counties not only for past taxes but the loss of these lands from settlement.

While one often encounters arguments that the O & C Act is a special program for the State of Oregon, history proves that it is in fact the fulfillment of the terms of the O & C Railroad grant. This unique history distinguishes the O & C lands from both the public domain lands and the forest preserves.

Unlike the public domain lands and the forest preserves, the O & C lands are not free of encumbrances. They are, in fact, analogous to a trust - a trust between the federal government and the counties within which these lands are situated. The beneficiaries of the trust are the O & C Counties with the federal government serving as the trustee.

It must be remembered that these lands were dedicated to the settlement and upbuilding of the State of Oregon. The railroad

16. It is important to note that this finding was made by Congress and was not an issue presented to the Supreme Court for concurrence. Retention could only be attained by compensating the counties in some manner. Clearly, in the absence of compensation litigation would have again clouded these lands.

17. House Rept. 1119, 75th Cong. 1st Session, June 28, 1937, p. 1-2.

18. A trust relationship not unlike the trust relationship between the federal government and the indian tribes or the State of Oregon and the Common School Fund.

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company was chosen as the agent of Congress to effect the settlement of the grant lands, it was untrue to its trust.¹⁹ The lands have always been devoted to the original purpose of the railroad grant.

To define the true relationship between the Federal Government (BLM) and O & C counties one must refer to the laws of trust, with particular reference to similar trust relationships (i.e. common school fund, Indian tribes and trust territories). Without going into detail, one can generally conclude that as trustee the federal government must take all steps necessary to give effect to the trust. For example, if the federal government were to dedicate these lands to purposes not contemplated in the act then it would have acted in violation of its trust duties and could be held financially accountable.

The purposes of the various O & C Acts are very clearly stated. When called upon to address the purposes of these lands the Ninth Circuit noted²⁰ that the O & C Acts are clear that the primary use of the lands is for timber production. The court noted the act specified that the lands "shall be managed . . . for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the principal (sic) of sustained yield for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities."

The Court went on to note that nowhere does the legislative history suggest that wildlife habitat conservation or conservation of old growth forest is a goal on a par with timber production or indeed that it is a goal of the O & C Act at all.

With out expressly stating it, the Court was reaffirming that the original purposes of the granting act to the railroad must be attained. As long as the O & C Act is followed these purposes are met.

It is within this historical framework that the RMP must be analyzed. While the public domain lands may be managed for

¹⁹. Sen. Rpt. 494, 64th Cong. 1st Session (May 18, 1916) p. 42-43

²⁰. Headwaters v. BLM, (Ninth Circuit, No. 89-35688, Sept. 10, 1990)

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multiple use concepts, the O & C lands can only be managed under the concept of multiple use if such management does not reduce the receipts to the counties.²¹

The standard for management is set by the ability of the BLM to manage these lands under sustained yield principles while abiding by the other legal mandates that apply equally to federal as well as private lands.

III. Coordination with Local Planning

The BLM planning regulations provide clear directives that the resource management plans are to be consistent with officially approved or adopted resource related plans and the policies and programs contained therein. 43 CFR 1610.3-2 In Oregon, the resource related plans and policies are found in the local comprehensive plans.

Under the planning provisions contained within the Federal Land Policy and Management Act the Secretary is:

"to the extent consistent with the laws governing the administration of the public lands [i.e. O & C Act], coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located . . . by, among other things, considering the policies of approved State and tribal land resource management programs [i.e. comprehensive plans]. . . . Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act."

Since the expression of public policy and balancing of conflicting uses is the role of the comprehensive land use planning process, the BLM RMPs must be consistent with the local comprehensive plans. Either the BLM must conduct a consistency review or make a formal request to Douglas County for such review.²²

²¹. The receipts formula was designed to not only compensate the counties for the lost tax receipts but also as fulfillment of the original Railroad Grant.

²². We note that the Douglas County Planning Department has been contacted frequently by the BLM in developing this draft. However we are unable to find in the RMP any reference to the

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III. Oregon Forest Practices Act

The Oregon Forest Practices Act ("OPFA") is imbedded in the Douglas County Comprehensive Land Use Plan, and is the benchmark which the BLM should review its own proposals for consistency.

The OPFA is the model for the rest of the nation and was crafted in an open public forum with widespread public involvement and legislative review. Given this intensive public and legislative scrutiny, any departure from the OPFA should be identified as an inconsistency.

If the BLM chooses not to act consistent with the OPFA, it is required, by its own regulations, to provide not only the rationale for acting inconsistent with the OPFA but also a range of alternatives. In developing alternatives to the OPFA, we recommend that the BLM also prepare a cost-benefits analysis relative to any departure from the Oregon Forest Practices Act.²³

IV. Role of FLPMA on O & C Lands

In developing the final RMP it is important to recognize that the lands under BLM management do not have a uniform history and as a result have differing management requirements. As we have noted earlier the O & C lands are to be managed strictly according to the purposes in the various O & C Acts. The RMP emphasizes that is designed to fulfill the requirements of FLPMA, however this statement oversimplifies the issue. While FLPMA is seen by some as the "organic act" for the BLM, it does not universally apply to all lands managed by the BLM.

The BLM's authority under FLPMA is limited by other provisions of the law and by the category of lands under

inconsistencies that are present. For example we find no discussion of the Milltown Hill dam project or the impacts of varying from the Oregon Forest Practices Act.

²³. There are numerous examples of where the BLM has in its discretion elected to develop management practices in excess of the OPFA. Among these is the selection of a riparian buffer zone not only in excess of the OPFA but also in excess of the actual riparian area.

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consideration. While the Federal Land Policy and Management Act ("FLPMA") applies to all of the BLM managed lands, the degree to which it applies depends upon the lands in question.²⁴

One must be very cautious in applying the provisions of FLPMA to the O & C act lands since Congress has clearly stated that the statutory mandates under the O & C Act override any conflicting provision within FLPMA. In adopting FLPMA, Congress noted that:

"Notwithstanding any provision of this Act, in the event of conflict with or inconsistency between this Act and the Acts of August 28, 1937 (50 STAT 874; 43 USC 1181a-1181j), and May 24, 1939 (53 STAT. 753), insofar as they relate to management of timber resources, and disposition of revenues from lands and resources, the latter Acts shall prevail"²⁵

The courts have uniformly stated that the primary use of the O & C Act lands is for timber production in conformity with the provision of sustained yield. That primary use overrides any conflicting or inconsistent provision of FLPMA.

As stated in the O & C Act these lands:

"shall be managed, except as provided in section 1181c of this title, [since repealed], for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the principal [sic] of sustained yield for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities." (emphasis added)

Several court cases have clarified that the primary purpose of the act is permanent forest production. Timber is to be removed under the doctrine of sustained yield to provide timber supply, protect watersheds, regulate stream flow, contribute to economic stability, and provide recreational facilities.

These same courts have found that the O & C Act does not even suggest that wildlife habitat conservation or conservation of

²⁴. The Federal Land Policy and Management Act specifies that "Notwithstanding any provision of this Act, in the event of conflict with or inconsistency between this Act and the Acts of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181a-1181j), and May 24, 1939 (53 Stat. 753) insofar as they relate to management of timber resources, and disposition of revenues from lands and resources, the later acts shall prevail. Sec. 701(b)

²⁵. 90 STAT 2786, Sec. 701(b)

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old growth forest is a goal on a par with timber production, or indeed that it is a goal of the O & C Act at all. The courts have repeatedly stated that the O & C Act is a dominant use statute and not a multiple use statute.

Since the degree to which FLPMA applies is governed by the respective land status, the State should recognize these differences and develop its response in accord with the specific lands in question.

V. Old Growth Management

The improper injection of the multiple use concept into the O & C Act is clearly evidenced in the preferred alternative's inclusion of old growth emphasis areas ("OGEA"). While the Board supports the multiple use concepts as applied to the public domain lands, the Board totally opposes any old growth emphasis areas on the revested O & C lands.

Old growth for old growth sake, or for wildlife, is not an element of the various O & C acts. The Board can not underscore enough the need to closely adhere to the original purposes of the O & C Acts. Any lands that are biologically suitable for commercial timber production must remain classified as timberlands under the O & C Act.

If the BLM elects to adopt an alternative that contravenes the purposes of the original O & C Act²⁶, then the counties must be compensated. If society as a whole chooses to reduce timber harvest for purposes other than those embodied in the O & C Act then clearly society should compensate the counties. The counties and local communities should not be forced to bear the burden alone.

²⁶. The original O & C Railroad grant had a dual purpose, one was to provide the financing necessary to build the railroad, and the second was to aid in developing the land by placing the lands in the hands of bona fide settlers. By failing to accomplish the second purpose the Supreme Court instructed the federal government to come up with a plan that would accomplish the development of Oregon. The government in turn developed the strategy of revesting the lands with the eventual sale of the land to settlers and revenues returned to the counties.

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VI. Intensive Management

In the preferred alternative the BLM proposes to establish three categories of forest management (Old-growth emphasis, general forest management, connectivity management) each with a varying degree of management intensity. However in reviewing the activities within each category it appears that while the general forest management areas are described as intensive management in accord with the O & C Act, in fact these lands are considerably constrained.²⁷

If the lands are to be managed for intensive timber production then management should be free of restraints to the fullest extent allowed by law (ie. OPFA and O & C Act)

VI. Land Acquisition

The preferred alternative includes a provision wherein the BLM seeks to acquire additional lands for recreational or fisheries values. The Board expressly reserves the right to comment directly on any proposed land acquisitions or exchanges.

With the projected decrease in receipts, the county can ill afford any additional reductions in its land base. Therefore as a general policy the Board opposes any additional land acquisitions. Furthermore the Board opposes any trade of O & C lands, unless the acquired lands assume the O & C status.

We note that the State of Oregon has likewise adopted a policy against further erosion of the tax base. The Governor recently went on record opposing an Indian gambling proposal on the basis, among others, that the project included the acquisition of land and the resulting removal of the land from the tax base.

The acquisition of more land by the federal government within the county has a dramatic impact upon the county tax base. In addition due to the high degree of federal forest receipts and federal land base within the county, the county has limited

²⁷. While the O & C act allows other uses such as recreation, it does not require these uses on each acre of land. By allocating other lands with these alternative uses emphasized, then the CMA should be totally free of these additional restrictions.

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opportunity under the PILT program. Unless a change is made in the PILT program, the county incurs an economic hardship whenever the federal government acquires more land within the county.²⁸

VII. Endangered Species Act Consistency

In reviewing the time table for completion of the BLM plans we note that the U.S. Fish and Wildlife consultations with respect to the northern spotted owl, will not be completed until after the close of the public comment period. Since the consultation process may result in a significantly different preferred alternative then what has been developed, the Board recommends that the public comment period be extended until after the consultation results are available to the public.

While the public may have little input in the Fish and Wildlife consultation, the public has a role to play in determining the balance in other outputs and in crafting methods to achieve the recovery of the northern spotted owl. Since this balancing process can not be done prior to release of the consultation results, the public comment period should be left open to allow for additional review and comment.

VIII. Watershed Condition Index

The Watershed Condition Index Methodology is an attempt to provide a reference point for comparing the various alternatives. We recognize that the numerical results²⁹ have no meaning by themselves but we are unable to ascertain the scientific validity of this process. We are deeply concerned over the reliance on aerial photographs that may not provide the minute detail required for this formula to work properly.

In reviewing the impact of private lands on the watershed condition index, we find the assumption that 50% of all private timber as identified as heavy timber on the BLM GIS would be harvested during the ten year planning period to be unsupported and in fact overly biasing the process.

²⁸. We note that it is frequently asserted that the reduction in O & C Receipts can be made up by PILT payments, however in fact the O & C lands are not considered federal lands for PILT payment purposes.

²⁹. We find the numerical indexes provided in Appendix 4 do not correlate with the descriptions in Appendix 3-6. The graphs are confusing and not fully explained as to their relevance.

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Likewise we are concerned that the current GIS data base does not include sufficient information on private lands to make statements as to the status of private lands with any scientific validity or reliability. Furthermore in several of these watersheds the Forest Service is a large landowner, yet they do not appear in the watershed condition index.

The fact that the "current condition" reference point is defined as October 1, 1988, raises serious questions about the usefulness of this reference point. We have had four years of intensive harvests on both private and public lands since that date.

We appreciate the BLM's attempt to create a numerical reference point, however we are deeply concerned that the data base and methodology in this case do not provide a meaningful reference.

IX. Reference Points

Typically forest management can be described as a large ecosystem experiment, however it is an experiment that has not been accompanied by scientific baseline analysis, repetitions or monitoring over time. Likewise, the proposed RMP must clearly recognize the scientific subjectivity contained within the various alternatives.

The need for sensitivity analysis throughout the planning horizon must be recognized and the appropriate funding assigned to cover the costs of this analysis. The RMP must adopt a program that establishes scientifically valid reference points and monitoring program. This need for scientific reference points is underscored by the RMP's emphasis on the new theoretical concepts of ecosystem management and emphasis on single species management.³⁰ Likewise the fact that the TRIM and ORGANON models are being pushed far beyond what they were intended to do creates a need for very close monitoring and analysis as we implement the RMP.

We are very concerned that the BLM is not providing sufficient monitoring or monitoring with the requisite sensitivity to analyze the impacts of its various programs.

³⁰. Under the Endangered Species Act, agencies have been placed into a position of single species management. A management philosophy that has the potential to place other species at risk.

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X.
Stumpage Prices

In Appendix 4-2 the expected timber stumpage prices utilized to calculate the sensitivity analysis were derived from the average timber sale price for the 1984-88 time period with an estimated real wood price increase estimated at 1.2% annually. As we indicated earlier the 1984-88 time period does not reflect the most current sale prices. We suggest that either the 1988-92 or 1976-1992¹¹ period be used for this analysis. Furthermore the 1.2% price increase has not been supported by recent real market values.

Given the fact that the BLM anticipates receipts will not drop significantly due to increased prices, to be consistent the anticipated price increase levels that were utilized in assuming the rising prices would counteract reduced timber harvests (p. 4-94) should be used in the sensitivity analysis.

XI.
Job Response

We are unable to determine what job response coefficient was utilized in determining the planning area jobs dependent on BLM timber production (XXV).

Your summary statement states there will be only 540 jobs in direct timber harvest and 50 in recreation (xvii).¹² Yet in Table 4-37 the total employment resulting from this preferred alternative is 880 timber harvest, 50 recreation, 30 fisheries, 130 in timber management are quoted for a total of 1,090 jobs.

¹¹. The 1983-88 time period was some of the lowest years and therefore selecting a four year period from these years does not truly reflect the historical averages. The 1976-91 average is \$22,661,000 in receipts for Douglas County alone.

¹². We note that the graph on p. xxv indicates there will be 1,010 jobs. It is also confusing as to what baseline or benchmark was used to determine job losses. If the 1984-88 average was used, and we have had a 21% decrease in employment between 1989 and 1991 (3-76) then the actual job loss numbers have not been properly stated.

While you indicate that the coefficients you used were the same as used by the Forest Service in its FEIS for the Management for the Northern Spotted Owl in the National Forests (4-94), in fact it appears you used different coefficients. The Errata sheet for the FEIS by the Forest Service indicates that coefficients of 15.0 -15.3 were used. If these multipliers were used in your calculations there should have been 1,575 direct, indirect and induced jobs.

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XIII.
Reforestation Restricted Lands

As we noted in our comments relative to the "Summary of the Analysis of the Management Situation, we are very concerned about the designation of lands into the "Limited Management", "Withdrawn" and "Adverse Location" categories. The FIR program has focused on reforesting difficult sites in southern Oregon and has been very successful in reforesting these sites. The successes of the FIR program should be incorporated into the RMP.

XIV.
Merger of BLM Areas

We find numerous references to the Douglas Sustained Yield Unit and the South Umpqua Sustained Unit¹³ yet we can not find where these units are defined in the RMP. Are these units the results of merging the current Dillard, Drain, South Umpqua and North Umpqua Resource Areas? If the BLM plans to merge the areas as part of the RMP process then a detailed analysis should be included. If these units are merely mapping units, then the RMP should discuss how they relate to the current resource areas and describe their boundaries.

XV.
"Analysis of the Management Situation" Comments

Douglas County previously submitted comments relative to the AMS however we have not seen any response to how those comments and the other comments submitted by the public were incorporated into the planning process. We suspect that we will see the comments discussed in the Approved Resource Management Plan however we believe that they should have been provided to the public prior to the issuance of the draft RMP. Since we are unable to analyze a number of the issues raised in the draft RMP until we see how the technical questions raised in the AMS process were resolved, we request that no final selection of the Approved Resource Management Plan occur until the public has had an opportunity for full and complete review of all documents.

We commented during the AMS process that we were concerned over the public involvement process. While the public is being provided opportunities at each step of the process to participate and comment, there is no opportunity for public comment on the

¹³. Appendix 3-60

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However when applying the coefficients utilized by the Recovery Team (p.553) of 13.87 for Douglas County, we find that a preferred alternative of 105 MMBF would yield a total of 1,456 direct, indirect and induced jobs.

While the draft states that the coefficients utilized by the BLM were developed using the same data and techniques as used by the USFS for the FEIS on Management for the Northern Spotted Owl in the National Forests, in fact when the Forest Service coefficients are used the resulting numbers do not match the BLM.

The Forest Service used 15.0-15.3 as its coefficients.¹¹ When these coefficients are applied to the 105 MMBF harvest level then the actual job figures are 1,575-1,606 direct, indirect and induced jobs.

We find that the draft RMP does not provide a clear picture of the actual impacts on employment. Furthermore it is difficult for us to determine the cumulative impact of the adjoining districts on the job response for Douglas County. To aid in analyzing the connected actions, the county wide impact should be discussed.

We recommend that prior to developing the final that this section be clarified and the true impacts revealed to the public for comment. Including a cumulative analysis on a per county basis.

XII.
Typographical Errors

The draft RMP contains several typographical errors and inconsistent statements. We suggest that prior to issuing the final that the document be edited carefully.

For example, on page 2-89 of the appendix that the estimated annual payment to the O&C counties is projected at \$1,151,070. We believe this is a typo since on page 4-97 the total payments from the Roseburg District is listed as \$11,510,730.¹⁴

¹¹. "Errata: Final Environmental Impact Statement on Management for the Northern Spotted Owl in the National Forests" p.5

¹⁴.

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total package. There is no discussion of how these individual steps will be integrated and presented for public review. The incremental process proposed (p. 1-6) does not comply with the CEQ guidelines.

We also noted in our comments to the AMS that the Timber Resources Section was incomplete and that we were reserving comments until we had an opportunity to review it in its entirety. We have yet to have an opportunity to review this document or see the public comments on it.

In summary the decision making process and information leading up to it, must be available for public review and comment in one complete package and not simply a series of steps that in and of themselves do not provide a complete picture of the decision being made, the environmental impacts, or the alternatives.

XVI.
Riparian Buffers

During the AMS process we expressed our concerns over the fact that the riparian buffers had been improperly hard wired to incorporate a one hundred foot buffer on each side of the third order and greater streams. At that time we recommended that the BLM follow the Oregon Forest Practices Act provisions relating to riparian areas. In reviewing the RMP we find that our original concerns have not been addressed.

In addition during our review of the RMP we were unable to determine how the TPCC and the new riparian distances as set forth in the draft RMP¹⁵ interrelate. We recommend that the BLM either follow the Oregon Forest Practices Act or in the alternative map the specific riparian areas.

The riparian areas are of such importance that we encourage the BLM to adopt a site specific management program. With a site specific management plan, these areas could be managed with sufficient sensitivity that timber management and other uses could be accommodated.¹⁷

The proposed riparian management program overlooks the interactions between coarse woody debris and channel morphology.

¹⁵. p. 2-40

¹⁷. We are very concerned over the use of "ecosystem management" as means to place lands into a no-management classification. If used properly the "ecosystem management" techniques should allow these riparian areas to provide timber to support the local communities.

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It also adopts an arbitrary standard for determining the existing condition of riparian zones. In reviewing the proposed standard based upon "mature riparian vegetation" we find that it ignores the impacts of soil type, stream channel morphology, and the value of vegetation other than large trees. We believe the proposed approach does not provide a benchmark that is in any way an indicator of riparian health.

XVII.
Alternatives

The preferred alternative proposes a drastic departure from the current harvest levels at a time when other land ownerships are also experiencing drastic declines. With the current harvest pressure on private lands, we question the inventory and growth projects utilized in the timber supply analysis.

We recommend that the BLM consider adopting a ramp down process that will allow the dramatic decrease to be phased in.

XVIII.
Minimum Harvest Age

We are unable to find any explanation as to why the minimum harvest age utilized in the prior plan was not used in developing the draft RMP. We recommend that the minimum harvest age be set at the same level as was used in the prior plan.

XIX.
Milltown Hill

Douglas County is in the process of developing the Milltown Hill multipurpose storage project on Elk Creek. This project is designed to aid the communities of Drain and Yoncalla as well as provide fish habitat, recreation, and water for agricultural purposes, among others. Not with standing the fact that this project has been in development for several years and affects BLM lands, we are unable to find where it is discussed in the RMP.

XX.
Endangered Species

It appears that the major driving force in this RMP is the Endangered Species Act. While we share with the BLM the difficulties created by the single species management direction of the Endangered Species Act, we are unable to determine from the RMP the true impacts of this management direction. The true costs of managing for the various species listed under the Endangered

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aggressive players in the development of the BLM Resource Management Plans. We believe the considerations outlined above will aid the BLM in the development of its final RMP.

It is our recommendation that the selected alternative incorporate these comments and fully comply with the requirements of the original Oregon & California railroad grant, and the ensuing O & C acts. At this time the alternative that most closely complies with these acts is Alternative B. We concur with the position set forth by the Association of O & C Counties and urge you to give Alternative B careful consideration when you select the proposed action.

In the event that compliance with the Endangered Species Act precludes the adoption of Alternative B, we can reluctantly accept the preferred alternative as long as the issues and changes set forth above as well as those set forth by the Association of O & C Counties are incorporated and resolved. We believe that ecosystem management which provides for the recovery of the northern spotted owl, bald eagle, as well as the various salmonid species, can be attained while maintaining consistency with the O & C Acts if these changes are incorporated.

Finally, in the event an alternative is selected that reduces the average timber harvest from the past ten year period or changes the average grade, the county requests that the change be phased in.

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Species Act must be clearly set forth. In addition we must have sufficient baseline data and monitoring programs in place to determine the success of this program.

We recommend that the RMP clearly set forth the target populations for each of the listed species, current population status, management goals, and a detailed monitoring program.

XXI.
Technical Abilities

In reviewing the computer modeling capabilities of the BLM relative to uneven age management, we find that the current system is unable to track uneven age stands. With this technological weakness it will be difficult for the BLM to properly track and monitor the uneven age stands that will be the focus of the ecosystem management strategy.

CONCLUSION

The Board of County Commissioners appreciates this opportunity to provide these initial comments. The Board will continue to provide comments and aid the BLM in crafting the final RMP.

We close our discussion by referencing the draft RMP wherein it is noted that under the preferred alternative that employment losses will increase and in turn increase the local demand for social services. This increase in demand for county services will occur at a time when the county's ability to respond will be reduced.

While current training and support programs are estimated to provide assistance to 42% of the displaced workers, the remaining 58% will be left without assistance. This is unacceptable. Clearly if society as a whole believes it is in the nation's best interest to displace these workers, then society has an obligation to assist these workers make the transition.

If the cost to retrain and assist 60% of the displaced workers will total \$34,234,000 then the cost to retrain and assist 100% of those displaced will equate to \$57,000,000. When these sums are added to the lost county receipts, lowered tax base and impacts on schools, the total impact is astounding.

With the economy and social fabric of Oregon "on-the-line" it is our obligation as County Commissioners and in turn the obligation of the State to take all steps necessary to be

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COMM. ROCKY M'WAY, PRES.
CURRY COUNTY COURTHOUSE
505-D BEACH, OR 97144
PHONE 503-247-1511

COMM. DOUG ROBERTSON, V. PRES.
DOUGLAS COUNTY COURTHOUSE
ROSEBURG, OR 97470
PHONE 503-440-4221

COMM. STEVE COBRNACCHIA, SEC. TRES.
LANE COUNTY COURTHOUSE
EUGENE, OR 97401
PHONE 503-687-4205



RAY E. COEYNER, EXEC. DIR.
488 HEYDON ROAD
ROSEBURG, OREGON 97470
PHONE 503-473-5286

DAVID S. BARNHORS, COUNSEL
SUITE 200, CENTURY TOWER
101 S. W. 12th AVENUE
PORTLAND, OREGON 97205
PHONE 503-227-5551

JOSEPH S. MILLER, PUB. REL.
16 3rd STREET, N.E.
WASHINGTON, D.C. 20002
PHONE 202-646-0851

December 16, 1992

Mr. James A. Moorhouse, District Manager
Bureau of Land Management
Roseburg District Office
777 N.W. Garden Valley Blvd.
Roseburg, OR 97470

Dear Mr. Moorhouse:

We welcome this opportunity to provide written comments on the Draft Resource Management Plan and Environmental Impact Statement (DRMP/EIS) for the Roseburg District.

Purpose of O&C Lands

By way of introduction, the Association of O&C Counties (Association) is an organization whose membership includes all 18 Oregon counties in which the 2.5 million acres of Oregon and California Railroad Revested Grants Lands are located. In order to understand the Association's point of view relative to the management of resources on these lands, it is necessary to briefly recount the unique history of these lands, which were set aside long ago for the purpose of providing local community stability through the dominant use of these lands for timber production.

Beginning with the 1866 grant, the Revestment Act of 1916, and the 1937 O&C Organic Act through the present, these lands have been statutorily recognized as having a local purpose and they are to be managed for the stability of local communities and industries through the production of timber under the principles of sustained yield.

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The 1937 Act directs the Department of the Interior to manage these unique lands under the conservation principles of sustained yield primarily for timber production and only secondarily for other, limited purposes listed in the Act. The Federal Land Policy and Management Act of 1976 (FLPMA) specifically exempts the O&C lands from the provisions of FLPMA in the event of conflict with or inconsistency between FLPMA and the O&C Act insofar as they relate to the management of timber.

The dedication of these lands to local purposes has inspired the counties, since 1953, to forego one-third of their statutory share of receipts (50 percent instead of 75 percent) through annual riders on Department of the Interior Appropriations Acts. The counties' annual relinquishment of one-third of their statutory entitlement has been based on the understanding that the foregone county monies would be appropriated for protection and intensified sustained yield timber production. This money was "invested" by the counties with the expectation that they would receive a "return" on their investment through increased harvest levels in future decades. Nearly one billion dollars of otherwise county revenue has been so appropriated since 1953. The federal government has, until recently, lived up to its part of the bargain, too. The result is that a highly productive, well-balanced forest has evolved that is second to none in the world. It has been estimated by the BLM that there was approximately 50 billion board feet of merchantable timber on these lands in 1937. The latest inventory stands at 49.7 billion board feet. With over 40 billion harvested since 1937, surely something has been done right and the concept of sustained yield timber production has been proven.

Judicial Affirmation of O&C Act

Recent judicial opinions have affirmed that the O&C lands are reserved for purposes different from other federal lands. Other federal lands are typically managed to accomplish national objectives. The O&C lands are to be managed for the benefit of the local economy and to promote community stability. Timber production is the dominant use for these lands.

This policy has been clearly and unmistakably confirmed by the U.S. Ninth Circuit Court of Appeals in the 1990 case, Headwaters vs. BLM. In that case, the Ninth Circuit stated, "... Nowhere does the legislative history [of the O&C lands] suggest that wildlife habitat conservation or conservation of old growth forest is a goal on a par with timber production, or indeed that it is a goal of the O&C Act at all."

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This position has been clearly stated in previous cases by the Ninth Circuit. In 1987, the Court acknowledged "... the primary use of the revested lands is for timber production..." O'Neal vs. U.S.

This ruling was consistent with the prior statement of the Court that "[i]n 1937 Congress passed the O&C Sustained Yield Act... which provided that most of the O&C lands would henceforth be managed for sustained yield timber production." Skoko vs. Andrus.

In 1986, the Solicitor of the Department of the Interior rendered an opinion dealing with the O&C lands, in which he said, in part:

"The freedom conferred to the Secretary [of the Interior]... is limited in one important way on certain federally-owned timberlands in western Oregon. There, any decision about managing northern spotted owls must be measured against the dominant use of timber production.

"Plainly, on lands subject to its provisions, the O&C Act creates a dominant use--the production of timber on a sustained yield basis.

"In deciding whether to establish a program for managing northern spotted owls on O&C timberlands, the Secretary, then, must first decide if it is possible to do so without creating a conflict with the dominant use there--timber production... If a program for managing northern spotted owls conflicts with producing timber on a sustained basis in O&C timberlands, the O&C Act will preclude the application to that realty. As the O&C Act instructs, on revested or reconveyed realty classified as timberlands in western Oregon, timber production is dominant." [Emphasis added.]

The Association is concerned that the DRMP/EIS contains no mention of this critically important history, nor makes any reference to the important judicial decisions which have been handed down relative to the O&C lands over the years. In fact, except for a listing in Appendix 1-2, the document all but ignores the O&C Act.

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Social and Economic Consequences

The Association is also very apprehensive about severe economic and social consequences which would follow from a decision by the Bureau to manage the O&C lands as set forth in the Preferred Alternative (PA) in the DRMP/EIS. Many of Oregon's communities will be devastated if the Allowable Sales Quantity (ASQ) on the O&C lands in your district is reduced as proposed in the Preferred Alternative. Thousands of individuals will be thrown out of work and the ripple effect throughout these timber communities will be devastating. In addition, the revenues flowing to the 18 counties from sales of timber off these lands will be correspondingly reduced. At the very time when local governments need additional funds to deal with the tremendous human costs of reduced O&C harvests, those governments will have fewer funds available to meet the needs. This severe problem would coincide with rising adverse impacts from the recent property tax limitation provision of the Oregon constitution, which limits the ability of local government to raise revenues to replace lost O&C monies or other decreasing monies. (This results from the fact that many O&C counties receive a very small portion of the \$10 per thousand dollars of assessed valuation available to all local governments because of their lesser dependence on property taxes historically.) This Association and the Association of Oregon Counties commissioned an analysis of the social impacts of timber harvest reductions in the O&C counties with Dr. Robert Lee of the University of Washington. (Lee, L. G., P. Summers, H. Birss, C. Nelson and J. Zientek, Social Impacts of Alternative Timber Harvest Reductions in the O&C Counties. University of Washington, 1991). Among Dr. Lee's many important findings were that the incidence of spouse or child abuse, alcohol or drug abuse and other manifestations of social stress increase in response to rising unemployment, at the same time that local providers of services in these areas find themselves with diminished capacity to respond to those in need.

Dr. Lee's findings also discuss the impact of unemployment on individuals and suggested that the quick fix of timber worker retraining advocated by many may be easier said than done. He stated, "People experiencing high levels of stress often suffer from impairment of the cognitive functioning required for retraining or making other changes in their lives. Extreme work-related stresses can produce symptoms resembling the 'delayed stress syndrome' from which so many Vietnam veterans suffered. When coupled with stress originating from the blaming of loggers and other wood products workers, loss of way of life, and betrayal by government, many individuals are likely to suffer from both a loss of self-esteem and an impaired capacity to recover. Their capacity to make rational decisions about retraining, moving, or shifting occupations can be substantially reduced by such an accumulation of stress."

But, assuming that the individual displaced worker is able to work his way through and resolve these problems, there are still severe difficulties in viewing "retraining" as the complete solution to the social and economic problems likely to result from the large reduction in the ASQ as proposed in the Preferred Alternative. The facts concerning retraining contained herein are discussed more fully in a memorandum filed with the Endangered Species Committee (ESC) on February 18, 1992, titled "O&C Counties' Post-Hearing Memorandum in Support of Exemption Requested by BLM." Affidavits and exhibits in the record of the ESC hearings substantiate the points raised in these comments. The BLM is already in possession of these supporting materials.

Of the thousands of timber and wood products workers who have lost their jobs in the last three years, most have been unable or unwilling to obtain job retraining. There are insufficient funds to serve those currently unemployed and additional funding in significant amounts is unlikely to serve a flood of newly unemployed.

The typical worker who actually is able to enter a job retraining program is male, 43 years of age, has been in the wood products industry for over 16 years, and has a 12th grade education. Thirteen percent of those who entered such programs are high school dropouts and another 12 percent are over 55 years of age. Many workers laid off from the timber and wood products industry have spent their working careers in that industry and have lived their entire lives in communities where the wood products industry is economically and culturally dominant.

Of those who do make their way into job retraining programs, the placement success has been relatively good. Any increases in unemployment, however, will result in a reduced placement rate. One expert has stated, "Dislocated workers are already being absorbed into the job market at nearly the maximum rate possible - the job market is already saturated with dislocated workers, whether retrained or not."

In addition, for those who make it into retraining, then complete retraining, and are placed, there is almost always a substantial reduction in wages from those earned in the wood products industry. In Lane County, the average is a \$2.00 per hour reduction. In Douglas County, the average is a \$3.50 per hour reduction. In Coos County, the average wage reduction for those lucky few who make it into and out of retraining is \$4.64 per hour.

The costs of retraining are substantial. The most obvious costs are the direct retraining costs. These range from \$3,500 to \$5,449 per worker trained. Other costs include PELL grants, which run from a few hundred dollars to \$2,600 per worker trained, and unemployment benefits, which normally are \$259 per week for anywhere from 10 weeks to 39 weeks, to exhaustion of benefits. In

All this having been said, it may be that the philosophy of the Preferred Alternative, "ecosystem management," can still be utilized within the proper statutory framework. This would depend in large part on whether harvest levels under the Preferred Alternative could be increased to bring them more closely in compliance with the harvest levels required by the community stability requirements of the O&C Act, while not exceeding restrictions imposed by the ESA. This would require a very careful balancing of obligations by the BLM.

Opportunities to Increase Allowable Sale Quantity

Based upon our review of the information set forth in the DRMP/EIS, we believe strongly that several opportunities do exist for moderate increases in the ASQ to the point where the required balance might be achieved. These opportunities relate to the allocation and management of riparian areas, the choice of minimum harvest age, adoption of departure from the nondeclining harvest level, and updating the timber inventory. The increase in ASQ to be expected from these opportunities should serve to lessen the impact on timber-dependent communities of the precipitous drop in ASQ proposed in the Preferred Alternative. The increases, if sufficient, would also serve to insure that management is in compliance with the O&C Act. These opportunities, and projected increase in ASQ, can become reality within the planning guidance through modest changes in such guidance without upsetting the basic concept around which the Preferred Alternative was designed. We have requested the State Director to make such changes to the State Director Guidance. Each of the opportunities will be discussed separately.

Riparian Management Areas (RMA)

We see an opportunity for change within the Preferred Alternative guidance for riparian area protection to provide for an increase in the ASQ. Under Preferred Alternative guidance applicable to riparian areas, some 34,576 acres have been allocated to RMAs and thereby segregated from acreage available for programmed timber harvest on a sustained yield basis. This large acreage dedicated to riparian area protection amounts to a near doubling of the acreage allocated for similar purposes under the current plan. According to the DRMP/EIS, all alternatives meet the minimum legal requirements for the protection of riparian areas, thus as few as 16,886 acres of RMAs as designated in Alternative A meet legal mandates. This being the case, it appears that the allocation of 34,576 acres to RMAs, as proposed in the Preferred Alternative, amounts to significant overprotection of one resource to the detriment of another. We suggest that a more reasonable and balanced approach would be to substitute Alternative A guidance for Preferred Alternative guidance with regard to RMA allocations. If

Coos County, the average time on unemployment is 32 weeks; that is expected to increase to 48 weeks in 1992.

From the foregoing, the following conclusions are inescapable:

- Funding is adequate to provide retraining to only one-third to one-half of those currently unemployed.
- Substantially increased funding is not available.
- For those who are served, the job placement rate may decline in the future.
- Any increase in unemployment will be met with lower retraining success rates.
- Those who are placed in new jobs suffer substantial wage reductions.
- Job retraining is expensive.

These are very real and severe economic and social consequences and all effort should be made to mitigate against these impacts.

Recommendation for Proposed Action

The O&C Act, its history, and the judicial decisions which have been rendered relative to it and the impact on local government revenue and services, lead us to the conclusion that the most appropriate alternative for the Bureau to select for the Proposed Action is Alternative B. Essentially, this would continue the current land use allocations coupled with the advantage of an updated timber inventory. We urge you to give Alternative B careful consideration when deciding upon the Proposed Action for your Resource Management Plan.

However, if it is determined that compliance with the Endangered Species Act (ESA) precludes the adoption of Alternative B, the Association can reluctantly accept the Preferred Alternative on the condition that certain changes are made to provide for an increase in the ASQ. We condition our support of the Preferred Alternative because of our view that the Preferred Alternative goes beyond the requirements of the ESA and represents an exercise of discretion by the BLM that is not allowed by the O&C Act. It is our firmly held position that the O&C Act requires that the timber harvest be set at the highest sustainable level to meet the statutory requirement for community stability and that deviations from such harvest level can only occur in response to other mandatory federal laws such as the ESA. While we are not opposed to management for non-timber values, such management should occur within this framework. As it stands, the Preferred Alternative does not appear to recognize the constraints of the O&C Act, nor does it appear to solely couple reductions in harvest levels with the requirements of the ESA.

Alternative A guidance were used, some 17,690 acres of forest land could be restored to the sustained yield timber production base. According to the sensitivity analysis addressing different levels of riparian protection, the ASQ could be increased by 4.4 MMBF by this action. We have recommended to the State Director that Alternative A guidance for RMAs be adopted for the proposed Resource Management Plan (RMP).

We have also suggested to the State Director that guidance with respect to programmed timber harvest activities within the RMAs be re-examined. As we understand the guidance, the only timber harvest permitted within RMAs is harvest of trees in support of resources other than timber and for limited crossings of RMAs for logging roads and yarding roads. In other words, acreage within RMAs is not included in the base acreage used to compute the ASQ, and a programmed timber harvest will not be taken from RMAs. We wish to point out that the Oregon Forest Practice Act Rules provide for growing and harvesting timber within riparian management areas to the extent that certain standards of protection are met. The Oregon Forest Practice Act Rules contain very specific guidelines for the numbers and sizes of conifer trees to be left per 1000 feet of stream length for riparian management areas of varying width. While full sustained yield production is not possible under the state rules, at least some timber production is permitted. If silvicultural systems applicable to the Old Growth Emphasis Areas (OGEA) and/or Connectivity Areas (CA) were applied to the RMAs, we estimate that the ASQ could be increased by an estimated 2.4 MMBF. As we understand two key building blocks of the conceptual framework around which the Preferred Alternative was developed were that "resource use and protection can occur in harmony" and that "stewardship is essential to long term ecological health and social well being." You have implemented these concepts in your management program for both the OGEOAs and CAs and have provided for the programmed harvest of timber on a sustained yield basis from such areas. If the concepts of management noted above are appropriate for OGEOAs and CAs, then certainly the concepts are also appropriate for management of RMAs, including the programmed harvest of timber on a sustained yield basis. Therefore, we have recommended to the State Director that the guidance with regard to RMA be amended to provide for programmed timber harvest from such areas subject to the rules for live tree retention set forth in the Oregon Forest Practice Act Rules.

In summary, if Alternative A guidance for RMAs were substituted for Preferred Alternative guidance to allow a reduction in acreage allocated to RMAs, and if such guidance were also amended to permit a programmed timber harvest from RMAs, such changes should result in an aggregate increase in the ASQ of an estimated 6.8 MMBF.

Minimum Harvest Age (MHA)

The concept of minimum harvest age was adopted in planning for the 1980's and its use has been continued in planning for the 1990's. The only issue is the youngest age at which timber will be subjected to regeneration harvest. From our examination of the DRMP/EIS, it appears that the MHA was set at 60-79 years. However, a sensitivity analysis carried out shows that an increase in ASQ could be realized if the MHA constraint was released. This increase amounts to 29.0 MMBF. The data in the DRMP/EIS does not indicate to what age the MHA would drop if unconstrained. If releasing the constraints on MHA would require regeneration harvest of timber less than 40 years old, we recommend that the MHA be constrained at 40 years. Other options to consider would be to set MHA at one age class lower than the MHA used in the Preferred Alternative or at the age of first merchantability.

We have recommended to the State Director that the guidance for the Preferred Alternative be amended to include one of the MHA options described above. Such a change could add upwards of 29.0 MMBF to the ASQ and help make a most difficult timber supply situation for timber-dependent communities and industries in the Roseburg District more tolerable.

Departure from the Nondeclining Harvest Level

Departure from the nondeclining harvest level is not something that public land managers normally decide to do but there are times and circumstances when it may be the wise thing to do. We believe that now is the time to consider departure from the nondeclining harvest level for the General Forest Management Areas (GFMA) in order to provide for a temporary increase in ASQ during the next decade.

The amount of forest land available for intensive timber production has been drastically reduced under the Preferred Alternative. Under the current plan some 83 percent of forest lands were dedicated to intensive timber management; the Preferred Alternative for the 1990's dedicates only 37 percent of the forested acres to intensive timber management--a significant reduction indeed! The current ASQ for the Roseburg District is 247.0 MMBF; the ASQ proposed by the Preferred Alternative is 105.0 MMBF--a 43 percent reduction! Add to this scenario the reduction in timber output from the national forests in the vicinity and timber-dependent communities in western Oregon are faced with a dismal outlook for the future.

One way to help alleviate the situation, and to ease the impact of such a large reduction in ASQ, is to adopt departure from the nondeclining harvest level to permit a one decade increase in ASQ. Such an action would help provide for a transition from the

high harvest levels of the 1980's to the reduced harvest levels projected for the future. We note that paragraph 3 of the March 15, 1983, O&C Forest Resources Policy Statement provides, as follows, for departure from the nondeclining harvest level:

"3. The allowable cut determination shall be based on nondeclining harvest level over time. Departures from the nondeclining harvest level may be permitted in any direction. Any increase shall not exceed the long-term sustained yield capacity of the land; decreases shall be economically and/or biologically justified and timed so as to minimize impacts on dependent industries and communities." (Emphasis added.)

We do not know exactly how much the ASQ might be increased by departing from the nondeclining harvest level, but suggest that a 8.8 MMBF increase might be a reasonable estimate based on a departure of ten percent. We note that the original proposed State Director Guidance required a sensitivity analysis for departure from the nondeclining harvest level for the Preferred Alternative. However, this requirement was apparently dropped because the DRMP/EIS does not indicate that such an analysis was undertaken. It should be carried out to establish the level of increased ASQ.

We have recommended to the State Director that the guidance for the Preferred Alternative be amended to require departure from the nondeclining harvest level in order to add to the ASQ and contribute to community stability.

Updating Timber Inventory

The DRMP/EIS indicates that the inventory of forest lands to estimate the volume of timber present and the age class distribution of such timber was current as of October 1, 1988, and that the timber inventory was updated current to October 1, 1990, for purposes of computing the ASQ for the various alternatives described in the DRMP/EIS. The updating was necessary to account for depletion of existing timber inventory due to timber sales and for accretion of timber inventory due to growth in order to arrive at an updated starting inventory for ASQ calculation purposes.

If the proposed RMP is implemented on October 1, 1993, as planned, five years will have passed since the timber inventory was completed. We recommend that the starting inventory for the purpose of calculating the ASQ for the proposed RMP be updated current to October 1, 1993. This should not pose a problem because of the fact that little or no timber is likely to be offered for sale during F. Y. 1993. Also, we wish to point out that for the past five years timber sale offerings have been substantially below

the volume of timber that should have been offered for sale in accordance with the timber management plan approved in 1983. Therefore, it appears that accretion of timber volume will far exceed depletion of timber volume and hence the net effect should be a starting inventory volume substantially greater than the starting inventory volume used to calculate the ASQ for the various alternatives described in the DRMP/EIS. Because a higher starting inventory volume should have a positive effect on the ASQ, we emphasize the importance of updating the timber inventory to October 1, 1993.

Opportunities Summarized

This Association is very concerned about the large drop in ASQ proposed in the Preferred Alternative. We are not convinced that such a drastic reduction in ASQ is absolutely necessary. Rather, we do believe that there are ways to increase the ASQ above that proposed in the Preferred Alternative, and still adhere to the basic conceptual framework used to design the Preferred Alternative.

We believe that modifications to the Preferred Alternative with regard to riparian area protection, minimum harvest age, departure from the nondeclining harvest level, and updating the timber inventory to October 1, 1993, could add at the least an estimated 44.6 MMBF to the ASQ. As noted above, we have requested the State Director to revise the policy to permit the changes we have recommended.

Comments on DRMP/EIS

We have attached hereto comments specific to the Roseburg District DRMP/EIS which are included in and make a part of this response by reference.

We are grateful for the opportunity to comment on these critically important issues. The future of much of western Oregon is dependent on the decisions which you and the other districts make relative to the management of these lands for the next decade.

Sincerely,

Rocky McVay
Rocky McVay
President

Attachment

COMMENTS SPECIFIC TO:

ROSEBURG DISTRICT DRAFT RESOURCE MANAGEMENT PLAN
AND ENVIRONMENTAL IMPACT STATEMENT - AUGUST 1992*

VOLUME I

Summary

The allowable sale quantity (ASQ) is discussed under the topic of "Timber" (page xiv) and reported as a total for the commercial forest land base. The ASQ is also reported similarly in Table S-1. We believe it would be helpful if the ASQ were reported by land allocation and by intensive management practice. For example, we understand the total ASQ to include production from the General Forest Management Areas (GFMA), the Old Growth Emphasis Areas (OGEA) and the Connectivity Areas (CA). In addition, the production from the GFMA's is made up of the base volume plus volume derived from the several intensive management practices. We suggest a tabular display be used to report the ASQ on both a cubic foot and board foot basis; we also suggest that the long term sustained yield (LTSY) be displayed in the table. See Exhibit 1 for an example of such a table.

We believe it is important to keep the ASQ segregated by land allocation because of the difference in assumptions used to compute the ASQ for such allocations. We also believe it is important to identify for each intensive management practice the ASQ contributed by such individual practices.

Chapter 1

We were disappointed that the Draft Resource Management Plan and Environmental Impact Statement (DRMP/EIS) was published for public comment without a discussion of the O&C Sustained Yield Act of 1937 and the relationship of said Act to the Federal Land Policy and Management Act of 1976 (FLPMA). The O&C Act is a unique piece of legislation which has guided the management of the O&C lands of western Oregon for over 55 years. And as you know, the O&C Act was accorded a special exemption by Sec. 701 of FLPMA insofar as the management of the timber resource is concerned. The purposes of the O&C Act and the Sec. 701 exemption are very important to this planning effort and need to be discussed in these planning documents.

*It is not our intent to make a detailed page by page review of the entire Draft Resource Management Plan and Environmental Impact Statement. Rather, we limit our comments to several specific items/concerns that we feel need to be addressed.

We believe this is important because the Resource Management Plan (RMP), once adopted, will become the blueprint for managing BLM lands in the Roseburg District for the next ten years. As new managers come upon the scene, their first action will be to become intimately familiar with the RMP in order to effectively carry out their duties and responsibilities. Without some discussion of the O&C Act in the RMP, the full significance of the O&C lands and the purpose of these lands will very likely be lost. This is of serious concern to the eighteen O&C counties, particularly after having invested nearly one billion dollars of county funds in the O&C lands during the past 40 years to pay for a level of intensive management that very likely would not have been undertaken otherwise.

We urge you to include a discussion of the O&C Act and its purpose in the plan. We suggest that you review some of the mailers published early on in this planning effort which discussed the O&C Act and the relationship to FLPMA. In our opinion, Chapter 1 seems to be the appropriate place to include such a discussion.

Chapter 2

Included in Chapter 2 is a section entitled Cost of Management (page 2-49) which addresses in a very general way the costs likely to be associated with implementing the various alternatives. A distinction is drawn between "traditional timber management" and "non-traditional timber management" with the Preferred Alternative considered as non-traditional timber management. The discussion points out that costs of traditional timber management "would be consistent with past management costs for this purpose" but that in contrast "costs of non-traditional timber management as proposed in the Preferred Alternative...would be much higher per unit of timber sold than for the other alternatives." In fact, the document states that "preliminary cost estimates...indicate management costs associated with the Preferred Alternative could increase two to five times over traditional management."

Unfortunately, the discussion of the cost of implementing the Preferred Alternative stops at this point and the reviewer is left to ponder the question of increased costs and the budget needed to implement the plan. We feel the abbreviated discussion of costs, particularly when costs of the Preferred Alternative are projected to be so much higher, is a serious oversight in the DRMP/FEIS. We recommend that you remedy the oversight in the proposed RMP/FEIS with a full and complete discussion of the costs of management for the Proposed Action together with an estimate of the budget requirements needed to implement the plan.

Chapter 3

No comment.

Chapter 4

In our opinion the section entitled "Effects on Timber Resources" (page 4-82) does not adequately analyze the effects other resources have on the timber resource nor are such effects quantified in terms of ASQ reductions. As you point out, "The ASQ depends on (1) the number of acres available for timber production, (2) the intensity of management, (3) the site quality of the land, and (4) the initial inventory." Accommodations for other resources are most likely to affect the number of acres available for timber production and the level of management on such lands. For example, allocation of suitable commercial forest land (SCFL) to special area designations will reduce the land base available for timber production and this action will result in a reduction in ASQ; allocation of SCFL to the biological diversity concept of management will influence the type of timber management practiced on these lands and this, too, will result in a reduction of the ASQ. What is needed in this section of the proposed RMP/FEIS is a discussion, resource by resource, of the likely effects that enhancement and/or protection of each such resource will have on the availability of SCFL for timber production purposes and the impacts that such reduction of SCFL will have on the ASQ. It is our opinion that you must address the effects of the various resources on timber production in order to meet the requirements of the National Environmental Policy Act just as you must address the effects of timber harvest on the variety of other resources being managed. (We suggest you review the Medford District DRMP/FEIS and the way that Medford handled "Effects on Timber Resources.")

In addition to a discussion of the effects of the various resources on timber production, we recommend the inclusion in the proposed RMP/FEIS of a table showing for the Proposed Action the acreage of Suitable Commercial Forest Land (SCFL) allocated for enhancement and/or protection of each of the several resources together with the reduction in ASQ attributable thereto. Alternative B should be the starting point (acres of SCFL and ASQ) with incremental reductions of SCFL and ASQ until the level of the Proposed Action is reached. We chose Alternative B as the base for comparison because Alternative B is the alternative which most closely reflects compliance with the purpose and intent of the O&C Act. See Exhibit 2 for an example of a table to array the data. We make this request because we believe that decision makers and the public need to know with some precision the amount of timber production which will be forfeited in the enhancement and protection of resources other than timber.

Table 4-27 shows the ASQ for the several alternatives for six different time periods. We direct your attention to our opening discussion in the Summary. We suggest that Table 4-27 be restructured to permit detailing the ASQ by land allocation, i.e., GFMAs, OGEAs and CAs, and that for the GFMAs, the ASQ be disaggregated to the intensive management practices. We also suggest that the long term sustained yield (LTSY) be displayed for

each alternative. The reason we ask for the LTSY is because consideration of a departure from the nondeclining harvest level is constrained by the long term sustained yield capacity of the land.

Chapter 5

No comment.

Chapter 6

No comment.

VOLUME II

Chapter 1

No comment.

Chapter 2

We suggest you include in Appendix 2-2 a description of the procedures used to compute the allowable sale quantity for the Preferred Alternative (and/or Proposed Action). We believe this is necessary in order to describe how the following components were handled in computing the allowable sale quantity: (1) retention of a portion of the stand at harvest; (2) development of stands with multiple canopy layers; (3) maintenance of wider tree spacing by means of a series of density management cuttings; (4) management on longer rotations; and (5) expected timber yields from stands so managed.

Since the current timber volume for the Roseburg District is based on a 1988 timber inventory, we suggest you also include in Appendix 2-2 a description of the procedures used to update the timber inventory to the present time and a tabular display of the results of the update.

Chapter 3

No comment.

Chapter 4

We suggest you include a sensitivity analysis in Appendix 4-1 to determine for the Preferred Alternative (and/or Proposed Action) the ASQ for a departure of ten percent above the

nondeclining harvest level, provided that the resulting increase in ASQ does not exceed the long term sustained yield capacity. We suggest you also determine the highest level of departure permissible during the first decade which is within the LTSY constraint.



OFFICE OF THE GOVERNOR
STATE CAPITOL
SALEM, OREGON 97310-0370
TELEPHONE: (503) 378-3111

December 18, 1992

Mr. James Moorhouse, District Manager
Bureau of Land Management
777 N. W. Garden Valley Blvd.
Roseburg, OR 97470

Dear Jim:

Enclosed you will find the State of Oregon's Final Coordinated Response to the Roseburg District's draft Resource Management Plan and Environmental Impact Statement. We have also attached copies of six position papers, state agencies' final comments and the Oregon State University Report. This response represents the State's final review of concerns that eleven state agencies, the public and interest groups, and Oregon State University have expressed to us over the last several months on BLM's draft plans.

I encourage your District staff to feel free to contact the Governor's Forest Planning Team to gain a full understanding of specific concerns and recommendations that we have outlined in our response.

I thank you and your staff for the field trips and discussions afforded the Governor's Forest Planning Team over the last year. We look forward to continuing this cooperation with your District. If you have any question about the State's final response, don't hesitate to call.

Sincerely,

Anne W. Squier

Anne Squier
Senior Policy Advisor for
Natural Resources

THE STATE OF OREGON'S FINAL COORDINATED RESPONSE

TO THE
BUREAU OF LAND MANAGEMENT'S

DRAFT RESOURCE MANAGEMENT PLANS

AND

DRAFT ENVIRONMENTAL IMPACT STATEMENTS

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EXECUTIVE SUMMARY

The Governor's Forest Planning Team has completed the Final Coordinated Response to the Bureau of Land Management's draft management plans for the Eugene, Salem, Medford, Coos Bay, Roseburg Districts, and the Klamath Falls Resource Area. Preparation of this coordinated response is part of Governor Roberts' commitment to be aggressively involved in federal forest planning and working within the spirit of cooperation outlined in the Memorandum of Understanding signed between the State, Bureau of Land Management (BLM) and the United States Forest Service.

Key issues addressed in the State's Final Coordinated Response to the six BLM plans are summarized in the following sections.

Ecosystem Management. The State endorses BLM's overall ecosystem management approach by using biological diversity to manage their lands. While biological diversity will require long-term experimentation, research and intensive evaluation and monitoring, the State believes that it will create over time a more ecologically sustainable, productive, healthy, and resilient natural ecosystem. The State believes that people and communities are key elements that must be considered when implementing ecosystem management.

Land Use. Land use conflicts between BLM and rural interface residents have increased over the years. The State recommends that BLM become more active in local land use planning. This means BLM should actively participate in Oregon's statewide land use planning program by coordinating its efforts with various state agencies and local governments.

Fish and Watershed Management. The State supports BLM's strategy to manage and monitor by analytical watersheds. Water quality and quantity, fish and wildlife habitat, and wetlands should be enhanced, maintained if in good condition and restored where conditions have been identified as declining. Sensitive fish stocks must be protected on BLM-administered lands. BLM should protect riparian areas and monitor conditions over time. Cooperation between landowners is essential within multiple ownership watersheds to achieve the desired conditions.

Air Quality. BLM plans should more specifically address how the proposed increase in use of prescribed burning will meet state and federal air quality standards. Continued cooperation between the State and BLM regarding air quality is encouraged.

Tourism and Recreation. The State recommends that BLM expand recreational opportunities on its lands. This would include increasing/expanding developed recreation sites, increasing dispersed recreational opportunities, building additional trails, and protecting scenic quality along state/federal highways and Wild and Scenic Rivers.

Timber Management. While the State supports BLM's new biological diversity emphasis, we question predicted harvest levels anticipated from various land allocations. In particular, growth and yield assumptions may not meet the timber volume expected from lands within the timber base. Increased dependence upon intensive management practices to produce the predicted allowable sales quantities must be accompanied by stable funds for implementation and monitoring. Forest health should be more adequately addressed in the final plans.

Wildlife Management. BLM needs to more explicitly explain how they intend to improve habitat (cover, forage and road management) for deer and elk. BLM should further protect other wildlife, especially sensitive, threatened and endangered species. The State supports the creation of older stand conditions through approved silvicultural practices. The State urges BLM to comply with the Final Recovery Plan for the Northern Spotted Owl and continue consultation with the U.S. Fish and Wildlife Service to reach consensus on the best way to provide for the recovery of the northern spotted owl and other threatened and endangered species.

Old Growth. BLM districts are proposing various techniques to maintain/produce older-aged forests. The State supports BLM's overall approach to maintain and protect old growth stands through biological diversity. Old growth-dependent species must also be protected when harvesting old growth in the general forest land allocation through landscape diversity and accelerating older forest conditions on adjacent BLM lands.

Livestock Management. The State recommends that BLM develop detailed allotment management plans for every grazing allotment. Of concern is livestock's impact on fish and wildlife habitat, big game, and riparian-dependent species. The State encourages range improvement projects to increase forage and water developments which should help draw livestock away from riparian areas.

Minerals and Energy. BLM should acknowledge and preserve access to state-owned mineral rights. BLM should further recognize the value of mineral and energy resources when making land management decisions.

Socio-economic. BLM's draft plans have not sufficiently addressed the social and economic implications of their preferred alternatives on Oregonians. BLM needs to more specifically address local impacts of district plans on community stability, concentrating on the social impacts. Job multipliers should be further evaluated. Monitoring of the socio-economic conditions created by implementation of the preferred alternatives needs to be addressed.

Road Management. The State recommends that each BLM district develop a comprehensive road management plan. The plans would be used to manage access which in turn would improve wildlife habitat, water quality, and recreational opportunities.

Special Plant and Tree Species. BLM should expand its inventory of sensitive plants and implement standards for protection including monitoring. BLM should aggressively follow the interim management plan for managing Pacific yew.

Tribal Concerns. Lands administered by many BLM districts were used by Native Americans and contain historically significant cultural and spiritual sites. The State believes BLM should identify, during project planning, these sites and protect them during implementation of management activities.

Standards and Monitoring. The implementation of biological diversity by BLM will mandate a comprehensive monitoring program, including a dedicated funding source. This is critical in determining whether the expected future conditions are being accomplished. Specific, measurable standards must be a component of the total monitoring package. The State recommends that BLM strengthen its standards and monitoring program in the final plans.

Budgets. Adequate funding is essential for implementation and monitoring of BLM's biological diversity strategy. Dedicated funds for expanded intensive management programs being proposed are needed. The State believes that BLM budgets should not be necessarily linked to allowable sale quantity levels.

Detailed State Final Coordinated Response. Questions regarding the State of Oregon's Final Coordinated Response should be directed to: Governor's Forest Planning Team, 155 Cottage Street, Salem OR 97310, Phone: (503) 378-8127

STATE OF OREGON'S FINAL COORDINATED RESPONSE
TO
BUREAU OF LAND MANAGEMENT
DRAFT RESOURCE MANAGEMENT PLANS
AND
DRAFT ENVIRONMENTAL IMPACT STATEMENTS

I. INTRODUCTION

The Bureau of Land Management administers 2.5 million acres of land in western Oregon including parts of Klamath County. In total, this accounts for approximately nine percent of the forest land base in western Oregon. Fish and wildlife, domestic water, timber, recreation, grazing, and minerals are just some of the many values found on these lands. Revenues from managing BLM resources contribute millions of dollars each year to Oregon counties for schools and roads. The importance of BLM lands to the people of Oregon cannot be over-emphasized.

Recognizing a need to coordinate State responses to federal resource management plans, the Governor's Forest Planning Team was created in 1987. This team, which includes representatives from twelve state agencies, has worked together over the last five years to develop coordinated responses to major federal land management planning documents.

Most recently, the Governor's Forest Planning Team has worked closely with five BLM districts (Medford, Salem, Roseburg, Coos Bay and Eugene), one Resource Area (Klamath Falls) and the State Office in Portland in an effort to better understand BLM's planning process. The State also conducted six "open houses" scattered throughout the state to solicit input on BLM's draft plans. Comments received from the public's review of the State's Proposed Coordinated Response have also been considered. Input from the public, state agencies, and Oregon State University form the basis for the State's final response.

The following document is the State of Oregon's Final Coordinated Response to the six draft Resource Management Plans (RMPs) and Environmental Impact Statements (EISs). The State's final response represents a consolidated response to the six draft RMPs and EISs and includes comments appropriate to specific issues by districts/resource area. Individual state agency comments and Oregon State University's Report have been attached for review.

We appreciate the cooperation that BLM districts, the Klamath Falls Resource Area and the State Office have given the State Team in understanding the planning process. This kind of working relationship strengthens the ability of the State and BLM to develop resource management plans acceptable to Oregonians and the Nation.

II. MAJOR ISSUES

--DISCUSSION OF MAJOR ISSUES--

A. Ecosystem Management. How will BLM implement ecosystem management that responds to creating sustainable, productive, and healthy ecosystems while still producing goods and services?

B. Land Use. How can BLM better address problems encountered in managing rural interface areas? Has BLM met the federal consistency requirements of the National Coastal Zone Management Act and Oregon's Coastal Zone Management Program? Has land tenure been adequately addressed? How has State ownership of surface/subsurface ownership rights been handled?

C. Fish and Watershed Management. How will BLM use analytical watersheds to measure cumulative effects of management activities? How will riparian areas and wetlands be protected? How will fish habitat be protected and enhanced?

D. Air Quality. How should BLM address the use of prescribed fire as a forest management tool in terms of the potential impacts on air quality?

E. Tourism and Recreation. How should BLM manage for recreation, visual resources, and Wild and Scenic Rivers?

F. Timber Management. Are BLM's timber growth and yield assumptions valid? How will silvicultural practices be used to support projected harvest levels? Will BLM be able to produce the harvest levels predicted by land allocations? Has BLM adequately addressed forest health?

G. Wildlife Management. How should BLM districts manage for big game habitat? What snag levels should BLM provide for cavity-dependent birds and other wildlife? How should sensitive, threatened and endangered wildlife species be managed?

H. Old Growth and Mature Forest. How will BLM manage its forests to maintain old growth and mature forest composition?

I. Livestock Management. How will BLM manage its grazing lands to produce forage for livestock and wildlife while protecting other resource values, in particular riparian areas?

2

4

J. Minerals and Energy. How should BLM recognize and manage its mineral and energy resources?

K. Socio-Economic. How will the adopted plans affect economic opportunities in surrounding communities? What impact will the plans have on socio-economic stability in the planning area and statewide?

L. Road Management. How should districts/resource areas manage their road networks to promote compatibility with resource uses?

M. Special Plant and Tree Species. How should BLM protect special status plant and tree species?

N. Tribal Concerns. How should BLM districts protect traditional Tribal cultural and spiritual sites?

O. Standards and Monitoring. Does BLM have measurable standards and a comprehensive, aggressive monitoring program to determine whether plans are meeting short and long-term expected future conditions?

P. Budgets. What budget will BLM districts need to carry out the preferred alternative? How should the districts react if a smaller budget allocation occurs?

3

5

A. Ecosystem Management. How will BLM implement ecosystem management that responds to creating sustainable, productive, and healthy ecosystems while still producing goods and services?

1. Concepts and Principles

Managing lands and resources based on ecological principles has been emerging as a new view in scientific literature, research, and in public policy. This view is seen as being not only biologically sound, but also more attuned to public expectations and values of doing a better job at managing our natural resources. It makes sense for programs and organizations to work under a systems concept which includes people, animals, soils, plants, water, climate, with the processes of nature working together as a whole.

The concepts presented in this section and in the State's paper, titled, Ecosystem: A Coordinated State Response To BLM's Resource Management Plans (Appendix 1), were derived from literature searches, field trips, and discussions with researchers and land managers on defining principles and implementation strategies for ecosystem management.

The State believes that the guiding principle of ecosystem management is to create a more ecologically sustainable, productive, healthy, and resilient natural ecosystem. How to meet this objective is a complex issue land managers must face. One thing is certain, however, a change is needed on how we have traditionally managed our resource lands. We believe that change may be achieved through the careful application of ecosystem management.

The Revested Oregon and California Railroad Grant Act (O&C Act) and the Federal Land Policy and Management Act are the two major pieces of legislation that govern the management of BLM lands in Oregon. Within these laws, ecological principles define management constraints, management approaches, and predictions of those ecosystem responses necessary to ensure proper maintenance of sustainable systems. People will continue to play a major role in this ever-changing ecological system.

Another law which has influenced management on not only BLM lands but other federal, private and state lands is the Endangered Species Act. This Act requires the protection and recovery of species determined to be endangered or threatened, regardless of other legal mandates.

2. Goals of Ecosystem Management

The State's comments on BLM's biodiversity strategy are based on the following five objectives:

- a. Maintenance and restoration of biological diversity at four levels of organization: geographic scale, genetic composition, communities and ecosystems.
- b. Sustainability of components and processes of ecosystems over time and long-term productivity and resiliency of such ecosystems.
- c. Contribution to the basic needs of people and communities who depend on the land for subsistence, livelihood, and social and spiritual development.
- d. Consideration of sensitive ecosystems such as wetlands, riparian zones, and fragile sites.
- e. Provide consistent linkage between forest health and ecosystem management.
- f. Intensively monitor and evaluate implementation of biological diversity to determine if short-term goals are leading to long-term expected future conditions.

3. Consistency with Legal Mandates and Authority

BLM manages 84 percent of its land in western Oregon/Klamath Falls Resource Area under the Revested Oregon and California Railroad Grant Act (O&C lands) and Coos Bay Wagon Road (CBWR) lands. The remaining 16 percent are referred to as Public Domain lands managed under the direct authority of the Federal Land Policy and Management Act (FLPMA). The O&C/CBWR and Public Domain lands have different legal mandates on how they should be managed. BLM has stated in its preliminary planning documents that it would make planning decisions consistent with these laws.

While it is conceivable that, with the requirements of the Clean Water Act, the Clean Air Act, and the Endangered Species Act, Public Domain and O&C/CBWR lands could be managed similarly; it is not obvious that they should be so managed. The mandates are different; the management approaches to protect and enhance may be different; and, the beneficiaries of these approaches are different.

BLM draft plans have not explained the rationale on how their biological diversity-based preferred alternatives are consistent with its legal mandate for O&C/CBWR lands. The relationship

between the preferred alternatives' ecosystem management concepts and existing laws governing the management of O&C/CBWR lands need to be clearly articulated in each final plan.

and activities of these agencies. BLM plans should explain in more detail how they plan to coordinate their biological diversity program with adjacent landowners and more broadly on a landscape level.

4. State's Recommendations

5. Summary

Biological diversity principles used by BLM in developing their draft plans represent a holistic approach to managing resource lands. We commend BLM on this effort.

The State applauds BLM's biological diversity strategy as it recognizes the forest ecosystem from a holistic perspective rather than the traditional single-emphasis management. Each draft plan evaluates the important components of biological diversity and attempts to predict both short- (10-year) and long-term (100-year) expected future conditions. The concern over fragmentation, due to ownership patterns and past intensive management practices, may be mitigated by the application of the Designated Conservation Areas (DCAs) grid, Old Growth Emphasis Areas, Conductivity Areas, special areas, and other allocations which promote an older forest structure. Intensive long-term monitoring will be essential to determine if BLM's biological diversity strategy is meeting expected future conditions.

The State's comments on biological diversity, found in the draft plans, are based on principles found in our position paper (Appendix 1). These principles are described below.

Many questions remain to be answered by the scientific community and land managers on how to successfully manage lands using ecosystem management. BLM's ecosystem management approach will be very helpful in answering these questions over time.

- a. **Expected Future Condition.** BLM RMPs should identify and examine the expected future condition for biological diversity. Expected future condition goals should relate to the compositional, structural, and functional attributes of ecosystems and should include a regional perspective. BLM districts need to express in greater detail what the expected future conditions will be from implementing the preferred alternatives.
- b. **Prescriptions.** RMPs should include specific, measurable prescriptions or standards which when implemented would work toward meeting the expected future condition. While prescriptions are part of each draft plan, it is not clear how they will meet the biological diversity short- and long-term goals.
- c. **Ecosystem Condition.** RMPs should provide information on the current condition of ecosystems and their compositional, structural, and functional attributes to establish "baseline conditions." Plans need to identify areas of concentrated biological diversity and ecosystems (e.g., old growth) at high risk due to human activities. "Baseline conditions" should be used to monitor trends in biological diversity over time and to make necessary adjustments in plans. Standards and monitoring plans for evaluating whether they are being met need strengthening.
- d. **Research and Adaptive Management.** The RMPs should detail how BLM plans to integrate management, monitoring, and research to continually apply adaptive management and improve the scientific basis for ecosystem management. This has not been sufficiently addressed in the draft plans.
- e. **Ecosystem Monitoring.** RMPs should include specific monitoring questions for measuring whether management prescriptions are meeting the expected future conditions. For example, is forest age class distribution within a certain forest allocation moving toward or away from the

B. Land Use. How can BLM better address problems encountered in managing rural interface areas? Has BLM met the federal consistency requirements of the National Coastal Zone Management Act and Oregon's Coastal Zone Management Program? Has land tenure been adequately addressed? How has State ownership of surface/subsurface ownership rights been handled?

1. Rural Interface

BLM has identified the management of rural interface areas as one of eleven major planning issues to be addressed by each district and the Klamath Falls Resource Area.

The term "rural interface" refers to those areas where BLM-administered lands are adjacent to or intermingled with predominately privately owned lands zoned and/or used for agricultural, forest, rural residential, and other resource and nonresource purposes.

Owing to the close proximity of BLM holdings with other lands and population growth in these areas, BLM, private and other public landowners are expected to experience increasing levels of conflict with one another over the management and use of their respective ownerships.

expected future condition? BLM plans should integrate management, monitoring, and research to continually apply adaptive management and improve the scientific basis for ecosystem management. BLM districts need to develop more comprehensive, monitoring plans to measure the long-term commitment of ecosystem management.

Taken together, the draft resource plans state that rural interface conflicts affecting the management of BLM lands in Oregon are becoming greater, with the most extensive problems occurring in the Medford District. One of the most visible results of this development is that wildfires over the last several years, particularly in southern Oregon, have destroyed and/or threatened increasing numbers of lives, resources and structures in rural interface areas.

Statewide, BLM has calculated there are approximately 194,000 acres of BLM land lying adjacent to private lands currently zoned to allow development on 1 to 20 acre lots.

- f. **Ecosystem Dependency.** BLM operates under laws and regulations which require production of goods and services of all types. People are part of, and are dependent on, BLM-managed ecosystems. BLM plans should describe the linkage and dependency (social, economic, spiritual) of local and regional communities, groups, industries, etc., on ecosystems within each land allocation.
- g. **Threatened and Endangered Species.** RMPs should reflect the special considerations BLM is providing for ecosystems that contain endangered, threatened, and sensitive species. This includes meeting the requirements of various recovery plans, as well as ecosystem management provisions for preventing species from being listed. Special emphasis should be placed on the recovery requirements of the spotted owl and provisions for anadromous fish. BLM has developed its strategy for meeting the requirements of the Endangered Species Act for the spotted owl and other species. Whether this strategy is sufficient to meet the upcoming legal mandates is unknown at this time.
- h. **Silvicultural Practices.** BLM plans should identify the silvicultural practices and the cause-and-effect relationships which will lead to the goals of biodiversity/ecosystem management. This includes guidelines for: timber harvest and road management, achieving species diversity, retention and restoration of old growth and other successional stages, rotation ages, vegetation control, stand conversion, artificial regeneration and genetic improvements, hardwood management, fertilization, and prescribed fire. BLM has presented some innovative forest management approaches to managing its lands in response to protecting sensitive, endangered and threatened species plus other resource values.
- i. **Coordination.** BLM should clearly specify methods for coordinating biodiversity and ecosystem management goals with adjacent forest landowners. Specifically, BLM must coordinate with the Forest Service and relevant state agencies to assure that activities to achieve regional/landscape biodiversity are compatible with plans

a. BLM's Response to Rural Interface Problems

The preferred alternative in each district's draft plan conceptually treats the rural interface issue in the same manner. Each district proposes to establish a buffer area on its lands which lie adjacent to private lands zoned with minimum lot sizes ranging from 1 to 20 acres.

Within these buffer areas, BLM management activities would be altered where feasible to mitigate the concerns of nearby residents. Examples of the kinds of special management practices undertaken by BLM in the interface buffer include restrictions on public access, road building, harvesting methods and frequency, and application of herbicides and pesticides.

b. State's Recommendations

The State's review of BLM's interface strategy is based principally on a policy paper titled, Recommendations to BLM For Managing Rural Interface Areas, transmitted to BLM from Governor Roberts in December 1991. (Note Appendix 1) The paper, which BLM encouraged the State to produce, formally acknowledges that the problem of rural interface areas involving BLM lands is a matter of critical State concern.

The paper calls upon BLM to enter into a special partnership with the State of Oregon so that the rural interface problem can be addressed comprehensively rather than in a fragmented, uncoordinated manner. Unlike other states, Oregon presents BLM with a unique opportunity through its recognized statewide land use program and related initiatives by the Department of Forestry and other agencies to deal with rural interface areas.

The State's paper contains six specific recommendations aimed at enabling BLM to join with state and local governments in achieving significant progress on various aspects of the interface problem, including policy development, agency coordination, information exchange, and conflict resolution.

Unfortunately, after review of the six draft RMPs/EISS, it is disappointing to note that BLM apparently rejects a proactive approach described in the State's paper for dealing with rural interface areas.

The State believes that BLM's passive strategy of relying on uniform buffering of federal lands will do little to alleviate new inappropriate developments in rural interface areas. This strategy further will severely limit BLM's opportunities to implement effective forest management programs on these interface lands.

The State urges BLM to incorporate the following recommendations, as described in the State's interface paper and the Department of Land Conservation and Development's comments to the RMPs (Appendix 2), into the final resource management plans.

- (1) BLM should act consistently with Oregon laws, policies, and programs adopted to protect the State's forest land base for timber production and other forest uses.
- (2) BLM should increase its participation in Oregon's statewide land use planning program. This could be accomplished through establishing joint State and BLM working groups to further BLM's involvement in the statewide land use program and other related State efforts to address rural interface problems.
- (3) BLM's State Office should provide policy guidance to districts for addressing rural interface issues.
- (4) BLM, in cooperation with the State of Oregon, should establish and apply a revised definition of rural "interface areas" which takes into account existing uses; current federal, state and local plans; and other land use factors.
- (5) BLM should incorporate the rural interface issue into its agreement with the State of Oregon for monitoring the implementation of BLM management plans.

2. Federal Consistency

Four BLM districts (Salem, Coos Bay, Eugene and Roseburg) administer lands covered under the federal consistency requirement as provided in the Coastal Zone Management Act. Under the Act, any federal activity, within or outside the coastal zone that affects any land or water use or natural resources of the coastal zone must be carried out in a manner which is consistent, to the maximum extent practicable, with the enforcement policies of the State's federally approved coastal management program. The mandatory enforcement policies contained in the Oregon Coastal Management Program are:

- a. The Statewide Planning Goals adopted by the Land Conservation and Development Commission;
- b. Acknowledged city and county comprehensive plans and land use regulations; and
- c. The statutory authorities and regulations of selected state agencies.

A preliminary analysis of a federal agency's consistency determination is made by the State following review of the draft plan or project being proposed. The final consistency determination by the State of Oregon is made following release of the final environmental impact statement on the adopted plan or project.

Based upon preliminary analysis, it appears that the draft RMPs for the four districts are consistent with Oregon's Coastal Management Program.

However, formal State concurrence with BLM's determination of consistency cannot be made at this time due to a lack of specific documentation in the RMPs which demonstrates that all of the applicable mandatory state authorities listed in the Oregon Coastal Management Program have or will be met.

For the purposes of its final federal consistency determination, BLM will need to document in the final EISS how the selected management alternative for each RMP complies with the statutory authorities and regulations of the Oregon Coastal Management Program. Until such an analysis is conducted and incorporated into the final RMPs, full concurrence by the State on BLM's consistency determination with the Oregon Coastal Management Program cannot be made. (See Department of Land Conservation and Development's comments on federal consistency -- Appendix 2.)

3. Land Tenure

BLM districts have inventoried and categorized their lands according to resource value (e.g., timber, wildlife, wetlands), land status (e.g., O&C or Public Domain) and ownership pattern (e.g., scattered or blocked). We have three concerns on how districts have addressed land tenure.

First, there seems to be no uniformity on how districts have categorized their lands. Coordination between adjacent districts is lacking and land tenure maps included in the plans are difficult to interpret. We strongly recommend districts develop common criteria and coordinate among themselves land tenure decisions to interject uniformity into the process.

Second, an In-Lieu Land selection settlement has occurred between the State and BLM within the last year. The State, according to the Courts, is allowed to select 5,202.29 acres of BLM Public Domain land. Our concern is the lack of mention of this settlement in the Land Tenure section for the preferred alternatives. We request that language be inserted which clearly states BLM's responsibility to accommodate the State's selection within the requirements of the law. (Note Division of State Lands response -- Appendix 2.)

Lastly, O&C and Coos Bay Wagon Road lands that are suitable and available for timber production should not be exchanged for unsuitable or single use lands. These lands should be retained for forest production.

4. Navigability

None of the draft plans acknowledge existing or potential State ownership claims on navigable waterways within BLM districts. Language, noted in Division of State Lands response, should be included in each final plan regarding navigability.

C. Fish and Watershed Management. How will BLM use analytical watersheds to measure cumulative effects of management activities? How will riparian areas and wetlands be protected? How will fish habitat be protected and enhanced?

One of the State's goals is to ensure that BLM restores and protects riparian-dependent and upland resources. This is consistent with BLM's direction in the Federal Land Management and Policy Act, the O&C Act and other federal and state laws. It is also consistent with BLM's long-term objective to maintain and enhance watersheds that currently are in good condition while improving those identified as declining. The comments and recommendations that follow are based on this goal.

Rivers, streams and lakes, and their riparian areas are valuable resources. Within their area of influence, they provide habitat for wildlife and fish and furnish domestic water and recreational opportunities such as boating, swimming, and fishing.

BLM's Fish and Wildlife 2000 -- A Vision For The Future has set several objectives for improving water quality and riparian area and watershed conditions in Washington and Oregon. The goal, according to this plan, is to improve nearly 656 miles of streams. Evaluation and monitoring is also emphasized as a major component of the program.

Maintaining and enhancing fishery resources, as noted in all of the draft management plans and the BLM's Fish and Wildlife 2000, is an admirable undertaking. Careful management of riparian

areas combined with manipulating harvest schedules in watersheds and instream improvements should help protect the fishery resources in western Oregon. As a general rule, BLM should not substitute restoration, enhancement projects or mitigation for adequate protection of riparian dependent resources except when damage from essential activities is unavoidable. BLM's proposed biological diversity strategy should help to achieve the expected future conditions desired in watersheds.

1. Fish

A State goal is to restore and protect fish stocks. Declining fish stocks in the Columbia, Snake, and several southern Oregon rivers will require an unprecedented effort by resource managers to reestablish acceptable wild fish populations. This effort must include cooperation by all landowners on the management of watersheds and, in particular, riparian areas. BLM needs to be an active player in this long-term program.

Many studies are underway (some 270 on the Columbia River system alone) to examine the causes for declining fish runs in the Northwest. Preliminary theories on why fish runs are declining range widely from dam construction to deteriorating conditions of our watersheds. Many believe it is a combination of many factors, all interrelated, which have led to the problem.

The types of fish habitat enhancement projects over the next decade are generally not enumerated or described in the draft plans.

Fishery concerns which BLM can influence in their land management decision process include: watershed management (including riparian area protection), forest management practices, and grazing.

Sensitive Fish Species

Several of the listed sensitive fish stocks, which have been noted by the Oregon Department of Fish and Wildlife (ODFW) as occurring on the various BLM-administered planning areas include: chinook salmon (Lower Columbia River and South Coast fall run stocks), chum salmon, coastal cutthroat trout (anadromous Columbia River basin stock), coho salmon (Lower Columbia River and South Coast stocks), Oregon chub, Jenny Creek sucker, redband trout, Lost River and Short-nosed sucker just to name a few.

Of particular concern is declines in fish production in the Illinois River. Winter steelhead are of special concern as this stock has been petitioned for threatened or endangered status under the Endangered Species Act. The basin's fall chinook salmon and coho populations have also declined.

BLM has surveyed its lands and has concluded that aquatic habitat on some of its lands is not in good condition. These conditions will seriously influence BLM's ability to improve habitat for sensitive fish stocks occurring on their lands.

The State recommends that BLM conduct a survey to identify declining fish populations and develop recovery plans for high risk populations. BLM should take aggressive action to improve sensitive fish habitat working closely with the State, other federal agencies, Tribes, and interest groups. BLM should describe more completely how their preferred alternatives will impact sensitive fish stocks, and what steps would be taken to mitigate adverse impacts.

2. Water Quality and Quantity

a. Water Quality

A State goal is to ensure that BLM meets or exceeds state and federal water quality standards. The draft BLM plans have stated that they meet federal and state water quality standards; however, several districts have identified streams that do not currently meet these standards. Best Management Practices (BMPs) have been included in each BLM plan which present general prescriptions for meeting water quality.

The State believes that the BMPs listed in the draft plans contain few measurable standards and varied widely between districts. Furthermore, standards are neither clear nor specific enough to be used in monitoring water quality. No information is provided in the plans to show how managers will make determinations regarding water quality and erosion potential for forest management activities.

Further concern has been expressed over the lack of information on landslides. Landslide prevention is a critical component to maintaining water quality on forest lands. BLM has identified fragile sites (unstable soil areas) through its Timber Production Capability Classification inventory. While we assume that the inventory included the identification of potential landslide areas, protective standards for these sites have not been clearly described in the draft plans.

We believe BLM districts have not sufficiently addressed potential landslide problems. The draft plans surprisingly lack information regarding slope stability which is needed for, among other things, the location of waste disposal sites.

The State recommends that BLM districts strengthen their commitment to water quality through the following:

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- a. BLM needs to make BMPs more specific to assure that water resources objectives are being met. BMP language should include conditions for which BMPs are applicable. Supporting policies and documents also need to be consistent with the BMPs.
- b. Consistency through coordination in implementation and monitoring are needed not only within a district but also between districts. The State recommends that BLM develop more comprehensive standards utilizing such expertise as the Forest Service (Siuslaw National Forest), State Department of Forestry and others in identifying (using GIS) and protecting potential landslide areas.
- c. Where streams do not meet State water quality standards for temperature, BLM should not allow activities, (e.g., grazing) which would increase temperatures over the long term.

Temporary (one-season) temperature increases would be permissible from the following activities: restoring or improving riparian areas or in-stream habitat; stream bank protection; required transportation system crossings; harvest corridors; structures associated with putting water to beneficial use; or other essential activities such as fire suppression, flood control, or administering BLM lands. Water temperature increases from these activities should be minimal and adequately monitored, especially for cumulative effects. Temporary disturbances should be scheduled when adverse effects to beneficial uses would be minimized.
- d. BLM should evaluate future road design, construction, and maintenance standards to ensure protection of water quality. As noted in the Oregon State University response, adequate culvert sizes (consider 25 and 50 year flood) are necessary for draining runoff. Catastrophic road failures from poor road design and plugged culverts, can have a major impact on downstream channels, riparian area values and fisheries resources. The Oregon Forest Practices rules are currently being revised to consider larger culvert sizes on private lands.

The Department of Environmental Quality (DEQ) has conducted intensive monitoring of water quality in several basins in western Oregon since publication of BLM's Analysis of the Management Situation. BLM is encouraged to contact DEQ for the results of these monitoring programs especially on streams running through BLM lands. (Note DEQ comments in Appendix 2.)

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3. Water Quantity

A State goal is to provide a sustainable amount of water to meet the needs of Oregonians and fish and wildlife resources.

Successive years of drought statewide have elevated concerns over the availability of water. Most BLM plans have addressed streamflows, beneficial uses, community watersheds, and BLM wells. However, additional information is needed to strengthen the discussion on water quantity.

The State makes the following recommendations:

- a. The final plans should acknowledge the limits on the availability of surface water and address surface water quality problems.
- b. Districts should describe watershed improvement and stream restoration activities which increase low season flow.
- c. District plans should address ways to conserve and reduce water consumption and soil compaction.
- d. BLM should expand their discussion concerning the availability of groundwater and groundwater quality problems.
- e. Final plans should provide a more thorough discussion of the potential effects of the alternatives on water yields and streamflows. Other recommendations are outlined in Water Resources Department's response (Appendix 2).

4. Watershed Management

Oregon's Strategic Water Management Group has developed a watershed management goal for the State. This goal, in part, notes that a watershed management strategy must enhance and restore watershed ecosystems in order to optimize the natural resources of the State for all beneficial economic, environmental, and social uses.

BLM districts have divided their lands into analytical watersheds using a watershed condition index to measure current and future conditions. The State supports this strategy, in principle, as it should help BLM to achieve State objectives for water and wildlife resources on lands they administer.

Planning by analytical watersheds serves several very important functions. First, it allows district specialists the opportunity to plan management activities on a much smaller, more workable,

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geographic setting. Second, districts have a better opportunity to monitor the cumulative effects of all management activities on water quality and quantity, fish, wildlife, and recreation, plus other resources.

BLM's methodology of using an index to measure the cumulative effects of various current and future management practices within individual watersheds has merit. The condition of watersheds could be used to determine where forest management activities could or could not occur. However, the State is unclear how the key watershed condition indicator used in the plans (the watershed condition index) was generated; how it was used in management planning; how it will be used in standards, guidelines, and monitoring; and how it will be validated.

The State is concerned about predictions in the draft plans' preferred alternatives that some watershed conditions will decline over the life of the plans or even worsen from existing poor conditions. For example, the Salem District predicts that in 18 of its 27 analytical watersheds (67 percent), conditions will either decline to a "minor" or "significant" degree over the short-term under the preferred alternative. According to BLM's Executive Summary: Western Oregon Draft Resource Management Plans/Environmental Impact Statements, 45 watersheds "probably" will have declining conditions over the next ten years under the preferred alternatives.

The State fails to understand how declining watershed conditions will meet water quality and other resource objectives set forth in the draft plans or even state and federal water quality standards. It would seem that basin-specific prescriptions to restore or enhance water quality (e.g., sediment and temperature) and aquatic habitat have not been adequately addressed.

Recommendations on watershed management and condition index that BLM districts need to consider when they develop their final plans are listed below.

- a. In order to obtain more significant data from evaluation and monitoring, BLM should subdivide analytical watersheds greater than 10,000 acres into smaller, more manageable units.
- b. BLM should set watershed impact standards to help guide forest management activities. Standards should address maximum soil compaction, erosion rates, equivalent clearcut area, and relative percentages of seral stages. If standards are projected to be exceeded, proposed projects within a watershed should be reevaluated. Similar adjustment would also occur if monitoring determined standards are not being met.

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- c. BLM should display severely impaired streams identified by DEQ's 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution within analytical watersheds. This would better indicate existing on-the-ground conditions in the many subwatersheds within a single analytical watershed and provide more meaning to BLM predictions of future watershed condition.
- d. Watersheds should be classified and prioritized according to current functional and ecological conditions and importance for maintaining viable wildlife populations. Watershed-specific standards should be developed, in cooperation with adjacent landowners, to restore or maintain watershed conditions. A proactive approach may be used which would include establishing riparian management areas of sufficient width to achieve restoration on streams in poor condition. Districts should place a high priority for restoration on these watersheds. The State and other interest groups should be included in restoration plans. We commend the Medford District for adopting an aggressive approach to watershed/riparian area restoration by developing watershed management plans for 28 streams.
- e. BLM should analyze the relationship between calculated watershed condition indices and current flow and water quality conditions. This should enable BLM to test the validity of the rating system. BLM should use existing environmental assessment information to validate watershed condition index values as much as possible. Additional discussion on how BLM developed and used the watershed condition index in their planning process should be included in the final plans.
- f. Management activities should be monitored in each watershed to determine the cumulative effects on water, soil, fish, wildlife, and other resources. It will be difficult to accurately monitor watersheds where BLM manages only a small portion of the land base. The State strongly encourages cooperation and communication between landowners in multiple ownership watersheds. Cooperative ventures should involve evaluation of watershed condition, land management planning, and watershed monitoring for protection of water supply, water quality, and fish and riparian-dependent wildlife. Monitoring of multiple ownership watersheds further would serve as a benchmark for comparison with other watersheds with greater BLM ownership.

We commend the Medford District for recognizing watersheds and riparian areas with high cumulative effects. The district has deferred some 28,000 acres from harmful activities for the next ten years because of poor watershed conditions.

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- a. BLM needs to define an expected future condition for their riparian management areas and provide management directed at maintaining or restoring this condition. The State recognizes that riparian systems are dynamic and change with time due to catastrophic floods, wind, and other natural ecological processes.
- b. Standards should be established for all stream orders and should reflect functional and ecological differences between stream orders. At a minimum, these factors should ensure: long-term supply of large woody debris recruitment, snags, shading, water quality (temperature, turbidity), microclimate, floodplain protection, and critical habitat for wildlife and sensitive species.
- c. Riparian area management needs to be addressed at the watershed or landscape level and should reflect the current conditions of watersheds.
- d. Restoration of riparian areas identified in "poor" or deteriorating conditions should be a high priority.
- e. Riparian areas in "good" condition should be maintained in good condition.
- f. Riparian management areas (RMAs) should be an appropriate width to meet water quality standards, supply potential large woody debris (loading of complex wood structure in stream) and down wood (tons/acre in riparian management areas), and recognize and manage for sensitive riparian-dependent species within a landscape context.
- Buffer widths may vary depending upon overall watershed condition, stream order, beneficial uses, ecoregion, impact to sensitive species, and physical characteristics within/adjacent to streamside area. Critical components that should be considered when developing buffer widths include, but are not limited to, overall watershed condition, shading (water temperatures), sedimentation and turbidity, nutrient recycling, large woody debris, snags, and critical habitat for wildlife and sensitive species. BLM recognized some of these important ingredients when developing their riparian area protection policies.
- g. Concern has been expressed over protection of intermittent streams, mainly stream orders 1 and 2. Some have suggested (more accurate mapping is needed) that these streams may comprise as much as 79 percent of the total stream miles on BLM lands in western Oregon. The State recognizes that these smaller streams serve an important function for fish, wildlife and water quality. Greater knowledge through research on the importance of these streams to fish,

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5. Riparian Area Management

Water and associated streamside vegetation supply a unique ecological function. Riparian areas have their own distinctive environment and provide habitat for many fish and wildlife species inhabiting BLM lands. Riparian areas also function as corridors between BLM's Old Growth Emphasis Areas and other anchors of biological diversity within a landscape context.

The State's goal for riparian areas is to protect, maintain and restore (where necessary) long-term aquatic productivity and the functional and ecological values of adjacent terrestrial areas directly influencing aquatic systems. This should be accomplished by establishing standards for relevant factors which affect attainment of the State goal.

BLM districts have inventoried streams within their specific administrative area. Stream miles by order, acres of riparian area (mostly order 3 and above), pollution type and severity, and vegetative classes have been identified and summarized in the draft BLM documents. We commend the districts on this effort, as it should set the stage for programs designed to improve watershed/riparian ecosystems.

We would recognize the Klamath Falls Resource Area's commitment to produce a Watershed Management Practices Guide. While the content of this guide was not outlined in the draft plan, it could serve as an innovative approach toward meeting desired water quality goals. One item that we would encourage the resource area to reevaluate in their guide is the protection standards proposed around lakes which is less than other western Oregon BLM plans.

The importance of protecting riparian areas cannot be over emphasized. Several recent studies by a combination of federal and state agencies, Tribes, and others have surfaced in response to the declining fishery resource in Oregon. Studies by COPE through Oregon State University, Scientific Panel on Late-Successional Forest Ecosystems Report to the House of Representatives, Forest Service (Upper Grande Ronde River Plan, Riparian Management Guide for the Willamette National Forest), and the State of Oregon (Draft Water Classification and Protection Project, and Anadromous Fishery Study) are just a few of the many studies recognizing the need for a greater understanding of watershed/riparian ecosystems and the fishery resource.

Considering the importance of riparian areas on BLM lands contributing to water quality, water quantity and fish and wildlife habitat, the State makes the following recommendations:

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wildlife and water quality is needed. We believe that individual forest project plans should map and evaluate order 1 and 2 streams existing within the project boundary before a plan is implemented. If it is determined in pre-project planning that channel integrity or identified beneficial uses need protection, then appropriate protection (including riparian buffers) should be applied. Project planning should also evaluate the potential cumulative effects that activities could have on the beneficial uses outside (subbasin level) of the project area.

Intermittent streams should be managed according to specific standards established for large woody debris recruitment, snags, shading, water quality (temperature and turbidity), microclimate, and critical habitat for wildlife and sensitive species. Disturbance of streamside vegetation and soil must be kept to a minimum. The standards may be accomplished by a variety of techniques depending upon the beneficial uses in question. These include but are not limited to: leaving conifer wildlife trees along these streams; leaving hardwoods, nonmerchantable conifer trees and brush that occur along them; having large woody debris placed in them during forest management activities, including logging; avoiding logging through them; and overall, maintaining and protecting the integrity of the watercourses.

- h. Riparian area buffers identified on-the-ground for protection of specific riparian area resources would have non-scheduled harvest planned. Harvesting within these riparian buffers might occur for in-stream/streambank improvement projects, harvest corridors, fire control or other specific, short-term projects. Salvage logging within the riparian management areas should be discouraged except where detrimental environmental and/or structural (e.g., bridges or culverts) damage would be anticipated from leaving downed trees.
- i. While the State recognizes that the primary focus within riparian management areas on BLM lands will be streamside and associated vegetation, taking no action may not improve conditions within these areas, especially for large woody debris recruitment. As an example, the State is concerned about the large amount of alder-dominated riparian areas on BLM lands. These hardwood stands currently do not have the near-term potential for producing effective types and quantity of coarse woody debris nor will they likely have that potential in the future unless restoration measures (e.g., planting conifers within hardwood-dominated riparian areas) are taken.

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For both woody debris and water quality problems, restoration projects, if implemented, should use adaptive management combined with intensive evaluation, monitoring, and data evaluation to determine long-term and short-term tradeoffs. Strict project standards followed up by evaluation and monitoring are the keys to a successful stream restoration program.

- j. Exclude livestock in grazing allotments where poor riparian area conditions have been identified until such time as the riparian area reaches good condition.
- k. Mining activities in or adjacent to streams should be managed in a way not to adversely impact riparian area vegetation and water quality.

6. Wetlands

BLM should increase its recognition of wetlands as a riparian resource in a manner consistent with the Bureau's Riparian Wetland Initiative for the 1990's. Recommendations that the State would suggest be included in the final plans are:

- a. Specifically name wetlands as features for which riparian management areas will be established.
- b. Specifically identify wetlands that will be restored or enhanced.
- c. Acknowledge the need to coordinate and cooperate with public and private landowners (via Statewide memorandum of understanding) in order to 1) develop a common inventory of wetlands; 2) establish criteria for determining wetland significance for protection or restoration; and 3) develop coordinated priorities to protect and restore public wetlands.
- d. Acknowledge that the preservation of wetlands on BLM lands makes a major contribution to the attainment of the Oregon Benchmark goals on wetlands (i.e., 100% of 1990 Oregon wetlands still preserved in the year 2000).

The State endorses the Medford District and the Klamath Falls Resource Area inventory of wetlands and recognition of smaller one- to three-acre sites. This should set a standard that other districts should follow in their final plans.

7. Summary

BLM districts should develop and utilize comprehensive watershed management plans to improve water quality, water quantity, and fish and wildlife habitat within riparian areas. Continued

research and cooperation among federal, state, Tribes, and the private sector should improve/maintain acceptable riparian area conditions. Best Management Practices setting measurable standards and the identification and protection of unstable areas would further help maintain water quality. Monitoring, using measurable standards, is the key feedback mechanism for BMP implementation, effectiveness, and cumulative effects analysis.

D. Air Quality. How should BLM address the use of prescribed fire as a forest management tool in terms of the potential impacts on air quality?

The State supports a balanced ecological strategy for managing forests in Oregon. An ecological approach to forest management may entail a greater use of prescribed burning. If prescribed fire is going to be utilized by BLM as a forest management tool, state and federal air quality requirements must also continue to be met.

The draft BLM plans have stated that prescribed burning will be done in accordance with the Oregon State Implementation Plan administered by DEQ and the Oregon Smoke Management Plan (OSMP) administered by the Oregon Department of Forestry. Incorporated into the OSMP is a goal for reducing emissions from prescribed burning by 50 percent by the year 2000.

1. PM10 Nonattainment Areas

Prescribed forest burning and wildfires in west-side districts can affect air quality in both western and parts of central Oregon. Of particular concern are areas which do not meet state and federal health standards for small particulate matter (PM10). Currently these areas are Medford-Ashland, Klamath Falls, Grants Pass, Eugene-Springfield, and Oakridge.

Although prescribed burning is not a significant contributor to PM10 levels in the areas noted above, there is still a need to minimize smoke impacts, in order to ensure that air quality standards are attained by the federal deadlines specified in the Clean Air Act. DEQ has developed PM10 burning smoke impacts in these areas. The Department of Forestry's OSMP is directly tied into these PM10 control strategies.

2. Prevention of Significant Deterioration

The State is also concerned about maintaining clean air in areas currently meeting air quality standards. Contributing prescribed burning impacts could aggravate PM10 levels in these areas leading to the nonattainment designation and development of control strategies as discussed above. In addition, the federal Clean Air Act contains pollution limits known as Prevention of

Significant Deterioration Increments which limit the amount of emissions that can be added to a "clean" airshed. If the allowed deterioration increment is consumed, then further growth must be restricted, such as new and modified major industrial sources of pollution.

3. Visibility Protection

The State recognizes the importance of protecting federal Class I areas (wilderness areas and Crater Lake National Park) from smoke impacts as a result of BLM prescribed burning in western Oregon. The federal Clean Air Act requires states to improve visibility in these Class I areas. Air quality monitoring in the Cascades has shown a 65-75 percent improvement in visibility in recent years. The Oregon Visibility Plan, developed by DEQ in 1986, is largely responsible for this progress and is closely linked to the OSMP.

4. Summary

The State believes that the final BLM plans should specifically address each of the three issues outlined above in cases where smoke impacts from prescribed burning could potentially occur. Any increases in prescribed burning including "understorey" burning should be analyzed from an air quality standpoint.

In addition, the recent emergence of the forest health problems in central and eastern Oregon may expand the role of natural and prescribed burning on some of the forested land administered by BLM. The extent to which this could occur needs to be assessed prior to the start of any increased burning to ensure consistency with the Oregon's State Implementation Plan and OSMP. Continued coordination and communication among federal and state agencies in addressing these air quality concerns should be stressed.

E. Tourism and Recreation. How should BLM manage for recreation, visual resources, and Wild and Scenic Rivers?

BLM lands contain a variety of significant natural resources of recreational value, including wildlife, wilderness, lakes, and rivers. These resources have existing and potential values for local residents and also serve as an attraction for tourism from outside a specific BLM district.

As Oregon's and the nation's population grows, the demand also grows for tourist attractions and outdoor recreation. At the same time, the State, in an effort to expand its economic base and to mitigate the cyclical nature of an economy heavily dependent upon timber and agriculture, increasingly emphasizes

tourism, recreation, and the service industries which accompany them. Any long-range plan for BLM lands in Oregon should give more weight to diversified use of these lands if Oregon is to have balanced growth.

The State has addressed recreation uses and needs through statutes and state land use planning goals. The Oregon State Comprehensive Outdoor Recreation Plan (SCORP), with the Oregon Outdoor Recreation Plan 1988-1993 and the Recreational Supply Bulletin and Recreational Needs Bulletin, provide comprehensive technical information and assessments for analyzing recreational growth and needs throughout the state. Furthermore, the State's recreation paper (Appendix I), titled Recreation on BLM lands - State Position Paper, presents recommendations on improving recreational and tourism opportunities on BLM lands. We encourage districts to incorporate the State's recommendations and technical expertise when developing their final RMPs/EISS.

1. Recreational Tourism

Many proposed recreational developments and management actions have direct impacts on the future of recreational tourism in Oregon. Several of these actions which BLM should consider in its final plans include:

- a. Coordination with State and local governments on actions which may influence our Regional Strategies and Community Initiatives Programs.
- b. Development of a multiple-agency recreation planning program to promote regional recreational development and tourism.

The development of recreational/tourism strategies by State and federal governments and the private sector is one essential component of Oregon's plan to diversify its economy.

2. Dispersed Recreational Demand

The 1988 SCORP projects demand for a variety of dispersed recreational activities. As identified in this document, merely considering activity demand is insufficient to address recreational diversity. Equally important is to consider the desired characteristics of the setting for a given activity. Those characteristics in SCORP have been defined in terms of the Recreational Opportunity Spectrum (ROS).

The Klamath Falls Resource Area was the only plan which recognized ROS to identify recreational opportunities. We commend them on this effort and recommend that the five westside BLM districts incorporate this rating into their final plans.

The SCORP analysis has identified a need to supply more "primitive" and "semiprimitive" recreational opportunities. While it may be difficult to furnish this specific kind of recreational setting because of BLM's checkerboard ownership, Special Recreational Management Areas, Areas of Critical Environmental Concern, Outstanding Natural Areas, Research Natural Areas, scenic areas, plus other special sites may possess some of the characteristics needed for "primitive" and semiprimitive recreation. The State encourages districts, where appropriate, to use the ROS to identify "primitive" and "semiprimitive" recreational opportunities.

3. Wilderness

Soda Mountain Wilderness Study Area. -- BLM completed its Record of Decision for the Oregon wilderness study areas in October 1991. BLM's final decision package, which must be approved by Congress, recommended that 49 study areas encompassing 1.3 million acres be designated as wilderness. All but three of the wilderness study areas (two are islands) are located east of the Cascade Mountains.

Soda Mountain is the only mainland BLM study area recommended for wilderness west of the Cascades. Located in the Ashland Resource Area of the Medford District, it encompasses some 5,895 acres of which 5,867 acres are being proposed for wilderness.

Soda Mountain - Pilot Rock area is an extremely unique transition zone where coastal, high desert, Cascades and Sierra ecosystems converge. Because of its geographic location and geologic history, many plant and animal species, not found anywhere else in Oregon, have become established. Soda Mountain also provides an important habitat for summering and wintering big game with much of the area identified as a "Designated Conservation Area" by the U.S. Fish and Wildlife Service in the Draft Recovery Plan for the Northern Spotted Owl.

Ever since BLM began evaluating sites for wilderness consideration, there has been strong public interest in expanding the Soda Mountain area. The Governor's Forest Planning Team visited Soda Mountain earlier this year to get a first-hand look at the area and discuss its status with local citizens and BLM.

Since the area is ecologically unique and due to a strong interest by the public, the State recommends that the proposed boundaries of BLM's Soda Mountain wilderness be further evaluated to determine if additional land should be wilderness beyond what has been recommended in BLM's Wilderness Study Report -- Record of Decision. This evaluation should be conducted before final legislation is drafted for Congressional approval. BLM is

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Given the considerations noted above, the State believes that the methodologies used to determine suitability of wild and scenic rivers should be reviewed in preparing the final plans. We recognize that all the rivers found eligible are not necessarily suitable. But we believe that the current method used by BLM may not be adequate for making that determination.

Criteria that BLM districts should consider when analyzing suitability of rivers should include:

- Aggregated values of a given stream.
- Importance of aggregated values on both a statewide and SCORP regional level.
- Importance of smaller streams to program.
- Non-local as well as local support for a given stream.

Visual management on scenic rivers is best determined through the river planning process. This provides for comprehensive development of management standards for all values appropriate to a given river. Such standards should be based on the identified ORVs regardless of river designation. In terms of visual resource management, the State recommends the following management/protection standards:

- No scheduled harvest (visual resource management I) in river corridors, under its administration, designated as wild.
- Rivers or segments of rivers designated as scenic should be managed to maintain and provide recreation opportunities in a near-natural setting. While silvicultural practices could occur within the 1/4 mile corridor, these practices should not substantially impact the river or its immediate environment. Where scenic is an ORV currently meeting visual resource management (VRM) I, maintain the visual quality; likewise, where VRM II exists maintain and protect its scenic value. When VRM III exists, BLM should attempt to enhance visual quality to VRM II.
- River or segments of rivers designated as recreational should be managed to maintain ORVs for which they are designated while providing river-related recreational opportunities in a recreational setting. On rivers where scenic or recreation is identified as the ORV, standards should be implemented which would protect and enhance existing scenic conditions.

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encouraged to carefully manage the entire area of public interest, outside of BLM's proposed WSA boundary, in order to protect its current ecological values and suitability for wilderness.

4. Trails

The draft plans propose significant additions to recreational trails on BLM lands. The State supports this direction especially for those trails linking recreational sites, those allowing access to Special Recreation Management Areas, and those providing connectors to other recreational trails.

The State encourages each BLM district/Klamath Falls Resource Area to review recommendations for trail management in our recreation paper (Appendix 1). Some of the recommendations noted in the paper include: develop trail plans within each proposed project area, buffering, appropriate signing, rerouting, and implementing silvicultural practices to mitigate impacts. We urge that these recommendations be considered in the final plans.

5. Developed Recreation Sites

The preferred alternatives propose substantial increases in camping and day-use sites, in many cases more than doubling current provisions. We are very supportive of this increased emphasis. High priority for such development should be given to those sites supporting local recreational and tourism strategies.

6. Wild and Scenic Rivers

The State gives a high priority to the Federal Wild and Scenic River program. It, along with the State Scenic Waterways program, is critical in maintaining the natural resource and recreational values on Oregon's waters.

The following concerns have surfaced with all of the draft plans:

- The draft plans do not make it clear whether federal land management actions that potentially could have impacts on designated waterways in the State system will be coordinated with the State.
- Technical procedures for determining river suitability were not sufficiently explained in the draft plans. Issues include percent of land ownership by BLM; the criterion used for ranking rivers as suitable; use of "Outstandingly Remarkable Values" (ORV) in rating; and use of economic costs and local support criterion.

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Where neither scenic or recreation is an ORV, the VMR class should be determined through the individual planning process. For these rivers, visual resource management class III should be considered the minimum.

- In areas where more restrictive land allocations are already in place (e.g., primitive recreation, ACECs or Special Recreation Management Areas) the more restrictive standards should apply.
- BLM should concentrate on 1/4-mile corridor along rivers in designing plans for stream with wild and scenic designation. BLM should also manage adjacent lands beyond the 1/4-mile boundary, where necessary to protect ORV.
- All values on eligible rivers should also be maintained at their current level for the plan period (10-15 years) or until Congress acts.

The State strongly encourages BLM districts to work with adjacent landowners, the State and the public when analyzing streams for designation. Additional pertinent comments regarding wild and scenic rivers can be found in the Department of Parks and Recreation's response found in Appendix 2.

7. Off-Road Vehicles

Various forms of off-road driving are projected to increase in many of the draft plans. With their nearness to major population centers, BLM lands are a major provider of this type of recreation in western Oregon.

Off-road vehicle recreation, while enjoyed by individuals and clubs, has created some land use controversy over the years on federal and state lands. To mitigate these potential problems, the State recommends that BLM districts include provisions in their final management plans for designating areas to meet off-road vehicle demand. We strongly recommend that off-road vehicles use be included in a comprehensive road management plan which should be developed by each district.

BLM should strengthen its standards and guidelines for off-road vehicle use. Brochures should be published for public distribution showing locations where off-road vehicle use is permitted and explaining regulations on use.

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8. Scenic Highways

The public's perception of how BLM lands (and other ownerships) are managed is in many cases determined by what people see as they travel the highways and hike the trails. This is a major reason for maintaining visual quality along roads, trails, developed recreational areas and other visually sensitive sites.

Scenic quality contributes to the increasing tourist industry in western Oregon. Hundreds of miles of State highways run through BLM-administered lands. Highways 22, 26, 34, 38, 42, 62, 126, 138, 140, 199, and Interstate 5 are just a few of the routes passing through BLM lands that are used by Oregonians and out-of-state visitors. With this in mind, BLM districts should carefully consider scenic quality in their RMPs/EISs.

It is recognized that maintaining continuity in visual quality on BLM lands is somewhat complicated by its checkerboard ownership. In many cases adjacent ownerships are intensively managing their resources without a high degree of visual quality in mind. This, however, has changed as revisions to the Oregon Forest Practices Act rules (ORS 527.630 Sections 10 and 17) have set visual standards and identified specific highways for visual protection. Visual quality most likely would be enhanced if the six draft plans preferred alternatives were implemented.

BLM's draft plans have classified and are proposing visual protection standards for many sensitive areas: ACECs; SRMA; Wild and Scenic Rivers -- McKenzie and Rogue; travel corridors -- Mt. Hood Corridor, I-5, Marys Peak Road, plus other recreational sites. The State supports the visual protection of sites presented in the preferred alternatives, and suggest BLM provide adequate visual protection along other visually sensitive highways.

The State recommends the following regarding visual quality:

- a. BLM districts should more precisely inventory and reevaluate their visual protection recommendations in the final plans for major highways that pass through BLM lands. The analysis should identify those highways or highway segments appropriate for visual management. Existing visual conditions along these highways should be described, as well as the directives to develop management plans to achieve expected future conditions.
- b. Scenic values along the major highways, cited above, should not fall below visual resource management (VRM) Class III. The State believes that VRM Class IV (modification) would not retain the visual quality objectives along these important travel corridors. The application of new silvicultural concepts by BLM may help mitigate visual concerns.

- c. Long-term visual management objectives should consider the use of silvicultural practices (e.g., uneven-aged management or underburning) in order to accomplish the VRM objectives.
- d. BLM should work with adjacent landowners and others to maintain visual continuity.

The State supports BLM's Backcountry Byway Program.

We also support Salem District's special protection for the Mt. Hood Highway corridor including land exchanges to promote visual quality.

With an increased interest in driving-for-pleasure, these designated routes will give the public sightseeing and wildlife viewing opportunities on lands administered by BLM.

9. Technical Issues

a. Estimates of Recreational Use

We understand that BLM does not currently estimate recreational use on lands under its jurisdiction. Therefore it used activity occasions derived from SCORP, adjusted based on BLM's proportional forested recreational land base for this planning period. We concur with this methodology, but urge BLM to develop methods of use estimates more appropriate to BLM lands in the future.

b. Economic Valuations of Recreation

Analysis of the economic benefits of recreation use should be developed with values appropriate to BLM lands. For example, we understand current methodologies do not place economic values on recreational activities occurring within a BLM district produced by residents within that district. This would miss the transfer payments of recreation produced by a resident of one county recreating in another county. We urge that current recreational economic methodologies be reconsidered so the full value of recreation can be described in the final RMPs.

F. Timber Management. Are BLM's timber growth and yield assumptions valid? How will silvicultural practices be used to support protected harvest levels? Will BLM be able to produce the harvest levels predicted by land allocation? Has BLM adequately address forest health?

Timber harvest from lands administered by BLM has been and will continue to be a major source of logs available to local mills throughout Oregon. Over the last ten years, 11 percent of the total volume harvested in Oregon has come from BLM lands. In

1991, over 486 million board feet was harvested from Bureau lands which represents eight percent of the total volume harvested statewide. Forest management activities not only furnish jobs for local economies but also are an important revenue source for counties to support schools and roads.

BLM's legal mandate for managing its lands has come from the O&C Act and the Forest Land Policy and Management Act. These laws, which were discussed in the Ecosystem Management section of this paper, directly address the management of lands administered by BLM. The O&C lands have been intensively managed over the last fifty years as directed by congressional mandate. Public Domain lands administered under the Forest Land Policy and Management Act consider more multiple use policies.

1. Forest Land Management

Under the current plans, forest management entails implementing mainly even-aged management (clear-cutting) followed by the application of intensive management practices (e.g., burning, planting, fertilization, thinning, and controlling competing vegetation) on short rotations (40-60 years). The primary objective is to intensively manage forest stands to reestablish and perpetuate the growth of Douglas-fir/hemlock stands on a sustained yield basis. Other species are favored depending upon the ecoregion within districts.

Implementation of this strategy represented accepted forest management practices for managing western Oregon forests in the past. Recently, however, these practices have been questioned due to air and water quality problems and protection of sensitive, threatened, and endangered species plus other concerns. This has required BLM and other forest landowners to reassess their approaches to resource management.

In the draft plans, BLM is proposing to meet this challenge by adopting an ecosystem approach to forest management known as biological diversity. Biological diversity represents a significant change from BLM's current management philosophy. While there are questions about the legal sufficiency of this new strategy in meeting the O&C Act, the State believes that biological diversity goes a long way toward addressing concerns about forest health and maintaining productive ecosystems.

The preferred alternatives are designed to produce mature and older forests over time. Because less older forests will be provided on adjacent private lands, we are concerned that the checkerboard ownership pattern makes it unlikely that the objectives for management will be achieved. In order to produce the desired future condition of major forest areas, nearly complete watershed-level ownership is necessary.

A variety of techniques have been used to provide older age class forest. Old Growth Emphasis Areas (OGEAs) use 300 year rotations and density management to accelerate older forest characteristics. Connective Areas (CAs) are managed using 150- or 200-year rotations. Due to the numbers of overstory leave trees planned, we anticipate that management in the General Forest management area will produce characteristics similar to older stands for about 2/3's of the rotation. BLM's efforts are innovative in that they attempt to maintain spotted owl habitat over time while still producing timber from the same land. This strategy is not without controversy, however, as concerns have been expressed over the sufficiency of this strategy to maintain dispersal habitat for spotted owls. (Note wildlife management section of this coordinated response for a further discussion.)

The Medford District has divided its planning area into southern and northern management units based on site productivity, plant community, and forest condition. Proposed forest management prescriptions have been tailored to each area to better fit conditions on the ground. Variations in conventional forest management practices are also being proposed in frost-prone areas. The State compliments the district for this effort.

Implementation of uneven-aged management, especially in the Klamath Falls Resource Area's ponderosa pine and pine-associated stands, is also supported by the State. Both the Medford District and Klamath Falls Resource Area mention using uneven-aged management as a silvicultural management tool. A more comprehensive explanation would be helpful on how these, and possibly other districts, will implement uneven-aged management and how this differs from the various green tree retention standards being proposed in the preferred alternatives.

Our concern, which will be reiterated again in following sections, is the uncertain outcome of applying untested silvicultural prescriptions through biological diversity. It will take highly trained professionals to implement and monitor biological diversity to determine if the program is successful in meeting each district's (including western Oregon as a whole) expected objectives.

Adequate funding is necessary for a successful program. BLM is proposing a much higher level of intensive management (e.g., more genetic plantings and pruning) than ever before. Historically, monies have not been available for intensive management programs. Furthermore, timber receipts have been used to fund many of the activities. We question how BLM intends to obtain the necessary funds to implement biological diversity with reduced harvest levels and higher predicted costs. BLM should evaluate the possible impacts on management programs and outputs (e.g., allowable sales quantity) of lower funding levels.

We direct your attention to the Department of Forestry's response (Appendix 2) and Oregon State University's Report (Appendix 3) for more detailed comments specific to individual BLM districts/resource area.

2. Land Suitability

BLM districts have inventoried their lands by using a system known as the Timber Production Classification System (TPCC). GIS mapping has helped identify the various TPCC classifications. According to the draft plans, this inventory identified the physical and biological capabilities of the lands to support and produce forest products on a sustained yield. Some 2 million acres were identified as suitable in western Oregon/Klamath Falls Resource Area of which 1.7 million acres would be managed for varying degrees of timber harvest. Less than 1 million acres would be allocated to general forest under the six preferred alternatives. Other land allocations (e.g., Old Growth Emphasis and connectivity areas) would allow less intensive timber production as compared to the general forest allocation.

The State recommends that BLM, using data obtained from the Forest Intensified Research project, Department of Forestry, and other studies, continue to validate the accuracy of data obtained from its inventory program and further evaluate lands currently determined to be unsuitable. If it can be determined that some of these lands can be managed for timber production, they should be returned to the suitable base. Likewise, lands in the suitable base which are determined to be unsuitable through monitoring, should be taken out of the base.

Comments regarding BLM's TPCC inventory system are found in Appendix 3 -- Oregon State University's Report (page 43).

3. Growth and Yield Assumptions

Estimation of the sustainable yield level is highly dependent upon a number of assumptions regarding land bases, timber inventory, management activities, and growth and yield assumptions. If the assumptions are not correct, one may find in the decades ahead that either the harvest level was not sustainable or that the harvest level was less than could have been realized.

The allowable sales quantity (ASQ) on each BLM district was calculated using a computer program named TRIM-PLUS. Districts used a combination of two growth and yield models (Stand Projection System -- SPS and ORGANON) for estimating future yields from managed forest stands.

5. Timber Supply

The primary driver of BLM's socio-economic analysis is timber supply. BLM used an innovative approach to model timber supply. This approach has much merit. However, some basic assumptions need to be revisited and the analysis for the final plans should reflect a more uncertain picture of timber supply in Oregon. In addition, BLM should explain how the timber supply analysis was used in formulating its draft alternatives and how it will be used in formulating the record of decision. Please review the Department of Forestry's draft response found in Appendix 2 for more details.

A summary of the concerns and recommendations regarding timber supply include:

- a. Due to the uncertainty in timber supply, it is reasonable to assume that stumpage prices will increase substantially more than has been predicted in the draft plans. We encourage BLM to reevaluate the stumpage prices used in its analysis to better align them with current projections.
- b. Overall, analysis of the timber supply situation is more optimistic than warranted. The draft plans portray what is likely to be an upper level of timber supply. Additional scenarios should be portrayed reflecting lower potential harvests from private owners, the Forest Service, and forests managed by the Oregon Department of Forestry. Uncertainty about the probability of implementing planned BLM timber sale levels should also be documented.
- c. The public's sensitivity toward harvesting younger stands (50-60 years) of timber may force BLM to reconsider later decadal management regimes. Current restrictions on federal lands have caused increased harvesting of smaller diameter logs on private lands. This may translate into longer rotations on BLM lands than would otherwise be the case. BLM should evaluate the effects of longer rotations and higher minimum harvest ages on all lands managed by BLM.
- d. Timber sale quantities are highly dependent upon intensive management activities yet, historically, BLM management activity accomplishments are well below planned levels.

Levels of management practices on BLM forest lands are dependent upon levels of federal funding. These appropriated funds have, most of the time, been sufficient to insure adequate regeneration of cutover stands but have often been insufficient to take advantage of opportunities to significantly increase growth levels of the Bureau's Oregon forest lands. Planning for socio-economic impacts of projected timber supply levels should consider the unstable

Several questions have been raised regarding BLM's extensive inventory system including sampling selection, unit design, and intensity methods. Concerns have also been expressed regarding BLM application of SPS (an even-aged Douglas-fir or western hemlock calibrated model), to stands where green trees will be maintained.

Some of the draft plans noted that the preferred alternative includes many elements which are recognized to be substantially untested modeling of sustained yield as compared to other alternatives presented. It is further noted that the level of confidence in yield and harvest values is lower than other alternatives.

The State is concerned that ASQ levels predicted in the draft plans may be inflated estimates of the actual volume that can be expected. Questions regarding inventory design, site index equations, volume and taper equations, growth and yield from intensive management practices, minimum harvest ages, and empirical yield tables need to be discussed in more detail in BLM's final plan. Further analysis should also be conducted on the allowable cut effect of deferring for 80 years some of the OGEAs even though they remain in the timber base.

The State would direct BLM's attention to Oregon State University's Report on growth and yield in Appendix 3.

4. Forest Health

Deteriorating forest health conditions can be visually detected as one travels in eastern Oregon. Forest health is also a serious concern in western Oregon forests where insect and disease mortality is very common. Forest health conditions influence the amount of timber yield sustained over time, the ability to maintain critical fish and wildlife habitat, and the maintenance and development of recreation opportunities on all forest lands regardless of ownership.

BLM's draft plans fail to adequately address forest health issues which have recently received both public and political attention. In most of the plans, forest health is not mentioned in the goals or objectives of the proposed management alternatives. Medford and Klamath Falls draft plans come the closest to addressing health problems and solutions.

The State recommends that BLM's final plans set specific goals and objectives including monitoring detailing how management strategies of the preferred alternatives will address forest health problems and what mitigative measures will be implemented to improve unhealthy forest conditions on BLM lands. We encourage BLM to work with other forest landowners to improve forest health.

nature of federal funding of forest management activities and the difficulties of securing funding for these activities over the next several decades.

- e. Timber supply is the primary driver of the BLM socio-economic analysis but does not appear to be an important part of alternative formulation in the draft plans. One would have expected BLM to use this analysis as an integral part of developing plan alternatives; the potential exists to use the analysis as a key decision criterion for the record of decision.
- f. The Bureau appears to have used a harvest flow constraint known as Sequential NonDeclining Yield. The basic concept is to find a harvest level that can be sustained over time. This process is a fairly rational approach to regulation when trying to balance stability goals with forest regulation goals. BLM did not do any sensitivity analyses on alternative flow constraints. In light of concerns for community stability, BLM might want to present a "departure alternative" in its final plan.

6. Wildlife Management. How should BLM districts manage for big game? What snag levels should BLM provide for cavity-dependent birds and other wildlife? How should sensitive, threatened and endangered wildlife species be managed?

1. Deer and Elk Habitat

Big game is an extremely important resource which depends on cover and forage found on BLM administered lands. Big game provides recreation to the public in the form of hunting and viewing opportunities. The Dean's Creek Elk Viewing area is an example of BLM's commitment, in coordination with the State, to develop an interpretive roadside program for elk and other wildlife.

BLM districts have appropriately utilized the Wisdom Model in determining big game habitat conditions. However, BLM has not stated how it would improve habitat effectiveness (HE) for big game in areas with low HE indices.

a. Cover

Cover is one of the critical components that needs to be available on BLM lands if management objectives (i.e., HE indices and number of animals) set by the Oregon Department of Fish and Wildlife (ODFW) are to be achieved. Cover, which includes the subcategories of optimal, thermal, and hiding cover, has been evaluated in the draft BLM plans. Existing cover conditions were rated as marginal in most of the elk management emphasis areas.

The reason given for these marginal conditions is past forest management practices on BLM and adjacent private lands. Under their preferred alternatives, BLM districts are predicting no change in the short term for cover conditions. Cover conditions would improve in the long-term in the OGEAs but would remain marginal in the general forest area. The State is concerned about long-term marginal conditions in the general forest.

The final RMPs should address how BLM proposes to improve marginal cover conditions and to meet HE and herd number objectives. BLM should work with ODFW on meeting these management objectives.

b. Forage

Forage quality and availability are also important elements necessary for big game survival. Like cover, BLM draft plans indicate marginal current conditions in most of the emphasis areas/analytical watersheds. Lack of forage or poor forage quality has led to deer and elk migrating onto private lands thus leading to land use conflicts. BLM districts have mentioned the use of forage seeding on harvested units and road rights-of-way. Coos Bay, in particular, is planning to seed up to 50 percent of the acres harvested each year.

BLM districts should consider the following recommendations on forage in their final plans:

- (1) The final RMPs should address how BLM proposes to improve marginal forage conditions and to meet State HE and herd number objectives. BLM should work with ODFW on meeting these management objectives.
- (2) Expand, where feasible, the forage seeding programs to benefit big game. BLM should increase its effort to search out and/or create native grass and legume seed sources for forage seedings palatable to big game species.
- (3) BLM should fund forage seeding through timber sale receipts.
- (4) BLM districts, in particular the Klamath Falls Resource Area, should structure grazing allotment plans to mitigate forage conflicts that may arise between livestock and big game. Alternatives such as shortening livestock grazing periods in the fall to allow green-up for winter forage may be helpful in defusing forage problems.

c. Roads

A plan to manage roads in a responsible manner is perhaps the most powerful management tool BLM has to benefit big game in western Oregon. Open roads allow easy access to big game herds

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A Recovery Team was appointed by Secretary of the Interior Lujan to develop a recovery plan that would consider the habitat for the spotted owl and other species plus the economic effects of implementing a recovery plan. The State has a member on the 18-person Northern Spotted Owl Recovery Team and has contributed support, from several State agencies, to the process.

BLM's draft preferred alternatives propose to address spotted owls and other critical species through application of ecosystem management principles. The overall intent of this strategy according to BLM is: "To manage lands to contribute to community stability consistent with maintenance of ecosystems and a diversity of species; contribute to long-term recovery of the northern spotted owl; and maintain fish and wildlife and recreation, scenic and other resources." The objective is to maintain many of the old growth/mature forest components necessary for the spotted owl and other species while permitting the production of a certain level of goods and services on lands available for timber harvest.

As noted in the Old Growth and Mature Forest section of this coordinated response, districts have taken various approaches to maintaining and producing mature/old growth stand conditions. The concepts revolve around creating Old Growth Emphasis Areas (OGEAs) and Connectivity Areas (CAs) and Klamath Falls Resources Area's Protected Habitat Areas (PHAs) scattered throughout the districts.

BLM's Salem District has identified three classes of OGEAs and two types of CAs in an effort to maintain/create older forest structure. The preferred alternative strategy for OGEA 2 (Nestucca block) is calling for more intensive management than in OGEA 1 blocks. Due to the current stand structure existing in the Nestucca block, there is a need to accelerate older forest conditions. While this need is recognized, there is a concern that the management scenario being proposed is untested and possibly too aggressive thus it may not meet the intent of the spotted owl recovery plan. The Governor's Planning Team and state agencies recently visited the site with BLM resource area managers to discuss proposed management prescriptions under the preferred alternative.

Other concerns have also surfaced regarding the retention of existing stands of old growth and whether or not BLM's older forest strategy will be sufficient to meet dispersal habitat needs of the spotted owl. Furthermore, BLM has not done a risk analysis and developed contingency plans for OGEAs and CAs that potentially could be destroyed by a catastrophic event.

The effectiveness of CAs as corridors for wildlife movement has not been adequately addressed in the draft plans. Some of the factors that may affect the utility of these areas include: their

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and other wildlife. This accessibility has exposed deer and elk to greater human-caused disturbances. Big game must expend more energy to seek hiding cover from hunters and others when open road densities are high.

Open-road densities exceeding 4 miles/square mile are common on all of the BLM districts. Declines in big game habitat caused by a high density of open roads has been well documented. We direct your attention to the roads management section, Appendix 1.

2. Snags and Dead-and-Downed Wood

Dead and down woody material is increasingly recognized as an important component of the forest ecosystem. BLM should provide enough "wildlife trees" to maintain viable populations of birds and other wildlife. Additional steps should be taken to ensure the development of snags over time.

Green trees should be left on regeneration units to provide future snags. BLM districts are commended for proposing to leave 6-20 green trees per acre. However, residual green trees left on harvest units may not be long lived or may blow down such that snags may be unavailable in the future. Thus, it may be necessary to girdle or blast out the tops of some of these trees over time in order to produce snags to support desired population levels.

BLM should have concrete proposals to create snags including estimated budgets and work-month requirements. BLM should also adjust ASQs to account for these created snags over time. BLM should fund research to determine whether artificially created snags have the same utility for wildlife as those produced naturally.

The State supports BLM's proposals for retention of dead-and-downed wood. Where feasible, BLM should provide downed logs greater than 24" diameter at a minimum rate of 2/acre. BLM should include the retention of target levels of dead-and-downed wood in contract stipulations for planned timber sales. BLM should establish a monitoring system to ensure that target levels are attained.

3. Sensitive, Threatened and Endangered Species

a. Spotted Owl

The northern spotted owl was listed as a threatened species on June 26, 1990 as it was determined that declining habitat conditions were leading to possible extinction. Several conservation strategies have been developed, most notably the Interagency Scientific Committee's (ISC) Report and the Draft Recovery Plan, to address the northern spotted owl's recovery.

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width, current fragmentation of habitat within the corridors, the effect of timber harvest on current and future habitat mosaics including anticipated patch size, land ownership pattern, and different dispersal needs of wildlife. BLM should address these factors in their final plans.

Intensive management of the forest landscape has created the current stand conditions that exist today. To reach conditions we desire in the future may require some manipulation (less intensive than in the past) of forest stands to hasten old growth/mature forest conditions.

It is the responsibility of the US Fish and Wildlife Service to determine whether BLM plans comply with the Endangered Species Act. The State supports the general principles and overall approach taken in the Draft Recovery Plan for the Spotted Owl as a means toward resolving the present impasse. The Final Recovery Plan for the Northern Spotted Owl, due to be released in 1993, should be adopted by BLM unless the U.S. Fish and Wildlife Service determines that BLM's land management strategy is adequate for protecting the spotted owl.

b. Bald Eagle

The State concludes that the implementation guidelines for the bald eagle recovery plan have been met by the districts. However, ODFW is specifically concerned about the bald eagle roosting area in the Scappoose block which has apparently received no special protection in the Salem draft RMP. We would ask BLM to contact ODFW regarding this specific bald eagle site.

c. Marbled Murrelet

With the recent listing of the marbled murrelet as a threatened species under the Endangered Species Act, BLM must provide an in-depth analysis of the effects of the alternatives on this species. The definition for suitable habitat as currently used by BLM must be further refined to reflect the latest scientific information. From an operational context, the State recommends that BLM expand murrelet inventories and take interim measures to protect suitable habitat.

d. Other Sensitive Wildlife Species

Additional concerns have been expressed by ODFW and others on populations of other Oregon sensitive species (e.g., neotropical migrant birds) that may be impacted by BLM preferred alternatives. This concern especially applies to the general forest management area where the impacts of timber harvesting on these species may be severe, but applies to other allocations as well. The final RMPs need to provide clear direction for site-

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specific protection of these species including information on protection of nest sites and other important habitat areas. BLM should take no action which would contribute to the listing of sensitive species. BLM should inventory sensitive species occurring on their lands, mitigate impacts on sensitive species resulting from management actions, and monitor to assess the impacts of actions on sensitive species.

H. Old Growth and Mature Forest. How will BLM manage its forests to maintain old growth and mature forest composition?

When people think of forests, they may envision majestic old growth. These old growth stands provide habitat for many wildlife species and furnish a variety of recreational experiences.

Old growth is also still important to the timber industry. Because of its size and the quality of the wood, these trees are especially prized by industry.

According to the BLM's 1988 extensive stand inventory, there are over 290,000 acres of existing old growth (200 year old) in the western Oregon districts. While various land allocations being proposed in each district's preferred alternative set-aside some of these stands (e.g., Special Areas, wild and scenic river corridors, riparian areas, and wildlife habitat) many old growth stands would remain in the general forest allocation. According to the draft plans' preferred alternatives, some 40,000 acres of old growth in total would be harvested in the first decade of plans.

BLM districts are proposing several different techniques to maintain/produce older-aged forests. OGEAs 1's use 300 year rotations and density management to accelerate older forest characteristics. CAs are managed using 150- or 200-year rotations. Klamath Falls Resource Area's preferred alternative calls for a system of 80-100 acre protected habitat areas each surrounded by a 1/4 mile buffer to maintain old growth in the western portion of their resource area. Residual trees (6-20 depending upon the land allocation) and other old growth components (snags and downed woody material) are to be left on units within the general forest allocation or nondeferred OGEAs and CAs.

BLM's biological diversity proposal is innovative but untested in that it will attempt to maintain old growth characteristics for species such as the spotted owl while still producing timber. According to the BLM's Executive Summary, 324,000 acres of old growth would be remaining after 10 years; 475,000 acres after 100

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years would be considered old growth. This would be an alleged increase in total acres from the current inventory of 290,000 acres.

While the State supports BLM's approach to maintaining and protecting old growth stands through biological diversity, we are concerned about the impact that harvesting will have on old growth dependent species. We further realize that the harvest from these stands represent the most predictable portion of the allowable sales quantity in these uncertain times of timber supply.

The State's concern focuses on BLM's proposed harvest of old growth in the general forest allocation for the preferred alternatives. More specifically, there is currently a shortfall of biological diversity opportunities existing in the Coast Range due to human and natural disturbances. Most watersheds in the Eugene, Salem and Coos Bay Districts lack older-aged components necessary to maintain ecosystem management. Harvesting of old growth within the general forest allocation will further exacerbate the problem unless mitigative measures are considered.

The State believes that one solution to this problem would be to maintain within each third-order watershed example(s) of ecologically significant older forest stands. These stands should represent PNW 447 criteria, or if no stands having these characteristics are present, include natural stands without significant salvage or thinning histories. Protection of such stands will offer refugia for associated wildlife species, and may allow them to expand their distribution and populations as younger stands in the surrounding area mature over time. Other possible solutions should also be analyzed in an effort to address this concern.

The State recommends that BLM further evaluate the impacts on biological diversity (genetic, species, ecosystem, landscape) in the Coast Range from harvesting old growth in the general forest allocation in the preferred alternatives. BLM should further develop and analyze other alternatives which retain biologically significant old growth stands while still producing economic opportunities. Conceptually, Alternative E's old growth strategy could act as a benchmark for other alternatives regarding old growth retention.

I. Livestock Management. How will BLM manage its grazing lands to produce forage for livestock and wildlife while protecting other resource values, in particular riparian areas?

Ranches located near land administered by BLM and the Forest Service, in many cases, depend upon livestock grazing from these lands. Historically, nearby cattle ranching operations use public lands as summer pasture and utilize home ranches to grow

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irrigated hay for winter feed. Declines in livestock forage from the BLM could have an effect on local ranches. A decline in the economic stability of local ranches would create economic hardship on the communities in the surrounding area.

The State's recommendations outlined below recognize the economic and cultural facets of the livestock industry by proposing a program that we believe will ensure the long run, sustainable use of BLM lands by livestock while protecting sensitive resource values located on these lands. Most western Oregon BLM districts have limited grazing programs on their lands, with the exception of Klamath Falls Resource Area. While most of the following comments and recommendations refer to the Klamath Falls Resource Area, they are also applicable to all BLM districts where grazing is permitted.

The Klamath Falls Resource Area currently has some 95 grazing allotments (81 permittees/lessees) producing 13,869 Animal Unit Months (AUMs) of forage annually. An additional 5,096 AUMs are classified as suspended non-use. According to the draft Klamath Falls RMP/EIS and personal communications with BLM staff, range managers (using a core team) have evaluated the impact of grazing on other resource values, especially streamside habitat and big game forage needs.

The Klamath Falls Resource Area has identified some 14 allotments in need of improvement. These allotments represent over 61 percent of the total allotted grazing acres on the east side and 28 percent on the west side. In total, this represents some 57 percent of the allocated AUMs.

Klamath Falls' draft preferred alternative proposes that 13,185 AUMs per year be available which represents a decline of 5 percent from the current level. Justification for the decrease is based upon a need to develop upland water developments, improved riparian area conditions and improve forage for both livestock and wildlife.

We have several concerns regarding livestock management. First, there seems to be a large number of allotments which lack comprehensive allotment management plans. Without a plan for each allotment, combined with an aggressive monitoring program, how can the Klamath Falls Resource Area hope to improve unsatisfactory conditions in allotments currently needing rehabilitation? Will allotments identified as (I) in the plan become high priority for improvements when funding is available? While the core team approach used to identify resource conflicts in allotments is a good start, it should not be considered a substitute for allotment managements plans. Without allotment management plans and monitoring, degradation of the very values the Klamath Falls Resource Area is trying to protect or maintain could continue unchecked.

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Furthermore, the Klamath plan permits annual grazing in riparian areas with currently less than good conditions. BLM should not allow grazing in such degraded areas except under strictly controlled management. If BLM cannot document initial recovery, they should change their grazing strategy or consider no grazing until recovery is achieved. The Governor's Watershed Enhancement Board wants to promote cooperative projects between the BLM and private owners where riparian areas cross mixed ownerships.

The State is also concerned about livestock impacts on fish and wildlife, with special emphasis on the Lost River and Short-nosed Suckers, big game, sage grouse, and other riparian dependent species.

The State supports a livestock management program which allows grazing while protecting resource values (i.e., water quality and fish and wildlife habitat). Considering the need to more carefully control livestock grazing in riparian areas and improve forage conditions on several of the allotments, we believe the proposed short-term decline in AUMs seems justified. The State favors additional reduction of AUMs when resource degradation is apparent.

As part of the range management program BLM should:

1. Develop allotment management plans for every allotment.
2. Monitor allotment plans on a regular schedule.
3. Activate range improvement projects (seeding, water development, and prescribed burning) that will both increase forage productivity and draw livestock toward lands not currently grazed and away from those in poor condition.
4. Implement grazing systems such as seasonal use and deferred rotation grazing that better fit the livestock to the resource.
5. Attract livestock away from riparian areas by:
 - Developing other water sources
 - Placing salt blocks away from riparian areas
 - Planting other palatable vegetation
6. Limit livestock use in riparian areas to periods when forage and soils are most resilient and to uses determined by site-specific conditions.
7. Exclude livestock until the recovery of riparian area vegetation (to a good condition) is enough to allow managed grazing.

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8. Maintain and protect streams in "good" condition; restore streams in "poor" condition.
9. Secure a stable funding source for livestock management program.

Short-term declines in AUMs may occur on specific sites, but production should stabilize and, perhaps, even increase over the long-run once stream and rangeland conditions improve and problems of redistribution and grazing administration are addressed successfully. Frequent monitoring of allotment plans, as proposed by BLM, will detect resource problems. Grazing strategies should then be adjusted where needed.

BLM already has one key to success for balancing forage use with the protection and rehabilitation of the resource base: the generally improving flow of information and ideas among its staff, the Forest Service, permittees, and other resource users.

Two other success factors in this effort are the rapport between BLM and most allotment holders, and the expert help available from local soil and water conservation districts and conservation groups. Several BLM sponsored grazing projects in eastern Oregon (e.g., Camp Creek) have shown that proper grazing management can support livestock while protecting other resources.

The State believes that local people continuing to work together in a cooperative spirit, watershed by watershed, will pay off in better resource management and an improved livestock economy.

J. Minerals and Energy. How should BLM recognize and manage its mineral and energy resources?

Mineral and energy resources can be found on many lands administered by BLM. These valuable resources may include leasable minerals (oil and gas), locatable minerals (gold and other precious metals) and salable minerals (rock and aggregate resources). The location/extent of mineral resources depends upon the physiographic region. BLM administers both mineral estate and split estate lands.

While districts have discussed mineral and energy resources in their draft plans it is difficult to determine the location of these resources. In particular, State-owned mineral rights underlying BLM surface ownership have not been identified.

The State makes the following recommendations to BLM regarding minerals and energy which should be considered when developing the final RMPs/EISs:

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1. Each one of the final plans should: a) acknowledge any state-owned mineral rights (list legal descriptions); and b) preserve, whenever possible, access to existing valid mineral rights.

At the very least, the State believes that the management of severed estates with state-owned mineral rights should be specifically addressed and that the management direction offer the greatest possible latitude to the State.

2. BLM districts should recognize energy and minerals as an important resource when making land management allocations. Land available for mineral and energy exploration and development should be kept at the highest level environmentally possible in the preferred alternatives. Decisions to withdraw lands should be based on an open analysis with proper accommodation of current environmental protection and reclamation requirements.
3. There is a need to better quantify the value of the resources and to factor the resource value into the BLM alternatives. Specifically, mineral withdrawals have been made without the benefit of a mineral inventory. Such an inventory should be conducted before withdrawals are recommended.
4. For all districts, the State encourages BLM to provide realistic opportunities for mineral exploration and development. Mining overlay zones and explicit standards and procedures to allow mining in other land allocations are viable mechanisms to use to mitigate conflicts.

While budgeting for mineral assessments has been a problem for BLM, the Department of Geology and Mineral Industries stands ready to assist districts in assessing the mineral potential on their lands.

K. Socio-economic. How will the adopted plan affect economic opportunities in surrounding communities? What impact will the plans have on socio-economic stability in the planning area and statewide?

The long-term socio-economic goals of Oregon's state government and its people are spelled out in Oregon Benchmarks: Setting Measurable Standards for Progress. The State recognizes the need to diversify its economy, particularly in nonmetropolitan areas. The plans as specified in the draft EISs are not inconsistent with this goal. However, without a coordinated policy response to the impacts of the proposed timber harvest reductions, the State's highest priority strategic planning goals (Key and Lead Benchmarks) in two major areas are put at substantial risk.

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1. Economic Benchmarks -- the goal of reaching the national average in per capita income particularly for regions outside of Portland metropolitan area and regional job distribution are severely impacted by the preferred alternatives.
2. Social Benchmark (specified as Benchmarks for People) -- achievement of goals relating to drug use, social harmony and job skills are adversely impacted by the structural economic change which will result from the preferred alternatives.

The State calls on BLM to provide the analytical ground work for an effective policy response to the fundamental social and economic changes which would follow the implementation of the preferred alternatives.

The economic and social conditions throughout Oregon are a major concern for the State. The management decisions taken on federal lands affect the economic and social welfare not only in nearby communities, but also the State as a whole.

Lands administered by BLM in western Oregon make a significant contribution to the economy of Oregon. State and local governments receive monies from management activities (mostly timber harvest) on BLM lands. BLM manages both Public Domain and Oregon and California (O&C) lands. Some 50 percent of revenues generated by timber receipts on O&C lands is given to western Oregon counties.

Many Oregon counties are very dependent upon revenues from federal lands which help finance schools, roads and local government. Douglas County, for example, derives over 60 percent of its revenue from BLM and Forest Service timber receipts; Josephine County, 16 percent; and Coos County, 14 percent. In 1991 alone, Oregon counties received some \$90 million from timber receipts from O&C lands. The five-year average (1983-1988) of O&C payments to counties was \$61 million a year.

Other direct revenue payments are also generated from the management of BLM lands. These revenues include mineral and grazing leases and in lieu of tax (public domain lands only) payments. Recreation (fishing, hunting, other recreational activities) on these lands also generates indirect revenues to local communities.

Declining timber harvests over the last two years have meant increased unemployment in timber-dependent communities throughout the State, increased social problems, and decreased county revenue. To address these problems, the State responded to BLM's Analysis of the Management Situation noting our concerns and making recommendations on how to analyze socio-economic impacts.

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Over the last year the Governor's Forest Planning Team has worked with BLM at the State and district levels to better understand and make recommendations on socio-economic impacts of proposed BLM management decisions. The State's review of BLM's socio-economic analysis is based upon a paper titled: Socioeconomic Issues and Bureau of Land Management Planning transmitted to BLM from Governor Roberts in May 1991. (Note Appendix 1) This paper describes the economic and social analysis the State would like to see presented in each BLM plan. Note additional comments in Appendix 2 (Employment Division) and Appendix 3 (Oregon State University Report).

1. Socio-Economic Conditions

The State commends BLM for analyzing migration trends, unemployment rates and the economic structure of the regional economy. We question, however, the multipliers used by BLM in calculating direct timber and timber management jobs. To strengthen this analysis, we recommend the following additions and further evaluations:

- a. Simple economic base analysis showing export base for counties in each district.
- b. Demographic and occupational profiles for communities likely to be impacted.
- c. Occupational profile of displaced workers.
- d. Reevaluate (using a consistent set of models) the impacts to total employment of harvest reductions.
- e. Expand mitigation discussion to include the adverse socioeconomic impacts of the plans and ways to lessen impacts.

The final BLM plans should also update the economic data presented in the draft plans to reflect more current information. (Note Appendix 3 for a more detailed discussion.)

2. Community Stability

We agree with BLM that impacts on communities will vary within each district and across districts. A more detailed analysis is needed which would allow BLM to systematically evaluate the impact of harvest reductions on areas not only within but also outside the districts. In other words, the plans should estimate the preferred alternatives impact on community stability based on the structure, occupational mix and demographics of communities.

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3. Social Impacts

Social impacts are briefly mentioned in the plans, but there is no effort to systematically analyze the likely impacts. We recommend using appropriate models (note comments from State Economists - Appendix 2) to measure the social impacts. The key ingredient that needs to be addressed is an inventory of social impacts.

4. Recreation/Tourism Industry

In an attempt to diversify the economy of Oregon, the State supports an aggressive recreational/tourism program on BLM lands. While the recreation/tourism industry will not fully replace the personal income levels and employment opportunities that timber industry jobs produce, it still should help isolated communities in this transition period. Retraining programs sponsored by the State and federal governments will play a major part in this transition.

An alternative which emphasized recreation opportunities could have served as a benchmark from which to compare jobs gained from the various alternatives presented in the plans.

5. Monitoring

Monitoring should be an especially important part of the final BLM plans. While the draft plans include provisions for monitoring of natural resources, it should also include provisions for monitoring of socio-economic conditions and for modification of the plan based on changes in these conditions.

6. Summary

BLM districts have addressed the socio-economic impacts created by their preferred alternatives. BLM districts should strengthen their analysis and discussions in the final RMPs/EISs to include a better analysis of district economic base and the impact on this base of the alternatives; dislocated timber worker skills and reemployment opportunities; social impacts; consistency in modeling, job multipliers, mitigation recommendations and monitoring.

Please review Economic Development Department, Department of Forestry, and the State Economist responses found in Appendix 2 and Oregon State's University's Report for specific recommendations.

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with high road densities (i.e., greater than 4 miles/square mile); watersheds with high off-road vehicle use resulting in unacceptable environmental damage; and sensitive wildlife areas. (Coos Bay and Klamath draft plans include this recommendation.)

4. Road density objectives for other areas would likely vary based on decisions made in the comprehensive road management plans.
5. The State recommends that BLM attempt to achieve a reasonable reduction (10%) in open road density over the next decade. This target may be difficult to achieve given the scattered ownership pattern of BLM lands. However, we encourage BLM to work together with adjacent landowners in an effort to accomplish this goal.
6. The State recommends that BLM's road management program be modified as needed to address the State of Oregon's recommendations for limiting development in rural interface areas.

Each BLM district is urged to coordinate with adjacent landowners and others in the development and implementation of a comprehensive road management program.

M. Special Plant and Tree Species. How should BLM protect special status plant and tree species?

1. Special Status Plant Species

BLM's draft plans have listed plant species found on each district. The State commends BLM on its commitment to protect those plant species that are either state and/or federally listed on public lands under its jurisdiction. To continue protection of existing threatened, endangered, and sensitive plant species while keeping other species from being listed, the State believes that BLM should consider the recommendations noted below.

- a. BLM needs to expand the inventory of its lands to identify all existing sites for listed and candidate species, including areas not currently slated for timber sale or harvest. BLM should work with other state and federal agencies to prioritize the study and monitoring of listed and candidate species to best facilitate knowledge of habitat requirements.
- b. Prioritized management plans should be developed for special status plants that outline how particular species will be protected, especially those located in land allocations that

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L. Road Management. How should BLM districts/resource area manage their road networks to promote compatibility with resource uses.

BLM's western Oregon road system is a valuable component of Oregon's overall transportation network. The road system serves the citizens of Oregon by providing access for timber, fish and wildlife, and watershed management. BLM roads also provide numerous recreational opportunities and are essential for forest fire protection.

Realizing the importance of road management on federal lands, the State developed a position paper titled, State of Oregon Recommendation on BLM's Road Management Program. (Note Appendix 1) We trust that BLM will consider recommendations presented in this paper when developing its final RMPs/EISs.

The road paper states that BLM should develop comprehensive road management plans. That is, in addition to road maintenance and construction goals and objectives, BLM should address the various resource concerns (i.e., recreational, fish and wildlife, timber, water resources) potentially impacted by roads. These resources are interrelated and road management plans should deal with them in an integrated fashion. Watersheds would be the ideal framework in which to develop road management plans.

BLM districts have inventoried their road networks and recognized the impact that these access routes have on natural resources. The draft plans express a need for access management in special areas, critical big game areas, old growth emphasis areas, and other areas. However, there seems to be no action plan to meet these broad objectives.

We commend the Salem District on its recognition that a comprehensive road management plan needs to be developed. They have made a commitment to develop a comprehensive road management plan soon after approval of their RMP.

The following is a brief summary of our recommendations to BLM on road management.

1. The State recommends that BLM continue to aggressively pursue funding for its road management program.
2. The State recommends that a comprehensive road management plan be completed within the framework of the RMP/EIS or shortly after approval of the plans. (Note road management paper for suggested content of management plan.)
3. The State recommends that a maximum 1.5 mile/square mile road density objective (i.e., roads open to vehicular traffic) be instituted for: sensitive watersheds; watersheds

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allow timber harvest and domestic grazing. Emphasis should be placed on improving or restoring critical habitats rather than merely maintaining existing often degraded conditions.

- c. Long-term monitoring of special status species, especially listed plants, is essential in determining whether plant populations are recovering or declining. Recent advances in technology should be used to develop monitoring program.
- d. Maintaining species at the level of minimum viable populations may not be sufficient to guarantee survival over the long-run. It is important to recognize that a minimum viable population is essentially on the brink of catastrophe, therefore, population levels above the minimum are recommended.

BLM districts in general should be complimented on their review of listed and other special status species. These species have been listed in the draft plans. Moreover, the State applauds the recent history of cooperation BLM has shown in promoting the study of many special status species, through joint cost-sharing projects with the Oregon Department of Agriculture and other agencies. Additional comments on special plant species can be found in the Department of Agriculture's response (Appendix 2).

2. Yew Bark

Bark from the Pacific yew tree is a source of taxol which has shown promise in treating certain forms of cancer. BLM in cooperation with the Forest Service is in the process of developing an EIS for managing Pacific yew. Lands have been inventoried to determine the amount of Pacific yew. An interim strategy is being used to guide BLM and the Forest Service on Pacific yew management until the EIS is finalized.

We encourage BLM to carefully follow the interim guidelines for Pacific yew management in order to collect the maximum amount of yew bark feasible from current forest management projects

N. Tribal Concerns. How should BLM districts protect traditional Tribal cultural and spiritual sites?

Lands administered by BLM's Klamath Falls Resource Area traditionally were utilized by the Klamath, Modoc and Shasta Tribes. The Siletz and Warm Springs Tribes used lands administered by the Salem BLM District.

The State supports the protection of identified Native American sites sacred to, or of cultural significance to, the various tribes mentioned above. The Tribes' cultural history contributes to the State's heritage and should be protected. BLM should,

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through close coordination with the Tribes, act to inventory, evaluate, and protect sites of cultural, religious, and historic value as required by federal laws. As additional sites are located, BLM should alter its plans in order to protect them, while remaining sensitive to other uses of the lands.

O. Standards and Monitoring. Does BLM have measurable standards and a comprehensive, aggressive monitoring program to determine whether plans meet short and long-term expected future conditions?

The implementation of biological diversity/ecosystem management will mandate comprehensive monitoring programs for each district, including a dedicated funding source in order to evaluate: a) whether the scheduled activities are being implemented as per plan guidance; b) whether the implementation of activities is effective in meeting the expected future conditions; and c) determining if activities are causing the effects identified in the EIS.

Ecosystem management and its effects on resources within the forest environment is a long-term investment. Research monitoring will be necessary in order to apply adaptive management on the ground. In a sense, ecosystem management is an experiment requiring close evaluation and monitoring of thousands of short-term projects which should lead to the final desired condition.

In order for each RMP and EIS to stand alone and meet the test of public and legal scrutiny, it must include standards followed by a monitoring plan to measure results. Standards must be measurable to be meaningful. There is little purpose in defining standards for which there are no methods for measuring the degree of compliance or attainment. The true judicial litmus test for the final plans, we believe, rests with the standards that must support the resource management direction found within the RMPs.

BLM's draft plans fall short of meeting the State's expectations for adequate standards and comprehensive monitoring plans. Even though the plans note a need to include the three phases of monitoring noted above, implementation seems to be the only element covered in the monitoring sections. As an example, how will the general monitoring questions for socio-economic conditions presented in the draft RMPs surface problems with plan effectiveness?

Other questions BLM should address in their final plans include:

1. Why aren't monitoring standards presented for each land allocation (i.e., Old growth emphasis areas, General Forest, connectivity areas)?

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diversity management will require a long-term commitment in funding to test programs and practices which accomplish the expected future conditions.

BLM budgeting should not be necessarily linked to ASQ levels. For example, the State suggests that BLM consider establishing a fund for density management activities in Old Growth Emphasis Areas that is separate from the ASQ derived source available for more traditional harvesting as proposed in the General Forest Management Areas. This approach would institutionally recognize the major goal of Old Growth Emphasis Areas which should be their utility in providing answers to critical wildlife/silvicultural questions through the application of research and monitoring.

III. DRAFT PLANS ORGANIZATION

The State agencies have found BLM's draft Resource Management Plans and Draft Environmental Impact Statements very difficult to review because of the way plans were organized. Some of the issues of concern to readers were:

- A. Difficulty in distinguishing the draft RMP from the draft EIS. For example, implementation standards were scattered throughout the documents.
- B. Lack of definable links between broad goal statements and specific actions (e.g., standards, guidelines, inventories, monitoring, evaluation).
- C. Difficulty in identifying BLM plan policies in the RMPs.
- D. Lack of substantiation to support claims of consistency with the plans and policies of other agencies affected by the RMPs.
- E. Inadequate/incomplete tables of contents and indexes.
- F. Numerous errors in tables and incomplete data.
- G. Maps showing land allocations are too small a scale with few reference points to decipher where allocations begin and end.

The State encourages BLM to reorganize their final plans to make them more readable to the public and land managers who will be implementing the final preferred alternatives.

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2. Why haven't the monitoring questions presented in district plans been tied to measurable management standards?
3. Is a threshold level of plus/minus 10 percent appropriate for changes in all resource outputs or impacts to resources?
4. Where are specific, measurable standards found in the districts/resource area monitoring plans?
5. Is there a tie between implementation and effectiveness which is necessary for meeting the expected future condition (e.g., ecosystem management)? Does BLM have a long-range monitoring framework which will direct the agency over the next 100 years in order to meet these expected future conditions?

The State believes that BLM districts/resource area should develop more specific standards and comprehensive monitoring plans. Of special note would be the Forest Service's approach to monitoring effectiveness and validation. We feel that without comprehensive monitoring plans for each district/resource area, RMPs/EISs will not meet the public's expectations and legal challenges that the agency will face.

Annual Program Summary monitoring reports, being proposed by districts, are a positive way to allow the public an opportunity to track and assess the progress districts are making on implementing their plans.

P. Budgets. What budget will BLM districts need to carry out the preferred alternative? How should the districts react if a smaller budget allocation occurs?

BLM districts project a need to increase their budgets in the new plans in order to meet implementation and monitoring requirements. Due to the complexities of the plans and the new biological diversity approach proposed, the State agrees that more money will be needed for training personnel, research, implementation and monitoring.

If funding for intensive management practices under the current plans are any indication of expected future funding, the State is concerned that the new plans may not be implemented. BLM's biological diversity is an experiment in land management which relies on many as yet unproven concepts.

With the uncertainty in past and present funding levels, the State recommends that BLM address the likelihood of funding for proposed actions and the impact of BLM's resources if expected funding does not materialize. This element in and by itself stands between a successful and unsuccessful outcome. Biological

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IV. FINAL COMMENTS

The State of Oregon's Final Coordinated Response represents the State's review of the six draft Resource Management Plans and draft Environmental Impact Statements. Twelve state agencies have submitted their recommendations to the Governor's Forest Planning Team for consideration in the development of the coordinated response. Input from six "Open Houses" held around the state this year, public comments on the State's Proposed Coordinated Response, discussions with various interest groups and individuals, and Oregon State University's Report were all considered when developing the State of Oregon's final response.

The State will work with BLM districts and the State Office, between their draft and final, to help them better understand our recommendations presented in this document.

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REPLY TO
ATTN OF: WD-126

James A. Moorhouse, District Manager
Roseburg District
Bureau of Land Management
777 N.W. Garden Valley Boulevard
Roseburg, Oregon 97470

Re: Draft Resource Management Plan and Environmental Impact Statement

Dear Mr. Moorhouse:

The Environmental Protection Agency (EPA) has reviewed the draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the Roseburg District, Bureau of Land Management (BLM). Our review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, which directs the EPA to review and comment on all federal draft and final EIS's. EPA provided scoping comments on the Proposed State Director Guidance on July 18, 1988 and on the draft Prototype Monitoring Plan on November 15, 1991.

The draft RMP/EIS presents seven alternatives that could direct BLM land management activities on the District's 423,928 acres in Jackson, Lane, and Douglas County, Oregon for the next ten years. The Preferred Alternative (PA) includes provisions for an annual sale quantity (ASQ) of 16.3 million cubic feet (105 million board feet) of timber, a 57 percent decrease from the current ASQ. The adopted RMP will replace four 1983 management framework plans.

It is clear that the formulation of this draft RMP/EIS has required a significant level of effort on the part of BLM staff. EPA wishes to commend BLM on addressing a broad range of issues through a variety of management objectives for the many resources found on BLM-administered lands. EPA is particularly pleased to see discussions of biodiversity and global climate change issues in the draft RMP. These are difficult issues to address in a programmatic document, and the BLM should be commended for addressing them as a part of its planning process. In addition, the Volume I and Appendix discussions comparing alternative proposals with the 50-11-40 dispersal criteria proposed by the Interagency Scientific Committee was very informative.

However, other issues raise concerns with this draft RMP/EIS. Our concerns are based on the lack of sufficient development of BMPs, a monitoring plan, and a cumulative watershed effects analysis process that provide adequate safeguards to assure that site-

■ Clarification and direction for future project environmental analyses to be tiered to the RMP.

We appreciate the opportunity to review and provide comments on this draft RMP/EIS. An explanation of the EPA rating system for draft EISs is enclosed for your reference. This rating and a summary of EPA's comments will be published in the Federal Register. If you have any questions about our comments, please contact Ruth Siguenza in our Environmental Review Section at 206/553-2143

Sincerely,

Charles E. Findley
Charles E. Findley
Director, Water Division

Enclosures: Review Comments
Impact Definitions
Riparian Policy
Rating Outline

cc: D. Dean Bibles, BLM State Director
Phil Hall, RMP/EIS Team Leader

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specific projects implementing the RMP will not adversely impact currently degraded watersheds. Therefore, EPA is rating the draft EO-2 (Environmental Objections-Insufficient Information). Specifically, our environmental objections include the following:

- The high potential for further water quality impacts and beneficial use degradation in Elk Creek, Cow Creek, Middle Fork Coquille River, and South Umpqua River, all of which are currently water quality limited;
- The lack of riparian zone protection for first and second order streams, which may contribute to violations of water quality standards (WQS) and impacts to beneficial uses;
- The potential for adverse impacts to fisheries related to the prediction that six watersheds in the planning area are expected to decline in quality under the PA ;
- The direct health and safety impacts of prescribed burning in rural interface areas and the indirect air quality impacts of the District firewood program;
- The arbitrary use of a ten year timeframe to distinguish between short-term and long-term resource impacts, regardless of the lifespan associated with specific resources, which could result in inaccurate impact assessments with implications for adverse population or community-level effects;
- The potential for impacts to threatened species listed under the Endangered Species Act (ESA), including the northern spotted owl and the marbled murrelet; and
- The lack of RMP direction regarding future environmental analysis for site-specific project proposals.

The following additional information and clarification is requested:

- Development of sufficiently-developed management guidance to facilitate water quality analysis and to ensure that Elk Creek, Cow Creek, Middle Fork Coquille River, and South Umpqua River, and other waters do not sustain violations of WQS and do not experience degradation of beneficial uses;
- Establishment of riparian zone protection for first and second order streams;
- Clarification of the need for and criteria for use of prescribed burning in rural interface areas and an expanded discussion of mitigation measures related to the District firewood program;
- Documentation of consultation activities under Section 7 of the ESA; and

**U.S. Environmental Protection Agency (EPA)
Review Comments**

**Roseburg District, Bureau of Land Management (BLM)
Resource Management Plan
and
Draft Environmental Impact Statement (EIS)
Oregon**

December, 1992

INTRODUCTION

The following comments identify several issues in the draft RMP/EIS that need clarification, revision, or expanded discussion. EPA offers these comments in an effort to strengthen the final RMP/EIS, to provide the public with a clearer picture of the environmental consequences of RMP implementation, and to identify opportunities for future public involvement regarding site-specific projects.

WATER QUALITY

Water Quality Standards (WSQ) and Beneficial Uses

There are four streams in the planning area that are listed as being "water quality limited" or lack beneficial use support in the *Oregon's 1992 Water Quality Status Assessment Report* [305(b) Report]: Elk Creek, Cow Creek, South Umpqua River, and Middle Fork Coquille River

Elk Creek

Elk Creek is recognized by the Oregon Department of Environmental Quality (DEQ) as being water quality limited (1992 305(b) report). Water quality is impaired because of exceedance of standards of the following parameters: dissolved oxygen saturation, nutrients and bacteria. DEQ has been continuously monitoring Elk Creek. The most likely source of the problem is agriculture but other sources may also exist. The 1988 *Oregon Statewide Assessment of Nonpoint Sources of Water Pollution* (NPS Assessment Report) states that water quality conditions are rated as severe, by observation, but DEQ's recent monitoring has supplied the necessary data. The problems in Elk Creek result in high turbidity, low dissolved oxygen, high nutrients, sedimentation and erosion, low flow and reduction of instream structure. The beneficial uses impacted include: coldwater fish, irrigation, and impacts on other aquatic life. Land use within the watershed includes agriculture, forestry, range, and road construction.

The probable causes for degradation of water quality are road location, vegetation removal, water withdrawal, depletion of baseflow, and altered physical characteristics of the stream.

Cow Creek

Cow Creek has also been identified by DEQ as being water quality limited [305(b) report]. The exceedance of WQS for pH is the major reason.

The NPS Assessment Report lists Cow Creek as having severe water quality problems: turbidity, low dissolved oxygen, high nutrients, erosion and sedimentation, low flow and insufficient stream structure. The beneficial uses impacted include domestic water supply, irrigation, stock watering, cold water fish and other aquatic life. Land use in the watershed which may have led to the severe ranking for Cow Creek include agriculture, grazing, harvesting, road construction and timber management, fire, storms/floods, and geologic hazards. Probable causes for disturbance are landslides, traffic, vegetation removal, road location, and water withdrawal.

Middle Fork Coquille River

According to the NPS Assessment Report, water quality conditions are considered to be severe with data. The Middle Fork Coquille in particular has severe nonpoint source problems by observation for temperature and turbidity. (Note: this is listed incorrectly in Appendix E of the NPS Assessment Report). Other problems within the basin include turbidity, low dissolved oxygen, nutrients, erosion and sedimentation, bacteria, viruses, lack of instream structure, and low flow. The Coquille River is water quality limited with the development of the TMDL (Total Maximum Daily Load) well under way. The parameters of concern are elevated populations of bacteria and algae, with decreased saturation of dissolved oxygen.

EPA objects to any timber harvest and road construction in the Middle Fork Coquille River Watershed until channel stability improvement has been documented through monitoring and cumulative effects can be evaluated. A comprehensive water quality monitoring program needs to be in place that better describes the impacts of past logging practices before new harvests are allowed.

South Umpqua River

The South Umpqua River is water quality limited and has been identified as needing a TMDL. The major water quality problems are bacteria, percent dissolved oxygen saturation, pH, and nutrients.

Water quality conditions from the NPS Assessment Report are rated as severe with data. The major pollutants of concern are low dissolved oxygen concentrations, pesticides, toxics, bacteria/viruses, dissolved solids, sedimentation, low flow, and excessive growth of plants (algae).

Land uses associated with water quality problems are agriculture, animal waste management, range, nursery/orchard, harvesting and road construction, recreation, and quarrying. The causes for the severe ranking include landslides, erosion, decreased ground water permeability, changes in flow patterns, runoff from commercial and industrial areas, removal of vegetation, water withdrawal, changes in base flow, dredging, animal and human wastes, and irrigation return water.

Timber harvest and road construction in the above watersheds may be implemented without exceeding WQS or beneficial use impairment. However, the primary methods for preventing standards impairment are not developed sufficiently in the draft RMP/EIS. The draft RMP/EIS notes that "[M]anagement activities would...comply with Oregon's Water Quality Standards and Guidelines for the Umpqua Basin...and the South Coast Basin..." (page 2-5). However, the draft document also notes that the "...1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution identified one or more streams in each Analytical Watershed with moderate sediment problems and three Analytical Watersheds with at least on stream each in the severe category." (page 4-16). "[W]ater quality problems are encountered throughout Roseburg District AWSs (Appendix 3-5)...The Roseburg District has 29 streams rated as A1." (page 3-21). (An A1 rating indicates severe impairment of one or more beneficial uses.) Under the Preferred Alternative (PA), six watersheds are expected to decline in quality (page xxiii). EPA's concern is that timber harvest and road construction may occur without adequate site-specific water quality analysis and that timber harvest deferrals may not occur in degraded watersheds in response to these analyses. EPA is also concerned that water quality monitoring plans are not sufficiently developed to verify that Best Management Practices are effectively preventing adverse water quality impacts.

Federal Consistency, Clean Water Act, Section 319

The federal consistency provisions of Section 319 provide an opportunity for state and federal agencies to coordinate their activities and cooperate in achieving state water quality goals.

The draft RMP/EIS appropriately utilizes the NPS Assessment Report to identify existing water quality conditions on the District and compare them to those estimated by the Watershed Condition Index (WCI), a BLM cumulative effects analysis. We support this use of the NPS Assessment Report. However, additional uses of the NPS Assessment

Report should be developed for the final RMP/EIS. The NPS Assessment Report, in conjunction with the 305(b) Report and other data, should be used in the final RMP/EIS to establish:

1. Desired future condition on a stream-by-stream basis from which RMP accomplishments can be measured.
2. Criteria and priorities for cumulative effects analyses.
3. Priorities for water quality monitoring programs.
4. Criteria and priorities for watershed activity level plans.
5. Priorities for watershed rehabilitation programs.
6. Best management practices and watershed harvest deferrals.

Watershed Cumulative Effects

RMP Implementation

The draft RMP/EIS discusses potential cumulative water quality impacts. However, EPA is concerned that the draft RMP/EIS does not specifically describe the nature of future cumulative watershed effects analysis to be conducted for site-specific projects during RMP implementation. Until the WCI is validated, it cannot be used with confidence for site-specific projects. Any cumulative watershed effects analysis should be validated. Road construction and timber harvest may need to be deferred pending the outcome of cumulative watershed effects analyses for site-specific projects. The draft RMP/EIS directs that:

Analysis of cumulative effects on water in the EIS for this RMP may guide overall activity scheduling during the life of the plan. Analysis of cumulative effects on water would be revisited when addressing project level activities, to incorporate the most current available information... (page 2-47).

A similar statement is made regarding timber sale scheduling on page 2-5. EPA supports this direction and encourages the development of a stronger commitment in the final RMP/EIS regarding the use of cumulative effects analysis results in guiding, and possibly deferring, activities in heavily impacted areas.

Additional Information

The final RMP/EIS should include the following:

1. A description of the cumulative watershed effects analysis that will be used for future site-specific projects during RMP implementation. The extent of analysis validation should also be described. If not, a schedule for completing such validation should be included.
2. A Best Management Practice (BMP) outlining specific parameters applicable to project-specific cumulative watershed effects analysis, such as water quality monitoring results, equivalent clearcut area, road density, or beneficial use impairment identified in the NPS Assessment Report and the 305(b) Report.
3. A BMP outlining a more conservative site-specific project planning approach when cumulative watershed effects analysis tools are not available, are under development, or have not been validated. When adequate tools and monitoring data are not available to predict future water quality impacts, timber harvest and road construction activities should be reduced to provide for an extra margin of safety and water quality protection.
4. A description of how cumulative watershed effects analysis activities will be coordinated among adjacent landowners through such things as annual meetings to coordinate road construction and timber harvest plans and/or cooperative agreements and land management objectives regarding desired future conditions for water quality, riparian zone protection, and activity deferrals.
5. A BMP with a commitment to activity deferrals when the cumulative effects analysis identifies probable beneficial use impairment.

Water Quality Monitoring Plan

Concerns

A water quality monitoring plan was included in the draft RMP/EIS. This is critical for successful long-term implementation of BMPs and protection of water quality and beneficial uses. While BMPs are intended to protect water quality, they must be monitored to verify their effectiveness.

The monitoring plan should be complete and well organized with carefully chosen sampling parameters and sampling sites. Coordination with other local, state, and federal agencies is important to avoid duplication and efficiently use limited resources. Sampling priorities should be consistent with problem areas identified in the NPS Assessment and 305(b) Reports and other data.

The commitment to monitoring is an important part of RMP implementation. Increasing demands for resources can result in decreased monitoring efforts. EPA believes that timber sale volumes and associated programs should be reduced proportionately if annual funding is not sufficient to support monitoring. EPA would like to see criteria outlined in the final RMP/EIS that clarify how this commitment will be met during RMP implementation.

Additional Information

In July, 1991 Oregon adopted narrative biocriteria as part of its WQS. The state is in the process of developing the implementation guidance for the biocriteria and is selecting appropriate reference sites in various ecoregions in the state. Once this framework is in place, the BLM should coordinate its monitoring locations and protocols to allow comparison with the reference site conditions. This is necessary in order to determine whether the WQS for protection of biological integrity of the waters are being met. Provisions for this coordination should be spelled out in the final RMP/EIS.

The state expects to adopt numeric biocriteria in 3-5 years which BLM activities will be expected to meet once adopted.

The final RMP/EIS monitoring plan should include written standards for sampling design, monitoring parameters, analytical techniques, statistical methods, reporting units, location of sampling, indicator species, budget, and procedures for using data or results in plan implementation; and availability of results to interested and affected groups. It should also have a clear feedback mechanism which enables the use of monitoring results to adjust standards and guidelines, BMPs, standard operating procedures, monitoring intensity, and project implementation (including timber sale administration) at first detection of adverse effects. Provision of such an adjustment process will ensure that BMPs and management strategies will improve in the future and that unforeseen adverse effects are identified and minimized. Lastly, the monitoring plan should include validation of the WCI and any other cumulative effects model or index intended for predicting the water quality effects of site-specific projects.

Helpful resources for the development of water quality and biological monitoring plans are:

Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska, EPA/910/9-91-001, May 1991.

Rapid Bioassessment Protocols For Use in Streams and Rivers, EPA/444/4-89-001, May 1989.

The monitoring plan may also be improved with the addition of:

- Identification of monitoring priorities that can guide activities should funding be insufficient for full plan implementation.
- Identification of a measurable desired future condition for each stream or subwatershed which adequately protects the beneficial uses.
- On-site inspection to monitor BMP implementation.
- Riparian Management Area (RMA) monitoring to assess long-term large organic debris contribution to stream systems in such terms as quantity, size, species, and delivery rate.
- A fisheries monitoring protocol based on identification of sensitive populations and habitat types and prioritized/stratified by stressors and resource risks. [EPA is concerned that sampling of all streams supporting salmonids once every ten years for changes in riparian and habitat conditions may not be adequate (Appendix 2-86).]
- A research/monitoring program to determine the effects of spatial and temporal segregation of harvests on sediment and hydrology.

Riparian Zone Protection

Concerns

Since the draft RMP/EIS provides inadequate protection for Riparian Management Areas (RMA) in first and second order (headwater intermittent and perennial) streams, WQS may not be met and beneficial uses may not be protected. The final RMP/EIS needs to include full protection of first and second order streams.

First and second order streams are important in maintaining downstream system integrity and water quality as well as providing fisheries and amphibian habitat/refugia. Disturbed first and second order streams may become sediment sources to downstream areas. In addition, loss of woody vegetation along these headwater streams may eventually lead to reduced large organic debris in downstream reaches. EPA agrees with the Medford draft RMP/EIS assertion that the greatest opportunity for improving stream conditions through RMA prescriptions is on first, second, and third order streams.

EPA has a number of concerns regarding first and second order streams. First, the largest percentage of riparian vegetation removal is along first and second order streams. Most of BLM's lands are along these headwater streams. In addition, since "...very little riparian protection would be afforded to order one and two streams on non BLM lands." (page 4-16), riparian protection on BLM land is all the more important.

Second, RMA widths are too narrow and could be weakened through road and yarding corridor development. The draft RMP/EIS states that "RMAs of less than approximately 95 feet are considered inadequate for proper riparian function, and RMAs smaller than 150 feet are considered to be functioning less than optimally." (page 4-42). However, average riparian area widths for first and second order perennial streams and third order streams are less than these minimum widths (page 2-40). In addition, under the PA, timber harvest could occur in riparian zones for road construction, yarding, or habitat improvement; the draft RMP/EIS does not outline under what conditions these activities could take place.

Third, the draft RMP/EIS relegates first and second order streams to a lower level of protection than higher orders. The draft RMP/EIS admits that "[D]ata is not available for first and second order stream riparian zones. The majority of these streams have not been protected in the past, and a significant portion of these are expected to be in minimal condition." (page 4-42). In spite of this admitted lack of data, the document also notes that "[F]irst and second order perennial streams would reach fair condition with the insufficient RMA widths." (page 4-43). This lower level of protection and admission of "insufficient RMA widths" is inconsistent with the Oregon WQS and with EPA's regional Riparian Area Management Policy. A copy of this Policy is enclosed for your information.

Additional Information

Tree diameter was selected as a measure of riparian zone health. The final RMP/EISs should indicate how diameter thresholds were selected. Tree species and density data should also be provided. In addition, factors that may limit future riparian zone maintenance and production, such as water table alteration should be described. These parameters should be incorporated into the riparian component of the WCI. To best assess management effects, the riparian index should be sensitive to species, diameter, density, and environmental modifiers/stressors. Since the draft RMP/EIS

determines RMA age and size based on the Timber Operations Inventory for adjoining upslope trees, the final RMP/EISs should address the inventory's accuracy in predicting RMA parameters.

In addition, the final RMP/EIS should clarify how the average widths shown for RMAs utilized in on-the-ground analysis. Specifically, the final RMP/EIS should identify how site-specific riparian resource management would be documented and consistently implemented. The draft document states in a number of places that riparian zone widths would be determined by on-the-ground characteristics. EPA recommends that the final RMP/EIS include both the documentation and the mechanisms to fully protect all beneficial uses for riparian areas, including wetlands and first and second order headwater, intermittent, and perennial streams.

Watershed Condition Index (WCI)

The WCI is a reasonable method for comparing watershed effects among the RMP/EIS alternatives, although future refinements could improve its effectiveness. It is one of the most complex approaches EPA has reviewed for evaluating watershed effects in a programmatic land management plan.

EPA's greatest concern is that the WCI can not be considered a substitute for evaluating cumulative effects on a project-by-project basis during RMP implementation. In addition, it may be inappropriate to compare the index among different watersheds. The large spatial scale of the analytical watersheds used in applying the WCI could mask significant resource degradation.

Due to the way in which the WCI is applied, it is essential that it be validated. Until then it should only be very cautiously used as a resource in important project level decisions.

Additional Information

The WCI does not provide an adequate assessment of synergistic and/or cumulative effects for site-specific projects. It appears to be quite subjective and may produce variable results. The final RMP/EIS should provide greater explanation regarding WCI assumptions as well as selection of index constants. In addition, several index factors may distort actual resource impacts.

The major missing component is a way of characterizing uncertainty in the estimates. This requires a methodology for making and evaluating field measurements and assessing uncertainty. Standard methodologies for propagating uncertainty are Monte Carlo methods, Latin hypercube methods, and first-order uncertainty. Monte Carlo methods are becoming common in risk and uncertainty analyses; references abound in

the environmental literature (e.g., Smith and Freeze, 1979). Latin hypercube methods are a subset of Monte Carlo methods (Iman and Shortencarier, 1984), and first-order uncertainty methods are described in Benjamin and Cornell (1970). These methods all require data with which to evaluate the uncertainty in independent variables (the components of each index).

References

- Benjamin, J.R., and C.A. Cornell, *Probability Statistics and Decisions for Civil Engineers*, McGraw-Hill, New York, 1970.
- Iman, R.L., and M. Shortencarier, *A Fortran 77 program and user's guide for the generation of latin hypercube and random samples for use with computer models*, Rep. NUREG/CR-3624, SAND83-2365, prepared for U.S. Nuclear Regulatory Commission by Sandia National Laboratory, Albuquerque, N.M., 1984.
- Smith, L., and R.A. Freeze, *Stochastic analysis of steady state ground-water flow in a bounded domain, 2. Two-dimensional simulations*, Water Resources Research, 15(6), 1543-1559, 1979.

Best Management Practices

The achievement of WQS for nonpoint source (NPS) activities occurs through the implementation of BMPs designed to achieve WQS. WQSs criteria are the measures by which BMP effectiveness is measured. While BMPs are intended to protect water quality, they must be monitored to verify their effectiveness. If found ineffective, the BMPs must be revised. Therefore, the draft EIS should not rely solely on the application of BMPs to satisfy the Clean Water Act (CWA). Since the use of BMPs does not guarantee compliance with WQS, the draft RMP/EIS should discuss the effectiveness of BMPs with illustrations of specific project examples and/or monitoring results. For example, the draft RMP/EIS could discuss the degree of risk of BMP failure as well as any history of BMP success as illustrated via effectiveness monitoring in similar project areas.

Fisheries

Concerns

The draft RMP/EIS states that "[L]ong term conditions for 80 percent of all fish bearing streams, regardless of order, would reach good/optimal condition." (page 4-43). However, the District has 29 streams with severe impairment of one or more beneficial

uses, and under the PA, six watersheds are expected to decline in quality. The mechanisms by which resource increases would occur are not provided. To manage and conserve the fisheries resource, landscape level planning is required.

Retention of riparian areas along third order and greater streams and the placement of instream structures will not lead to anticipated population increases. The fish habitat assessment assumes that riparian tree size and fish production are directly related. However, acute and chronic stressors such as upstream sediment inputs may continue to degrade fish habitat. Impacts such as sedimentation persist and accumulate in downstream, low-gradient habitats over periods of decades or even centuries. In addition, migratory species may be limited by habitat utilized at a single life history stage.

Additional Information

The District is responsible for the maintenance of sensitive species habitat and the restoration and sustainable management of the resource. To address these issues, EPA supports development of coordinated activity management plans. The final RMP/EIS should provide greater detail regarding plan coordination and implementation mechanisms.

In addition, chronic system stressors, such as unstable slopes, landslides, roads, and mining activities that may further degrade systems prior to recovery are not addressed. For example, the draft RMP/EIS indicates that debris torrents and landslides have affected channel integrity. The final RMP/EIS should indicate whether these inputs are ongoing and whether further logging would occur in the same geomorphic setting. The final RMP/EIS must address both past and future management scenarios to adequately assess long-term enhancement of anadromous fish streams. It should provide greater information on specific mechanisms of habitat recovery and aquatic species augmentation.

The Fisheries Productivity Rating System needs further explanation. Detail should be provided regarding the related factors analysis, rating system assumptions, and level of baseline data collection. For example, temperature data should include time of collection, stream order, location, and maximum, minimum, and average temperatures.

In addition, clarification should be provided regarding the statement "several streams were excluded (in the evaluation) because the current potential was low."

The draft RMP/EIS lists several fish species of concern. However, information and documentation (e.g., genetic integrity, diversity) regarding these species are absent. The final RMP/EIS should include:

- (a) a comprehensive biological survey;

(b) identification of watersheds supporting productive or valuable remnant populations or communities of native fishes, amphibians, and other aquatic biota; and

(c) delineation of a well-distributed network of least disturbed watersheds for conservation of biotic diversity.

Adequate fisheries information is needed to realistically evaluate management alternatives. For example, depressed or declining populations may be unusually sensitive to habitat alteration and degradation. Final RMP/EIS coverage of fisheries resources should be comparable to that provided for terrestrial species. Sensitive and priority habitats should be identified.

Recovery and restoration plans should be developed based on a watershed analysis and NPS Assessment and 305(b) Reports. In addition, fish habitat and sediment yield should be utilized to establish/predict habitat quality. The final RMP/EIS should include a table summarizing those sub-watersheds where a timber harvest emphasis would occur. Treatments that may further induce population declines should be avoided.

Frissell (1992) states that preliminary analysis of spawner count data available from the Oregon Department of Fish and Wildlife for the period 1986-1990 suggests that watersheds having a high proportion of their drainage basins within roadless areas support a disproportionately large percentage of southwest Oregon's remaining viable wild salmon stocks and much of its important chinook salmon fishery. In addition, recent research indicates that chum salmon are perhaps the most sensitive to logging impacts of the anadromous salmonids. Restoration plans should include identification and preservation of potential refugia. In addition, management treatments should be based on the location of sensitive species and current watershed conditions.

References

- Beschta, R.L., W.S. Platts, and B. Kaufmann. 1991. Field review of fish habitat improvement projects in the Grande Ronde and John Day River Basins of Eastern Oregon.
- Frissell, C.A. 1992. Water quality, fisheries, and aquatic biodiversity under two alternative forest management scenarios for the west-side federal lands of Washington, Oregon, and Northern California. A report prepared for The Wilderness Society.
- Harr, R.D., B.A. Coffin, and T.W. Cundy. 1989. Effects of timber harvesting on rain-on-snow runoff in the transient snow zone of the Washington Cascades. Interim Final Report for the Timber, Fish, Wildlife Program. Pacific Northwest Research Station, Seattle, Washington.

Nehlsen, W., J. E. Williams, and J. A. Lichatowich. 1991. Pacific salmon at the crossroads: stocks at risk from California, Oregon, Idaho, and Washington. Fisheries, Vol. 16 No.2 pp.4-23.

Sedell, J.R., G.H. Reeves, F.R. Hauer, J.A. Stanford, and C.P. Hawkins. 1990. Role of refugia in recovery from disturbances: modern fragmented and disconnected river systems. Environmental Management Vol. 14, No. 5, pp. 711-724.

Drinking Water

The draft RMP/EIS states that the agency's goal is to provide treatable water at the point of intake from its watersheds to public water systems serving local municipalities. In addition, coordinated watershed plans would be prepared for community water systems where a significant portion of the watershed is administered by BLM.

This goal should be restated. The goal of watershed management in watersheds providing surface water to public systems serving municipalities, is to assure the needs of the users are addressed and to protect comprehensive water quality. Public water systems must meet increasingly stringent public health criteria required by drinking water regulations. A drinking water treatment cost strategy that protects the public health and is economically and environmentally sound is a necessary component of a watershed plan. The interests and concerns of watershed managers, water system owners/operators, and the drinking water consumers must also be incorporated into a water management plan. Consequently, watershed plans will be prepared in conjunction with and for community water systems where BLM administers a significant portion of the watershed.

Another important consideration could be mining activities. If mining activities on BLM lands cause significant increases in the concentrations of metals in streams that supply public water systems, this could force these systems to install expense treatment systems to remove these metals. This is a possibility which should be explored thoroughly in the final RMP/EIS.

AIR QUALITY

The air quality analysis is based primarily on compliance with the Oregon State Smoke Management Plan (SMP) and the State Implementation Plan (SIP). Blanket statements regarding compliance with applicable plans and regulations do not inform the public or decision makers of actual anticipated air quality impacts. A broad screening level quantitative assessment of air quality impacts is needed to illustrate that burning can be done in compliance with applicable plans and regulations.

Sensitive Air Quality Areas

The draft RMP/EIS states that:

...the Clean Air Act...and subsequent amendments require Oregon to meet visibility and health standards through development of a State Implementation Plan (SIP). The Oregon Smoke Management Plan (SMP) is a part of the SIP and identifies strategies for using prescribed fire in forestland areas. (page 3-4).

Part of the required SIP identifies strategies for minimizing the impacts of smoke on the populated, designated, non-attainment, and smoke sensitive areas. The text needs to discuss in greater detail and define what is meant by the terms "non-attainment", "designation", and "smoke sensitive" and their regulatory significance.

Map 3-2 (page 3-8) shows sensitive air quality areas in western Oregon. The map and the discussion in the final RMP/EIS could be improved if each of the sensitive air quality areas were better labeled. The text should identify the sensitive areas that are most likely to be affected by the future site-specific activities in the Roseburg District. This discussion should also describe the significance of each designation.

Regulatory Requirements

The final RMP/EIS should provide a description of all applicable regulatory and/or permit requirements. The Clean Air Act (CAA) and SIPs require that prescribed burning not cause or contribute to violations of National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) increments. In addition, burning may not cause visibility impairment in federally-designated Class I areas. The air quality discussion must demonstrate that the proposed action will not cause or contribute to any violations of the NAAQS, that it will not cause air quality to degrade by more than any applicable Class I or Class II PSD increments, and that it will not cause or contribute to visibility impairment.

Oregon Smoke Management Plan (SMP)

The draft RMP/EIS indicates that all prescribed burning activities will comply with the SMP. The final RMP/EIS needs to better describe the SMP, what it allows, what it prohibits, and what it protects. The final RMP/EIS should also discuss SMP effectiveness in reducing air quality effects since its implementation in 1972. Any monitoring documenting such effectiveness should be described. Although most problem burns or intrusions can be attributed to unpredicted shifts in meteorological conditions, compliance with the SMP could still result in intrusions. For example, drift smoke from a prescribed

burn can be carried by night time drainage winds into designated areas. The final RMP/EIS should discuss whether the SMP contains provisions to prevent or minimize these types of incidents.

The final RMP/EIS also needs to address whether different burning conditions are permissible for different subareas within western Oregon and, more specifically, within the District. Different burning conditions could affect the amount of allowable burning activity under the SMP and SIP. This, in turn, could affect the kinds of site preparation that could be considered for site-specific projects. Any potential burning restraints should be discussed in the final RMP/EIS.

State Implementation Plan (SIP)

The final RMP/EIS should also describe the SIP and its provisions for prescribed burning. The relationship of the SIP and SMP should be clearly presented. Any restrictions that the SIP could impose on prescribed burning, separate from the SMP, should be addressed.

The draft RMP/EIS states that "... forestry prescribed fire smoke emissions is not a major contributor to PM10 nonattainment." (page 3-9). The final document needs to explain how the predicted tons of biomass consumption compare to emissions of regulated air pollutants and how predicted tons of emissions compare to the amount of particulates from prescribed burning that are assumed in the current SIP calculations, particularly in light of the fact that Alternatives C and PA will burn more tons of fuels annually than Alternative NA.

Prescribed Burning

The draft RMP/EIS presents a breakdown of the kinds of prescribed burning activities. Table 4-1 (page 4-8) shows annual prescribed fire fuels consumption by alternative as well as the tons of consumption by burn type. The air quality discussion in the final RMP/EIS should be expanded to fully describe the differences between the types of burning proposed. The final document should clarify which types of prescribed burns are "hot" and which types are "cool", since the temperature of a fire affects smoke dispersion characteristics.

Another concern is the increased amount of underburning. For example, while the draft document shows a decrease in broadcast burning between the PA and the No Action Alternative (NA), it also shows a significant increase in underburning between the two alternatives. EPA understands that underburning is used to reduce undesirable fuel loads without damaging desirable residual vegetation. Typically, underburning involves lower fire temperatures which allows the smoke to hug the ground and not easily attain

vertical dispersion. EPA is concerned about the effects of underburning smoke on nearby residents. The final RMP/EIS should provide a more thorough discussion regarding underburning, including its effects and applicable regulatory requirements. In addition, it should provide specific criteria and management direction that resource specialists may use when determining underburning sites.

Alternative burning techniques exist that can be used to reduce the impact of prescribed burning on air quality. These techniques optimize fuel arrangement, fire ignition for rapid and more complete combustion, and mop-up techniques. EPA believes that the air quality discussion would be improved by including an expanded discussion of what practices BLM has been using and any additional techniques that could be used in the future to minimize air quality impacts associated with prescribed burning. This expanded discussion should focus on the different types of burning proposed in the RMP.

Finally, the draft RMP/EIS states that

Air quality, under all alternatives, would not deteriorate to a point that ambient air quality would be adversely impacted due to prescribed fire. Particulate emissions from prescribed fire has not been shown to be a major contributor to any non-attainment areas problem. Under all alternatives air quality impacts associated with BLM-administered activities are normally of very short duration and would have no long or short term impacts on regional air quality. (page 4-7).

The final document needs to provide the basis for this statement. Further, this brief analysis should not be used as the basis for concluding that future site-specific prescribed burning proposals will have no effect on local sensitive air quality areas or rural interface areas (RIAs). Individual prescribed burning proposals require site-specific analysis of conditions unique to the project under consideration. The fact that prescribed burning on the Roseburg District has a small overall effect on regional air quality has little applicability to such site-specific analyses.

Rural Interface Areas

The draft RMP/EIS contains a nice discussion on fire suppression strategies, including those that could apply to RIAs. However, it presents a contradiction regarding the use of prescribed fire in RIAs. In Table 2-1 (page 2-53), the implication is that prescribed burning is the only site preparation method that will be used in any of the alternatives. However, on pages xxii, 2-35, and 4-100, the document states that prescribed burning will not occur in RIAs. This apparent contradiction needs to be resolved in the final document. In addition, although one of the primary purposes of the SMP is to keep smoke from prescribed burning activities out of densely populated areas, compliance with the SMP could direct smoke away from large urban centers and into smaller communities and individual residences in rural areas.

The draft RMP/EIS notes that the "...district has experienced problems including: ...Possible health and safety problem due to nearby slash burning" in RIAs (page 3-86). Particulate concentrations that exceed human health standards have been measured up to three miles downwind of a prescribed burn. The final RMP/EIS needs to discuss human health standards and the impact of prescribed burning on people living in RIAs and other downwind communities. This is a significant issue due to the provisions of the SMP and the increased use of underburning.

Alternatives to Burning

The draft RMP/EIS indicates that not all timber harvest units would require treatment by prescribed burning: "[i]n order to comply with the SMP, use of alternative treatment methods to broadcast burning would be part of all alternatives." (page 4-6). In fact, the document identifies four types of site preparation treatment: prescribed burning, herbicide application, and mechanical and manual techniques (page xv). Prescribed fire is identified as the primary site preparation method (page 2-7). However, on page 2-8, the document states that "[M]anual site preparation would consist of brush piling or cutting or hand piling of slash for burning." Further, in Appendix 2-9, one of the BMPs for mechanical site preparation methods directs the burning of piles when soil and duff moistures are high. This raises the question of whether or not the document truly is considering four types of site preparation strategies, or if the mechanical and manual techniques are more truly a subset of prescribed burning methods. The final RMP/EIS should provide a more expanded discussion of the types of site preparation and prescribed burning options.

Logging residue can also be reduced by harvesting systems directed toward maximum utilization of slash material, excluding the trees and fiber left for ecosystem and biodiversity objectives. The final RMP/EIS should discuss the economic and technological feasibility of improved slash utilization and the effect on fuel loads and hazards.

Finally, the final RMP/EIS should address how the decision to burn or not to burn is made. An analysis of the costs of prescribed burning compared to the costs of other site preparation methods is warranted. The decision criteria that have been used in the past should be described. More importantly, the final RMP/EIS should present the criteria, such as cost, silvicultural considerations, air quality considerations, market demand for low grade fiber, and/or ecosystem considerations, that will be considered in the future regarding prescribed burning decisions.

Firewood Program

The draft RMP/EIS notes that emissions reductions have been achieved, in part, due to the use of alternatives to burning, including firewood programs (page 3-9). Although prescribed burning may not contribute large amounts of particulates into western Oregon non-attainment areas, the indirect effect of BLM firewood programs may contribute to reduced air quality. Therefore, mitigation measures for the firewood program should be considered.

Such firewood/air quality mitigation measures exist. For example, the Wenatchee National Forest, Naches Ranger District Personal Use Firewood Environmental Assessment, includes several innovative mitigation measures to reduce the emission of particulates associated with woodstoves. These mitigation measures have been implemented and include:

- (1) a requirement that pieces larger than 8 inches in diameter must be split at least once prior to removal to facilitate drying of the wood;
(2) the firewood gathering season is closed on September 30th to assure that firewood is not collected when wet, and some curing time is available prior to burning;
(3) educational and informational materials that highlight firewood gathering and burning practices that minimize effects on air quality are provided with firewood permits; and
(4) a requirement to implement a cooperative arrangement with the local air quality agency on public information and education on firewood use and/or enforcement efforts on woodstove burning regulations.

EPA encourages the BLM to incorporate such creative mitigation measures into the final RMP/EIS.

IMPACT DEFINITIONS

The 10-year RMP implementation period is used as the basis for defining short-term and long-term time frames for draft EIS impact analysis and conclusions, as required by the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA). The draft RMP/EIS defines short-term as ten years or less and long-term as greater than ten years. However, application of a ten-year time frame is not equally appropriate for all resource categories.

For example, a considerable range in life spans exists for the biota found on BLM lands. Significant population and community level impacts could occur in some populations of fish and birds over several generations during a "short-term" period of ten years.

Short-term and long-term impact definitions would be more relevant if these timeframes were related to the natural life spans of individual species rather than an arbitrary ten year period. The Department of Interior has consistently used such an approach in the Outer Continental Shelf (OCS) lease sale EISs. These EISs are programmatic and cover large planning areas, including activities in those areas for several years. They are analogous to an RMP/EIS. The OCS impact definitions are based partly on the length of one generation for each species or group of species evaluated. Thus, the timeframe of an impact is biologically related to the species affected. We have enclosed a copy of the OCS impact definitions for your information.

In addition, ten years is not an appropriate timeframe for assessing effects to air and water quality or aquatic habitat. A ten year time frame does not comply with regulatory definitions. EPA suggests that the final RMP/EIS contain a definition for short-term water and air quality effects that is consistent with state WQS and the SIP. At a minimum, short-term air and water quality impacts should be analyzed under the shortest practicable period of time related to the implementation of specific activities.

SPECIAL STATUS/THREATENED AND ENDANGERED SPECIES

Management Direction

Direction given in the Federal Land Policy and Management Act (United States Code, Title 43 - Public Lands) states that the public lands should be

"...managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife..." [Section 1701 (a) (b)].

Given the above, the final document should explain the rationale for providing different levels of protection and management for special status plants and animals on Oregon and California Railroad (O&C) vs. public domain lands:

Management would be designed on O&C and CBWR lands to protect federal candidate, state listed, and Bureau sensitive species and their habitats when such actions would not diminish commercial use. Mitigating measures that would not reduce commercial use would be implemented on O&C and CBWR lands. All special status species and their habitats would be protected on public domain land. (page 2-28)

Further, the document states that under the PA:

Exchanges or acquisitions would be made to benefit any of the resources managed, however, O&C and CBWR lands would not be exchanged to acquire inholdings in OGEAs to enhance spotted owl habitat. As a matter of practice, substantial areas of O&C forest lands allocated as available for timber management would not be exchanged for lands to be managed for single use management purposes. (pages 2-45 and 2-46)

This appears to be something of a contradiction, as the document implies that O&C and Coos Bay Wagon Road (CBWR) lands are already managed for a single purpose: timber management. Since the District is 92 percent O&C land, the final RMP/EIS should also discuss what implications these policies could have on these special status species and their habitats.

Finally, the draft RMP/EIS notes that for the northern spotted owl, "[P]air sites would be protected until monitoring showed that the sites are no longer in use or have the potential for use." (page 2-43). This direction is restated on page 4-83. The final RMP/EIS should expand on this direction and clarify what sort of monitoring plan exists or would be established to monitor these sites and what Endangered Species Act, Section 7 consultation requirements would continue to apply to these sites. In addition, the final document should address protection measures that will be applied to single owls.

Consultation with U.S. Fish and Wildlife Service (FWS)

Since activities conducted under the RMP could affect threatened or endangered species, the final RMP/EIS should include the Biological Assessment and the associated U.S. Fish and Wildlife Service (FWS) Biological Opinion for the following reasons:

- NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;

- The CEQ Regulations for Implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements (40 CFR 1502.25); and
The Endangered Species Act (ESA) consultation process can result in the identification of mandatory, reasonable, and prudent alternatives which can significantly affect project implementation.

The potential effects on listed species are relevant to the subsequent project-level decisions. Both the Biological Assessment and the EIS must disclose and evaluate the potential impacts of the proposed action on listed species, such as the peregrine falcon, bald eagle, northern spotted owl, marbled murrelet, and Columbian white-tailed deer. Information and related management guidance regarding the recent listing of the marbled murrelet should be added to the final document.

The final RMP/EIS and Record of Decision should not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process and the FWS identifies necessary changes in plan implementation which have not been evaluated in the draft RMP/EIS, a supplement to the RMP/EIS could be warranted. For example, the draft document notes that under the PA, 5,000 acres of potential marbled murrelet habitat would be impacted (page 4-60). If the FWS were to consider these impacts harmful to the species, its resulting Biological Opinion could affect the implementation of the final plan. Likewise, all alternatives, except Alternative E, reduce the amount of suitable habitat in the short term. The FWS could consider this significant since the

...contribution of BLM-administered lands in the planning area to regional spotted owl viability is important due to the planning area's location at the juncture of the Coast Range, Klamath, and Western Cascades provinces and the bridge those lands provide between national forests. The Forest Service's EIS concluded that their decision would maintain viable spotted owl populations on national forest lands in all provinces but assumed that BLM-administered lands would provide linkages to permit owls in the Oregon Coast Range to freely interact with owls in other provinces, and maintain the owl population in the north portion of the Oregon Coast Range. (pages 4-71 and 4-71)

Coordination and Consistency

The draft RMP/EIS presents a great deal of information regarding the northern spotted owl. Since the concern and controversy regarding this species has spanned a number of years, federal agencies, and court cases, there are a number of plans and proposals that address owl populations, habitat, and management. The document should better outline how the alternatives and management direction compare to existing and

draft reports and recommendations, such as the Draft Recovery Plan for the Northern Spotted Owl, FWS (1992); Final Environmental Impact Statement on Management for the Northern Spotted Owl in the National Forests, USDA Forest Service (1992); Endangered Species Committee Record of Decision (1992); Alternatives for Management of Late-Successional Forests of the Pacific Northwest, Scientific Panel on Late-Successional Forest Ecosystems (1991); A Conservation Strategy for the Northern Spotted Owl, Interagency Scientific Committee (ISC) (1990). The Roseburg draft RMP/EIS does include a helpful discussion and Appendix that compares alternative management proposals with the 50-11-40 dispersal criteria proposed by the ISC.

Finally, the final RMP/EIS should address management direction for timber sale areas exempted by the Endangered Species Committee in 1992.

WILD AND SCENIC RIVERS

The draft RMP/EIS recommends different numbers of wild and scenic river segments for designation under the various alternatives. Only Alternative E recommends any designations (Smith River and Canton Creek). This recommendation raises a question regarding how river segments are evaluated and recommended for wild and scenic river designation. The differences in the alternatives are in management direction and objectives; however, the physical qualities of each of the river segments under consideration would seem to be the same under each of the alternatives. Therefore, if a river segment is both eligible and suitable for designation, the final RMP/EIS should clarify how it is possible to recommend a given segment in one alternative and not in another.

In addition, not all streams eligible for wild and scenic river designation are studied for suitability in the draft RMP/EIS. The document notes that

Interim management would be implemented under all alternatives to fully protect river-related values of the three river segments (Cow Creek, South Umpqua River, main stem Umpqua River) determined to be eligible for inclusion as components of the National Wild and Scenic Rivers System, but which are not being studied for suitability in the RMP." (page 4-77).

While the text describes some of the elements included in this interim management, such as exclusion of timber harvest in riparian areas and restriction of leasable and salable mineral development, it does not give a timeframe for the "interim". The final RMP/EIS should define the expected time during which these streams will be managed under RMP interim management direction and identify when suitability studies and possible recommendations will be made regarding these streams.

Finally, in September, 1991, Oregon revised its WQS to add an antidegradation policy under 340-41-026. The policy defines what will be considered Outstanding Resource Waters (ORW) and sets forth a process for nominating and designating such waters. This process is ongoing. The language in the standards states that:

The Commission may specially designate high quality waterbodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those waterbodies.

Priority water bodies for nomination include wild and scenic rivers. With the potential listing of various salmon species as threatened or endangered, it can be expected that critical habitat for these species will be designated as ORW. Waters so designated may not have their water quality lowered except on a short-term basis. In addition, land managers will be expected to fully participate in the development of management plans to protect those waters.

UNDERGROUND STORAGE TANKS

The draft RMP/EIS notes that the District is replacing 10 underground fuel storage tanks (page 3-15). However, the document contains no further analysis of these activities.

EPA considers leaks from underground storage tanks (USTs) a serious threat to human health, soil, and ground-water resources. Removal of these tanks should be coordinated with the Oregon Department of Environmental Quality. The draft RMP/EIS should address any known impacts associated with the replacement of the tanks, including corrective action plans to treat contamination caused by potentially leaking USTs and alternate disposal procedures for tanks, contaminated soils, and ground water.

ACCESS

The draft RMP/EIS notes that easements and reciprocal right-of-way agreements provide access to 90 percent of agency lands (page 3-4). It would be helpful if the final RMP/EIS also gave an indication of how much access the BLM provides to intermingled landowners through federal license agreements, easements, and reciprocal right-of-way agreements.

The draft document calls for the use of an interdisciplinary process to develop the overall transportation system and the establishment of road management objectives (Appendix 2-3). However, it does not address cooperation with other landowners. The final RMP/EIS should outline how the BLM will coordinate and cooperate with adjacent and intermingled landowners in order to plan, build, and maintain the permanent road system and accomplish road management objectives. For example, similar to the BLM's

authorization for cooperative road programs, the Forest Service Road Right-of-Way Construction and Use Agreement (Cost Share) program is also based on authorization from the Federal Land Policy and Management Act of 1976. The Forest Service program includes requirements for annual meetings with road use partners in order to discuss timber management activities; road use needs; road construction plans and standards (including surfacing); and maintenance obligations. The final RMP/EIS should clarify whether the BLM road program includes similar coordination methods that assist in accomplishing road management objectives.

The final document should clarify direction for road construction standards and surfacing. For example, on pages 4-42 and 4-55, the draft RMP/EIS notes that

New roads would no longer be built in valley bottom riparian areas. ... New roads would mostly be higher in the watersheds crossing steeper side slopes, and smaller first and second order streams. ... There would be a potential for adverse impacts to riparian zones due to the risk of road failures in these steeper areas.

The final RMP/EIS should provide specific direction to minimize the risk of failure of these alternately-located roads. Likewise, the draft RMP/EIS directs that roads "...would be constructed and maintained to standards sufficient to serve their anticipated use. ... Permanent roads would be paved or rocked." (page 2-18). Other discussions refer to roads with "natural" surface type (page 3-5) and temporary dirt roads. The final document should clarify the following issues:

- Identification of surfacing standards for permanent vs. temporary roads;
- Identification of what materials comprise "natural" surfacing;
- Identification of the impacts and risks associated with roads that are not surfaced, as well as the magnitude of these impacts and risks as they relate to the number of unsurfaced roads; and
- Definition of temporary road lifespans.

The draft RMP/EIS mentions road closures in a number of contexts throughout the document in conjunction with various management objectives. For example, on page 2-49, the document addresses roads and recreation sites and notes that if "...maintenance of such facilities is not adequately funded, some of them may be closed..." Likewise, the document states that "[T]emporary roads not needed for continued management would be closed upon completion of logging and replanting." (page 2-11); "[R]oads would be closed, if required, to prevent or alleviate significant resource damages." (page 2-18); and "[R]oad management, including closure, could be applied to meet biodiversity and multiple use needs." (page 2-27). The term "closed" appears to be used in two ways in the draft RMP/EIS; it can mean either administratively closed (using such means as gates

or other barriers) or obliterated (restored to the natural land contour and vegetation). Since both the economic costs and environmental costs of the two methods of closure may differ substantially, the final RMP/EIS should clarify which method of closure is appropriate related to specific issues and objectives. In those cases in which the road will remain on the permanent transportation system but in which road use will be restricted by an administrative closure, the final RMP/EIS should address non-traffic-generated maintenance needs that will ensure that culverts remain unobstructed and ditches are cleaned in order to prevent road "blow outs" during winter storms. In addition, the document should address road maintenance priorities that can guide decisionmaking when funding is not adequate for complete road system maintenance.

The discussion of road issues for Alternative C notes that where "...new roads are needed, road density would not exceed that needed if clearcut harvesting were planned." (page 2-27). Many foresters contend that partial cut and shelterwood systems often require greater road densities than clearcut systems. In addition, partial cut and shelterwood systems may have higher per unit sale preparation costs. Therefore, the final RMP/EIS should further explain how this road density objective will be achieved.

For example, the document should clarify whether use of helicopters is an option for accessing and harvesting timber sales. The draft RMP/EIS discusses the use of helicopters for fire suppression on pages 2-34, 2-39, and 2-45. If helicopter use is envisioned, the final RMP/EIS should include a discussion of noise impacts that could be associated with helicopter use, including the noise levels that might be experienced by those who live or recreate in the vicinity. This is important because helicopters at 500 feet are comparable to sound levels of heavy trucks and city buses heard from the street. This could be significant in areas of very low ambient noise levels. One source of information on helicopter noise effects in non-urban areas is the draft and final *National Surface Water Survey - Western Wilderness Area Lakes, Environmental Assessment*, EPA 910/9-85-125 and EPA 910/9-85-126, March 1985 and April 1985. [Copies may be borrowed from the EPA, Region 10 library at (206) 553-1259.]

TIMBER MANAGEMENT AND SILVICULTURE

The final RMP/EIS should clarify the BLM's philosophy regarding the ASQ (annual sale quantity) and identify whether it considers the ASQ a goal or a mandated level of timber production. In addition, the draft RMP/EIS assumes that there will be sufficient funding for plan implementation, presumably including forestry activities, such as reforestation, thinning, tree improvement, and fertilization that support the ASQ level. Since these activities contribute about 11% of the ASQ (page xi), the final document should identify how much these intensive forest management activities contribute to the ASQ and the silvicultural management priorities that would guide activities should they not

be sufficiently funded. This is particularly important since Oregon State University has estimated that management costs under the PA could increase two to five times above current levels (page 2-49).

The final RMP/EIS should consider timber sale economics as a management concern in response to the full public disclosure intent of NEPA and in response to the national controversy regarding below-cost timber sales. The draft document states that "[H]ardwoods would be encouraged on harvested sites where they would produce a higher net monetary return than conifers." (page 2-8). The final RMP/EIS should note whether or not this policy also considers other costs, such as ecosystem impacts, of hardwood conversion.

The draft document also notes (regarding intensive management practices) that each alternative "...considers the application of such practices, even where they may be uneconomic, for the potential purpose of promoting timber growth and harvest." (Appendix 4-160). The Appendix Sensitivity Analysis on page 4-2 indicates that both fertilization and commercial thinning tend to have positive present net values, while precommercial thinning tends to be negative. The analysis did not include prescribed burning. The final document should provide clear descriptions of key assumptions regarding intensive management practices, Interdisciplinary Team costs, sale preparation, timber pricing, product valuation, discount rates, rotation lengths, road and access costs, and road maintenance.

EPA supports the proposal in Alternative C encouraging agreements that could be "...pursued with private landowners and other land management agencies to optimize the extent and distribution of old growth restoration and retention areas while minimizing undue impact on multiple resource use." (page 2-35). EPA would also like to encourage coordination with adjacent landowners regarding timber management practices, particularly harvest activities. For example, many public agencies and some private companies have adopted guidelines requiring regeneration on adjacent parcels to be of a certain size (e.g., trees 4 1/2 feet tall) or stocking level before adjacent timber sale units may be harvested.

Finally, the draft RMP/EIS notes that "[A]t a minimum, Forest Practices Act (OAR 629-24) standards for snags and down logs would be met." (page 2-11). These standards should be clarified and summarized in the final document.

Finally, the final RMP/EIS could be improved if it addressed the degree to which the economic activities on BLM managed lands are likely to be economically self-supporting. A quantitative analysis of each "revenue and cost" stream would clarify the magnitude of any subsidies involved and assist in determining whether continuation of these subsidies is appropriate. In addition to timber harvest revenues, this analysis should include such items as grazing fees and mineral royalties.

FUNDING

The draft RMP/EIS states that "[T]imber sale volumes and associated programs would be reduced, if annual funding is not sufficient to support the relevant actions assumed in the plan, including mitigation and monitoring." (page 2-49). The draft RMP/EIS indicates that for Alternatives C and PA, the costs of nontraditional timber management would be two to five times greater per unit of timber sold than for the more traditional timber management alternatives.

The final RMP/EIS needs to describe the implications of funding on management direction in greater detail, including:

- how annual BLM funding levels are established;
- what portion of budget allocations are based on the amount of timber sold annually;
- what sorts of programs receive specially "ear marked" allocations; and
- what impact more costly non-traditional timber management could have on allocations for non-timber activities.

Management of BLM administered lands involves a great variety of activities and programs. The final RMP/EIS needs to describe in greater detail how a funding shortfall could affect these activities and their management direction in the RMP. This discussion should identify if all activities would be decreased equally in the face of insufficient funds or if certain management activities have a higher priority for funding than others.

CONSISTENCY AND COORDINATION

The draft RMP/EIS notes that the BLM regulations require interagency coordination with other federal, state, and local government agencies (43 CFR Part 1610.3) (page 5-5). While the Appendix discusses agency efforts to work with state agencies and counties on ways to make the RMP consistent with plans, policies, and programs, of other agencies, the document does not discuss what effort was made regarding National Forest

SOCIOECONOMIC ANALYSIS

The CEQ Regulations state that

When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment. (Section 1508.14).

The proposed action will affect small timber communities in western Oregon, the entire state and the Pacific Northwest region. The draft RMP/EIS has evaluated the environmental consequences of the proposal.

The socioeconomic analysis concludes that the reductions in timber harvest associated with the PA would be expected to result in significant reductions in employment and income in the affected area. The Klamath Falls draft RMP/EIS provides a more complete picture because it provides an estimate of the state-wide effects of both BLM and Forest Service land management alternatives. We recommend that the final RMP/EIS for the Roseburg District include an analysis similar to what is found in the Klamath Falls RMP/EIS. We would also recommend the analysis be expanded to include more information on other sectors of the economy.

First, the current analysis appears to be a static analysis; it implicitly assumes that other sectors of the economy will not change over the analysis period and thus shows the potential effects of the BLM and Forest Service activity in isolation from the rest of the economy. The analysis would be substantially more useful if inputs to its input-output model included current forecasts of how other sectors of the Oregon economy are expected to change over the next decade. This more holistic economic analysis might show that the regional economy is likely to employ more people over the next decade and that jobs lost in the timber industry may be replaced by jobs created in other sectors of the economy.

Second, an expanded analysis like that suggested above might provide a picture of what types of jobs might become available in the future and what types of job training or vocational training would assist displaced timber workers in finding new long-term employment. This would allow the final RMP/EIS to discuss and evaluate options for federally-sponsored displaced work assistance programs that might be used to mitigate the adverse employment impacts of the selected management plan. Although such assistance may well be outside the scope of the authority of BLM or the Forest Service, it is not outside the scope of the authority of Congress. The CEQ Regulations encourage the evaluation and consideration of alternatives not within the jurisdiction of the lead agency [Section 1502.14(c)].

Land Management Plans for adjacent Forest Service lands (Appendix 1-21). However, the draft RMP/EIS gives direction for Alternative B: "Do not allocate new RNAs on available O&C or CBWR land if a similar feature can be protected on a National Forest." (Appendix 1-31). The implication is that adjacent National Forest System lands are providing a buffer or additional resource for the BLM. If other federal lands are key to the success of an alternative, the final RMP/EIS should clearly outline what types of coordination and cooperation will be a part of plan implementation.

Another concern arises regarding the Consistency Table in Appendix 4 for Big Game Population Management Objectives. Under Alternatives NA, A, B, and E, cover on BLM lands is expected to decline. However, the document states that "...private lands are expected to provide adequate forage." (Appendix 4-157). Other parts of the document specifically exclude private lands from consideration because of jurisdictional differences, but in this case, the BLM appears to be using private land as a mitigation vehicle or buffer for the agency's activities. It is important to establish a consistent approach regarding adjacent private landowners.

Finally, the document briefly discusses agreements that would be pursued with private landowners and other land management agencies "...for certain riparian areas within the district to help minimize certain impacts from timber management, grazing, or other activities." (page 2-6) and "...to optimize the extent and distribution of old growth restoration and retention areas while minimizing undue impact on multiple resource use." (page 2-26). In addition, the draft RMP/EIS commits to the following: "[L]and management practices of adjacent landowners would be considered during site-specific timber management planning and other specific activity and project planning." (page 2-4). This direction presents strong incentives for the BLM to pursue coordination, and if possible, consistency efforts with its adjacent landowners, both public and private. The final RMP/EIS should further outline and discuss the purpose, scope, and specific management activities that could be covered in such cooperative agreements.

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United States Department of the Interior

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TIERING AND NEPA COMPLIANCE

FISH AND WILDLIFE SERVICE
Portland Field Station
2600 S.E. 98th Avenue, Suite 100
Portland, Oregon 97266

The CEQ regulations encourage tiering of NEPA documents.

Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review (\$ 1508.2B).

December 21, 1992

Memorandum

To: District Manager, Roseburg District, Bureau of Land Management
Roseburg, Oregon
From: Alan Field Supervisor, Portland Field Office, Fish and Wildlife Service, Portland, Oregon
Subject: Review of Draft Roseburg District Resource Management Plan (RMP) and Draft Environmental Impact Statement (EIS)

We have reviewed the subject draft document and provide the following comments for your consideration in developing the final RMP and EIS.

GENERAL COMMENTS

The BLM has in general produced a document with much detailed analysis of several alternative RMP's. It appears that with the exception of the No Action Alternative and Alternative A there would be a more balanced approach to resource management, which is to be commended.

None of the alternatives presented describe a plan that will clearly guarantee complete restoration and maintenance of fish and wildlife resources to their maximum carrying capacity in concert with timber production and other uses over the long term.

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Further, the final RMP/EIS should provide specific direction regarding the preparation of tiered NEPA documents. The draft RMP/EIS refers a number of times to future tiered environmental assessments (EAs), but this should not be construed as a directive to prepare solely EAs for individual projects.

Finally, the discussion on page 2-47 notes that environmental assessments will be made available for public review, but fails to identify the methods by which this will occur.

Much of the information used in analyzing the alternatives presented could be used in developing the HNWMP, in addition to the detailed input from other agencies and individuals responding to the subject draft EIS.

We also suggest additional information be utilized in developing an HNWMP. This would include riparian corridor widths and other provisions prescribed in the watershed/fish emphasis option described by the Scientific Panel on Late-Successional Forest Ecosystems of the Pacific Northwest (Johnson, Franklin, Thomas and Gordon, 1991) and publications on Individual Tree Selection (Reeder, M, 1988 and Kennedy, D., 1989).

Under the HNWMP plan we believe BLM can meet its responsibility to restore watershed productivity on lands under its control and set the example for other public and private land managers.

An economic analysis of the long-term overall benefits and costs of the HNWMP alternative compared to the other alternatives should be made. It is likely that economic benefits to fishery and other resources will significantly offset reduced timber revenues which have been higher than could be sustained without degrading the ecosystem.

A table of contents should be located at the beginning of the document for easy reference. Also, the page headers should be labeled as to what each chapter is covering.

Since many acronyms and abbreviations used in the draft documents may be unfamiliar to the reader, we suggest moving the list of acronyms and abbreviations to the front of the documents for quicker reference.

SPECIFIC COMMENTS

Page xiv, first partial paragraph. The RMA's proposed need to show that riparian resources will be fully restored. There is no clear indication that proposed riparian stream corridor widths will achieve this. The ARMP needs to include corridor widths necessary to restore the long-term maximum riparian corridor productivity along with stabilizing watersheds surrounding the RMA's.

Page xvi, sixth full paragraph. The fishery resource needs to be fully restored. A 58 percent increase of salmon and steelhead in streams over current severely depressed levels for the long term obviously is not adequate. The final RMP should state to what degree a 58 percent increase would be of the maximum potential of a fully restored fishery.

The adopted RMP should, through natural watershed restoration, produce long-term productive high quality habitat for the entire planning area rather than just implementing "projects" that improve 25 miles of the several hundred miles of stream habitat. The emphasis should be on long-term natural restoration more than small-scale and often short-term artificial efforts.

Page 4-42, fifth full paragraph. It is not clear that proposed riparian corridor widths on perennial streams, no protected corridors at all on intermittent streams and surrounding watershed/landscape management will produce the stated results. The adopted RMP should over the long term result in optimal riparian corridor conditions on all streams on BLM administered land.

Page 4-57, Table 4-16, Potential Fish Production Capability. Current populations of all species listed are severely depressed. Yet over the long term fish populations are only shown to increase by 20 percent for coho, 80 percent for chinook, 46 percent for steelhead and 21 percent for cutthroat. The table needs to show how close these figures are to "optimum" (maximum potential) levels. Further, the table and previous discussion should be expanded to illustrate the status of individual fish stocks, some of which may be near extinction. See also our previous comments related to pages 4-42.

THREATENED AND ENDANGERED SPECIES

GENERAL COMMENTS

The sections covering marbled murrelets need to be expanded and corrected, now that the murrelet is Federally listed as threatened. More information needs to be presented on what habitat characteristics are important for murrelets. The current definitions used for suitable murrelet habitat are much too narrow and simplistic. The analysis across BLM districts for murrelet habitat changes needs to be more consistent. When discussing future habitat condition scenarios, the impacts on BLM lands as a result of the alternatives need to be clearly stated and not intermingled with the future murrelet habitat conditions on both Federal and private lands.

Several portions of the draft RMP are not consistent with the draft Recovery Plan for the Northern Spotted Owl (draft Recovery Plan) and raise potentially serious concerns for the survival and recovery of the spotted owl. These include management activities within the large areas managed for older forest species (OGEAs), dispersal within the network of OGEAs, and supplementing critically low populations in some of the large OGEAs. These issues will be

This is particularly important because Federal ownership in the area is well below 50 percent of the landbase over much of the area.

The weakest link in the connection between spotted owl population clusters in the Oregon Coast Ranges lies directly west of the city of Roseburg along the Williams River. The extremely limited Federal ownership in this area and current condition of habitat on private land creates a likely barrier to movements between the southern portion of the Oregon Coast Ranges and Klamath provinces and the remainder of the Oregon Coast Ranges. Failure to provide dispersal across this area increases the pressure on the South Willamette/North Umpqua Area of Concern. To improve dispersal conditions in this area, the lands within the Roseburg District north of Highway 42 in the Dillard Resource Area and south of DCA OD-28 (draft Recovery Plan) should be managed for maximum habitat quality, through designation as a non-deferred OGEA, or at least connectivity area.

The draft Recovery Plan includes provisions to provide additional habitat and protection for spotted owl pairs outside of the large blocks of habitat, where populations within the large blocks are too low to ensure short-term stability. This concept should be incorporated into the RMP. The current and short-term population condition within the deferred OGEAs should be evaluated to determine the internal stability of these population clusters, and supplemented at levels to ensure cluster stability. Additional sites should be provided to maximize the cluster effect. Short- and medium-term cluster stability is even more critical in light of the already limited dispersal condition in the Oregon Coast Ranges and impacts of the preferred alternative to the development of dispersal condition.

The concept of promoting the dispersal of mobile old-growth species by providing connectivity areas between OGEAs with some level of old-growth characteristics is intriguing, but the function of these areas is difficult to evaluate given the lack of standards and guidelines in the preferred alternative. The RMP should include information on the species expected to benefit from the connectivity areas, particularly listed species; the expected function of the area for each species; and evaluate the ability of the area to provide these functions. This should include rationale for the location, width, and proposed management of the areas. To fully evaluate the function of the connectivity areas, the RMP should address the lowest condition expected in the connectivity areas relative to old growth characteristics and its relation to the future desired condition.

The RMP should contain an assessment of the viability of the spotted owl under the preferred alternative. The assessment should evaluate the viability of the spotted owl in the short term, lowest point in the habitat development, and long term. Improved habitat amounts and conditions 100 years in the future are of little value if the spotted owl populations are extirpated before habitat recovery. While the RMP included mention of risk in several areas, it contains no evaluation of spotted owl viability. The McKelvey model is used only to compare the alternatives, not evaluate viability.

The monitoring section of this RMP should be expanded and increased to include specific proposals with thresholds, trigger points, and courses of action. With this RMP, the BLM is attempting to manage forests in a manner different from all previous efforts. As a result, management prescriptions include numerous theoretical components that are as yet untested. Many of these prescriptions have the potential to affect listed species, particularly if the

discussed separately, though they contribute to the overall impact of the RMP on spotted owls.

Several activities are proposed in deferred OGEAs that appear inconsistent with the draft Recovery Plan and other proposed management schemes. These include management activities within older second growth that currently meet at least dispersal condition and deferral of regeneration harvest for 80 years rather than withdrawal of these large blocks. The RMP states that management in deferred OGEAs will improve the future diversity of the stands, may speed the recovery of suitable spotted owl habitat, and will only occur in currently non-suitable habitat. Standards or guidelines should be provided to ensure actions will be limited to appropriate situations.

The RMP does acknowledge the increased risk to spotted owl caused by the uncertainty associated with the human management of forests to speed the development of older-forest characteristics and the uncertainty of the success of silvicultural systems in recreating suitable habitat. Similar risk and uncertainties apply to the management proposed in the deferred OGEAs and connectivity areas. This risk should be evaluated and discussed. Again, standards or guidelines should be provided within the RMP to allow evaluation of the risk or impacts to the recovery of the spotted owl.

Large-scale salvage within the OGEAs also carries uncertainty for the future condition of habitat within the OGEAs. Given the lack of knowledge concerning the development of forests following catastrophic events, it is difficult to determine the level of stand legacy necessary to mimic natural recovery or speed development of natural condition. Therefore, large-scale salvage increases the uncertainty and risk of development of future old growth characteristics. The RMP should include an evaluation of the potential impact of salvage on future habitat condition.

Given the currently low populations of spotted owls, especially in the Oregon Coast Ranges physiographic province, dispersal between the large deferred OGEAs and between provinces is critical to maintaining distribution and viability of spotted owls. The preferred alternative results in actual degradation in the dispersal condition between the third and fifth decade and delay in the attainment of 50-11-60 condition on some capable quarter-townships for over 50 years. This 50+ year impact on potential dispersal corresponds with the period of lowest suitable habitat and spotted owl populations, exacerbating the concern for dispersal. The potential synergistic effects of low habitat, low population, and reduced dispersal should be addressed in the RMP. The land allocations or management prescriptions in the RMP should be altered to improve the dispersal condition over the first 50 years.

Dispersal condition is of particular concern in the Oregon Coast Ranges, and the South Willamette/North Umpqua Area of Concern, and the Rogue-Umpqua Area of Concern for interprovincial movements. Without adequate dispersal across the South Willamette/North Umpqua area of concern, isolation of the Oregon Coast Ranges is likely. A major portion of this area of concern lies within the Roseburg District, yet the RMP contains no information on the dispersal condition in this area or evaluation of the impacts of the preferred alternative on this area of concern. This area was not identified for any special management relative to spotted owls. The Roseburg portion of the South Willamette/North Umpqua Area of Concern should be designated a non-deferred OGEA as in the Eugene District and managed to enhance dispersal.

prescription fails to produce the desired condition. Therefore, the risk of failure carries serious consequences. The BLM discusses the concept of adaptive management in the RMP, but fails to carry that discussion to specific monitoring. Given the consequences of failure, monitoring plans should have specific thresholds and trigger points, and specified courses of action if thresholds are exceeded. In addition, experimental and theoretical procedures should not be implemented unless monitoring is included. If monitoring is not funded, harvest should not proceed.

The final rule designating critical habitat for the northern spotted owl (final rule) was published on January 15, 1992. The RMP should contain a discussion and evaluation of the impacts of the RMP on designated spotted owl critical habitat.

SPECIFIC COMMENTS

Page xvi, Column 1, Para. 2. The discussion of the discrepancy between the population model's projection of current population and the observed population should include potential problems with the model. The magnitude of the discrepancy is unlikely to be fully attributable to "packing".

Page 2-42, Column 1, Northern Spotted Owl. The RMP should include the standards under which the 80 to 100 acres for known pairs would be released for harvest, including the protocol that will be used to determine a site is no longer in use and the standards for determining potential use. It should also address resident singles, since most resident singles are probably undetected pairs and contribute to the population. Eighty to 100 acres of suitable habitat, not just acres, should be protected around each core area through withdrawal, not deferral. Core areas should be maintained regardless of the occupancy of the site. This will provide opportunities to manage spotted owls in the landscape. These core areas should be protected in all land allocation, even OGEAs. Management, particularly regeneration harvest, should not occur within these core areas.

Page 3-46, Column 2, Para. 4. The paragraph should include the data from the demographic studies on the Roseburg District and Cascades province. These studies do indicate a downward trend, contrary to the statement in this paragraph. The third and fourth sentence of this paragraph contradict each other.

Page 3-47. The marbled murrelet has been observed by BLM biologists within the Roseburg District.

Page 4-60. Since the murrelet has been observed in the Roseburg District, the alternatives may have impacts to known marbled murrelet habitat. Suitable habitat was described as "mature and old growth forest (150 years)." Later in the discussion, the text says that connectivity areas would provide nesting habitat for the latter part (after 100 to 120 years) of the rotation cycle. These statements are not in agreement as written. Also, it is unlikely that a stand managed on a 120-year rotation would provide much suitable habitat without some older component to create suitable nesting platforms.

Page 4-61, Column 2, Para. 2. Rather than assume that density management in the preferred alternative would not negatively affect attainment or retention of suitable habitat condition, the RMP should contain an assessment of the

risk of negatively affecting suitable habitat, in light of the experimental nature of the density management prescriptions.

Page 4-62, Column 1, Para. 3. The assumption that riparian management areas, TPOC non-suitable lands, and other lands not suitable for timber management would provide adequate Habitat 1 for nesting should be explained. Many of these areas, particularly riparian management areas, are of extremely limited scope and are unlikely to provide adequate core areas.

Page 4-63, Column 1, Para. 3. Provide information on the quality and distribution of suitable habitat, beyond simply stating that there will be a 14 percent decline in suitable spotted owl habitat under the preferred alternative long term. The RMP should evaluate the lowest habitat condition and the impact on spotted owl viability. The reduction in suitable habitat is only part of the impact. Replacement of nesting quality habitat with forests meeting minimal foraging quality may result in a further reduction in the viability of spotted owls. This problem is intensified if a substantial portion of this habitat is scattered, and further exacerbated by the checkerboard ownership pattern common to BLM lands. The Bureau should provide information on the extent to which the development of habitat long term is dependent on the ability to create or speed the development of suitable habitat through silvicultural practices, an as yet unproven assumption.

Page 4-64, Column 1, Para. 4. Given the BLM's lack of experience in developing and maintaining old growth characteristics capable of supporting viable populations of spotted owls through density management and the lack of detailed knowledge on the components of structurally diverse forests important to spotted owls, the prediction that as much as 35 percent of the OGEAs may have been impacted increases the risk of catastrophic failure of the network concept. The RMP does not indicate the period over which this 35 percent would be affected. If this is over the first decade, the risk is potentially high. The BLM should evaluate the risk of failure of the techniques and the potential impact of such a failure on listed species.

Page 4-64, Column 2, Para. 5. This section should provide an assessment of the effects of the preferred alternative on spotted owls in the Oregon Coast Range province, rather than simply highlight the importance of BLM lands to spotted owls in this province.

Page 4-67, Column 1, Para. 2. This paragraph discusses the importance of concentrating spotted owl habitat in large blocks to promote clusters of owls close enough to each other to ensure successful movements of individuals between territories. This is only one aspect of the cluster concept. Clusters were designed to be large enough to support populations sufficient to provide some level of internal stability in the short term. The paragraph should include a discussion of the capability of the OGEAs and management within the OGEAs proposed in the preferred alternative to maintain populations levels sufficient to provide internal stability.

This paragraph and the following discussion mention the need for successful dispersal between these large habitat blocks. As discussed in the general comments, the RMP does not indicate how this critical dispersal will be maintained.

Page 4-67, Column 2, Para. 1. This paragraph should indicate why the BLM chooses to use 50-11-40 as a measure of dispersal given its limited validation. If another method is appropriate, it should be provided here.

Page 67, Column 2, Para. 2. Provide information and analysis as to why the distribution of patches and strips of high quality habitat are adequate to provide this type of habitat and why this is important to dispersal.

Page 4-68, Column 1, Para. 4 - Column 2, Para. 3. The entire discussion of dispersal habitat in the Roseburg District is poorly developed and difficult to follow. There should be a succinct discussion of the impacts of the preferred alternative on dispersal condition and the impacts of dispersal condition on spotted owl populations. There is also a general lack of detailed information on the effects of the preferred alternative on the dispersal condition.

Page 4-68, Column 1, Para. 5. The continued degradation of dispersal condition between 20 and 50 years in the future is extremely troubling, given the importance of dispersal in portions of the Roseburg District to inter- and intra-provincial dispersal. The RMP should analyze the impact of this situation on viability of spotted owls.

Page 4-68, Column 1, Para. 6. The RMP should go beyond simply describing the location of the deficient quarter-townships to an evaluation of how this location affects inter- and intra-provincial dispersal. The fact that the deficient quarter-townships lie in a circle around the valley margin does not negate their importance to dispersal. Given the dispersal behavior of juvenile spotted owls, any dispersal habitat within the probable dispersal distance of an OGEA is important to dispersal.

Page 4-69, Column 2, Para. 1. Define the term "adjacent to OGEAs" and its relevance to spotted owl dispersal.

The number of deficient quarter-townships adjacent to OGEAs and the acreage of that deficiency in the third and fourth decades raises serious concern for the adequacy of dispersal conditions. As mentioned in the general comments, the greatest deficiency in dispersal condition corresponds to the period of low owl populations and suitable habitat.

Page 4-68, Column 2, Para. 3. Provide documentation on the statement that "although the PA would take longer for all quarter townships to meet dispersal habitat, the quality and quantity above 50 percent would ultimately exceed alternative D."

Page 4-71, Column 2, Para. 3. Provide rationale or documentation for the statement that isolation "is not thought likely to be a factor" under the preferred alternative. Currently no grounds or basis are provided for this statement. Given the previous discussion of dispersal condition and the level of "management" in the area of concern, isolation appears to be a legitimate potential threat.

Page 4-72, Column 1, Para. 2. The RMP does not appear to meet the assumption of the Forest Service EIS that the BLM would adopt a long-range plan similar to the ISC Strategy, as stated in the last sentence. This RMP differs from the ISC Strategy in several key areas, including management operations in suitable habitat spotted owl habitat within the large reserve areas and delay

Page 4-72, Column 2, Para. 3. The RMP should include an evaluation of the level of risk to the stability of spotted owl populations under the preferred alternative, rather than simply qualify the risk as higher than Alternative D. Risk is critical to the determination of whether the preferred alternative is sufficient to meet the BLM objectives of contributing to the recovery of the northern spotted owl.

Many of the concerns for the suitability of habitat under Alternative C, such as the uncertainty associated with the human management and the uncertainty of the success of proposed silvicultural systems in recreating suitable habitat also hold for the Preferred Alternative. This should be evaluated relative to the risk of failure of the RMP.

Appendices:

Page 4-87, Column 2. The BLM should provide its own monitoring program for spotted owls in the event that a recovery plan is not adopted immediately. Monitoring is a critical part of any plan, but carries even greater weight in a plan that incorporates numerous untested procedures that potentially impact listed species. To be effective any monitoring plan must include thresholds that will trigger re-evaluation and explicit courses of action if thresholds are exceeded. Monitoring plans should be developed prior to the adoption of the RMP to allow adequate evaluation of impacts of the monitoring to all aspects of the RMP. All actions should be tied to adequate monitoring. If monitoring is not funded, actions affecting the listed species should not proceed.

SUMMARY COMMENTS

The BLM has made progress in moving toward a more balanced resource management approach. However, none of the alternative RMP's described would clearly result in fully restored watersheds producing optimal fish and wildlife habitat in concert with timber harvest levels to be maintained over the long term. The ARMP should include modification of Alternatives D and E and additional information to describe a more "Holistic Natural Watershed Management Plan" (HNWMP) similar to what the Oregon Department of Fish and Wildlife describes as their recommended long-term desired future condition. The ARMP goals would be to implement and monitor short- and long-term management actions that would result in fully restoring watersheds and maintaining them over the long term to produce water quality, vegetation, riparian corridors and habitat diversity necessary to maximize fish, wildlife and timber production within the natural range of the watershed/landscape pattern present before European settlement.

An economic analysis of the HNWMP should be made that would include greatly increased commercial and sport fishery benefits and sustainable yield of higher quality timber products.

The final RMP should include expanded and updated information on the murrelet. Relative to the threatened northern spotted owl, the RMP differs significantly from the draft Recovery Plan. Specifically, the Service is concerned about the impacts of proposed management activities within the deferred OGEAs, provisions for dispersal between the OGEAs, the lack of a viability assessment in light of the continuing loss of habitat in the intermediate-term, and the failure of the RMP to address impacts to designated spotted owl critical habitat. The Service recommends that the preferred alternative include

in light of the continuing loss of habitat in the intermediate-term, and the failure of the RMP to address impacts to designated spotted owl critical habitat. The Service recommends that the preferred alternative include limitations on the management in OGEAs and thresholds for dispersal condition. Given the untested nature of many of the proposed silvicultural prescriptions, the Service recommends that a detailed and sensitive monitoring plan be developed and required prior to implementation of the RMP.

Roger E. Federhahn

Appendix I

Response to Public Comment

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Introduction

The public comment period for the Draft Resource Management Plan/Environmental Impact Statement began August 21, 1992 and closed December 21, 1992. Agencies, officials, and the public were invited to comment on Draft Resource Management Plan/Environmental Impact Statement. The Roseburg District held 31 meetings or briefings in Douglas County with approximately 400 people in attendance. An additional 37 meetings or briefings were conducted in Oregon and Washington D.C. concerning all six western Oregon RMPs.

During the 120-day public comment period, 1,348 comment letters containing over 9,000 specific comments were received on the Roseburg Draft Resource Management Plan/Environmental Impact Statement. The Roseburg District received 101 letters from various groups and organizations, public and elected officials. The remainder were from individuals. Those commenting geographically represented rural areas, small towns, and large cities throughout Douglas county and Oregon along with a few letters from outside of Oregon.

The letters included highly technical discussions and critiques from organizations and specialists as well as many personal, emotional letters from residents of Douglas county and Oregon. Of the 1348 letters received, 806 letters were form letters. A list of individuals and organizations who commented on the Roseburg Draft Resource Management Plan/Environmental Impact Statement may be found in Chapter 5. In addition, Appendix H contains copies of letters from Federal, State, and local government.

Organization of Appendix I

This appendix contains the responses to public comments. After analyzing the substantive comments described above, the Roseburg District Resource Management Plan Team with the assistance of State Office personnel grouped related topics to avoid text duplication. The comments in Appendix I are not direct quotes from individual letters, but are synthesized from a variety of comments that often express the same concern or question. The comments and responses are intended to be explanatory in nature. If there are any inadvertent contradictions between Appendix I and the text of the Proposed Resource Management Plan/Final

Environmental Impact Statement, the Proposed RMP/Final EIS direction prevails.

Response to Public Comment

Many of the comments on the adequacy of the Draft RMP/EIS addressed specific elements of the Preferred Alternative that are no longer components of the Proposed Plan. Where the Proposed Plan had a corollary element, our responses to such comments treated them as if they applied to the corollary allocation. The most common example is comments on Old-Growth Emphasis Areas. Our responses to those comments treat them as applying to Late-Successional Reserves in the Proposed Plan (PRMP).

The acronym "SEIS", used in comment responses, refers to the 1993 *Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl*. The term "FEMAT report" refers to the 1993 Report of the Forest Ecosystem Management Assessment Team, titled *Forest Ecosystem Management: An Ecological, Economic, and Social Assessment*.

Scoping

- Comment: The BLM and State of Oregon should convene an independent commission to study the specific ecological and administrative problems arising from the current ownership pattern.

Response: Funding for such an initiative would have to be authorized by the Congress and the State legislature. Such a proposal is beyond the scope of the RMP.

State Director Guidance

- Comment: The State Director Guidance for the planning process should be amended to permit changes in the Preferred Alternative.

Response: The State Director Guidance, which was issued through a series of instruction memos during the years 1988 through 1992, did not directly address the formulation of the Preferred Alternative, and did not preclude changes in that

alternative. The State Director never intended it to formally guide that aspect of the process and it did not direct any discretionary allocations or constraints in the Preferred Alternative. It has also not guided development of the Proposed RMP.

Purpose and Need

- Comment: The RMP/EIS should acknowledge the purpose of the O&C Lands, which is to be managed for the stability of local communities and industries through the production of timber, under the principles of sustained yield, and should also reference important related judicial decisions.

Response: Chapter 1 has been expanded, but citation of specific judicial decisions seems unnecessary to the function of the RMP.

- Comment: The documents never spell out clearly what decisions will be made as a result of the analysis done in the RMP.

Response: The Chapter 1 discussion, Purpose and Need for the Action, has been expanded to refer to the planning questions in Appendix B and to Table 2-1 where these decisions are summarized.

Budget Assumptions

- Comment: The Draft RMP does not include a cost analysis of the Alternatives. It should include costs of all aspects of timber sales, such items as road building, sale preparation, monitoring, site cleanup, mitigation of environmental impacts, and restoration. Higher management costs would undoubtedly occur if the Preferred Alternative were adopted.

Response: Ecosystem Based Management focuses on the many activities required to manage a specific geographic area. This type of management is different from traditional program based management that focuses on costs and units of accomplishments in each individual program. For this reason cost comparison is limited to comparison of the total costs of the No Action Alternative and the PRMP (See chapter 2, Costs of Management)

- Comment: Consider the unstable nature of Federal funding of forest management activities and the difficulties of securing this funding.

Response: The Introduction to Chapter 4 has been modified to acknowledge this.

- Comment: How does BLM expect to obtain funding to implement ecosystem management with reduced harvest levels and higher predicted costs?

Response: We expect the Congress will be able to look beyond the traditional measure of timber sales, understand the importance of Ecosystem Based Management, and appropriate adequate funding for its successful implementation.

- Comment: Evaluate the impact of lower funding levels on programs and outputs, including mitigation and monitoring. How will accountability for funding mitigation and monitoring support be verified?.

Response: Since the essence of Ecosystem Based Management is balance, reduced funding levels would affect all programs and outputs proportionally. Mitigation and monitoring are considered to be part and parcel of timber sale and other implementation costs. In the priority setting process, managers will insure the integrity of program balance, including mitigation and monitoring in the budget.

- Comment: Review historic silvicultural plans, required budgets, approved budgets, activities conducted, and reasons for the differences.

Response: Much of what is requested demands an analysis of political decisions made at high levels of past administrations and/or during legislative deliberations in Congress. Although the analysis would make an interesting if lengthy article, we believe it would suggest little about how such deliberations and decisions will come out when the budget topic is Ecosystem Based Management in the 1990s, not timber production as in past decades.

Organization of Document, Editing, and Maps

- Comment: It was difficult to distinguish the draft RMP from the draft EIS. For example, implementation standards were scattered throughout the document.

Response: Chapter 2 has been reformatted to clearly display proposed objectives and link them to management direction for each resource.

- Comment: Avoidance of acronyms would make the document more readable.

Response: The use of acronyms has been reduced.

- Comment: Moving the list of acronyms and abbreviations to the front of the document would help the reader.

Response: This change has been made.

- Comment: On the maps more geographic places and towns should be shown and named, more streams named, and secondary roads indicated.

Response: The level of detail of geographic naming was limited so as not to clutter the maps.

- Comment: Maps showing land allocations are too small a scale with few reference points.

Response: A reference grid has been added to the new PRMP maps. The scale is considered adequate for an Environmental Impact Statement. For more detail, see maps available for review in the District office.

Planning Schedule

- Comment: The final RMP/EIS and Record of Decision should not be completed before completion of Endangered Species Act consultation.

Response: Informal consultation prior to preparation of the PRMP/FEIS is considered sufficient. The Record of Decision will not be prepared until after formal consultation is complete.

- Comment: The deficiencies of the draft plan warrant BLM developing a revised or supplemental draft before proceeding to the final stage.

Response: BLM with the Forest Service prepared a Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl.

Coordination with Other Parties

- Comment: If other Federal lands are the key to success of an alternative, identify the related coordination and cooperation planned.

Response: Such coordination is addressed in the SEIS Record of Decision.

- Comment: All lands within the aboriginal territory of the Confederated Tribe of Coos, Lower Umpqua, and Siuslaw Indians can still be considered "Indian Country," as the President never signed into law the only document ceding rights of ownership of the aboriginal territory (Treaty of 1855).

Response: "Indian Country" is legally defined as (a) land within a reservation, (b) land held in trust by the Federal government, or (c) dependent Indian communities. See 18 U.S.C. § 1151. Although this definition is found in the criminal statutes of the United States, it has been utilized by the courts in civil proceedings as well. Under this definition, there is no "Indian Country" on the lands managed by the BLM in western Oregon.

The Coos, Lower Umpqua, and Siuslaw Indian Tribes unsuccessfully litigated their rights as "aboriginal owners" of lands in western Oregon before the Court of Claims in 1938. See *Coos Bay, Lower Umpqua, and Siuslaw Indian Tribes v. United States*, 87 Ct.Cl. 143 (1938), cert. denied, 306 U.S. 653 (1939). By the Coos Restoration Act in 1984, Congress restored a trust relationship with these tribes that had been terminated in Act of August 13, 1954, 68 Stat. 724. See 98 Stat. 2250 (codified in 25 U.S.C. § 714). However, the only lands included in the restored reservation were three small parcels of land located near Coos Bay. See 25 U.S.C. § 714e.

- Comment: The Confederated Tribes should be contacted for review of any activity permanently altering the land, minerals, vegetation on, or access to their aboriginal lands. The tribal office should receive copies of Environmental Assessments, FONSI, EISs, and other notifications of actions.

Response: A Memorandum of Understanding, currently under development with the tribal government, will identify those activities that the

Confederated Tribes will be contacted on and receive official BLM documents about.

Goals and Objectives

- Comment: It was difficult to identify plan policies in the RMPs. The RMPs should identify the expected future condition.

Response: Explicit PRMP objectives have been added for each topic in Chapter 2 to address these concerns.

- Comment: There should be a stronger link between the plan's broad goals and the specific actions that will be undertaken. In general, standards and guidelines need to be established.

Response: The objectives that have been added for the PRMP provide that link and, along with management actions/direction, equate to standards and guidelines.

The Preferred Alternative

- Comment: A table showing the acreage in each land classification would help the reader determine the significance of restricted areas.

Response: Allocations overlap so any table oversimplifies. The text of chapter 2 and Table 2-1 provide information on how much acreage is in each land classification. These acres are generally follow the hierarchy established in the SEIS ROD and the Draft RMP/EIS.

- Comment: The RMP should use a watershed approach to land resource management.

Response: The SEIS decision, which has been incorporated into our PRMP, details a four-tier approach to land resource management: regional, physiographic or river basin, watershed, and site specific or project level. Under this approach, analysis starts at the watershed level. The planning units will be physiographic province or river basin, consisting of a number of watersheds. Watershed based planning will be implemented and, over time, the Federal agencies including the BLM will switch from existing planning units to the provinces or modify the boundaries of current planning units to be more compatible with the watershed based approach.

- Comment: BLM's long-term projections are unreliable due to the vagaries of time and changing political and economic agendas. Adoption of any alternative should be a short-term action only.

Response: We recognize that the plan adopted will be replaced by another plan within ten years or so. Yet, only in the long-term can we attain many of the plan's key objectives, so much of the plan's focus remains long-term.

Legal Consistency of Preferred Alternative

- Comment: The draft plans have not explained how ecosystem management in the preferred alternative is consistent with BLM's legal mandate for O&C/Coos Bay Wagon Road lands, including its community stability requirement.

Response: The SEIS Record of Decision addresses this, and discussion has been added to Chapter 1, Purpose and Need, of this PRMP/FEIS.

- Comment: The Preferred Alternative makes timber production the residual rather than the dominant use, because lands are first set aside for riparian and other uses, and the residual land is further managed for old-growth restoration. This subservient position for timber violates the O&C Act.

Response: Management of these lands under the O&C Act mandate to provide a sustainable level of timber production must also be reconciled with other laws such as the Endangered Species Act and the Clean Water Act. The need of the local communities and industry for a stable timber supply is certainly of foremost concern in the management decisions for the O&C lands. The selection of the Preferred Alternative or Proposed Plan is our attempt to manage the O&C lands in a responsible manner. Such management is intended to allow as high a level of sustainable timber supply as possible without risking further drastic curtailments of the timber supply in the future due to the requirements of a myriad of other laws through which the BLM must chart its course. The mechanical Probable Sale Quantity calculation hierarchy may make it appear that timber production was the last concern in the decision making process. This does not mean,

however, that it was subsidiary to other uses of the timber lands.

- Comment: Since the Alternative A level of riparian protection meets legal requirements, selection of that level of riparian protection would be most consistent with the O&C Act.

Response: The level of riparian protection included in the PRMP was selected not only to meet current legal requirements, but also to promote the goals of watershed protection contained in the O&C Act and to provide sufficient protection to reduce the potential for listing of aquatic species as threatened or endangered. Taking into consideration the anticipated benefits to the quality of watersheds in the O&C Act, it does not necessarily follow that the alternative with the least riparian protection allowed by law is the "most consistent with the O&C Act."

- Comment: Lowering the minimum harvest age by releasing arbitrary constraints on it would seem to be most consistent with the O&C Act, particularly considering the difficult timber supply situation.

Response: While the O&C Act does not set "arbitrary constraints" one way or the other about the rotation age or minimum harvest age of the timber, the purposes of the O&C Act in providing a long-term sustainable timber supply may be adversely affected by lowering the minimum harvest age. The level of sustainable harvest over the long-term could be reduced if the minimum harvest age is significantly lowered below the age of the culmination of mean annual increment. Intensifying harvest activities on the lands included in the General Forest Management Area by lowering the minimum harvest age could also have adverse effects on the quality of watersheds on the O&C lands. Such results cannot be considered as "most consistent with the O&C Act."

The environmental impacts of harvesting much younger trees must also be considered. Lowering the minimum harvest age in the General Forest Management Area could have significant adverse impacts on the ability of protected species such as the northern spotted owl to disperse throughout their range, and possibly cause the BLM to violate the Endangered Species Act.

- Comment: The exclusion of O&C forest land from exchange for lands to be managed for single use management purposes relative to listed species appears to conflict with Section 7(a)(1) of the Endangered Species Act.

Response: Congress in Section 7(a)(1) did not direct the Secretary to ignore the limitations in statutory authorities for other Interior programs when it directed the Secretary to use these authorities to further the purposes of the Endangered Species Act. The O&C Act requires those lands to be primarily managed for timber. The BLM would violate its statutory authority under the O&C Act for the management of these lands if we were to exchange O&C timberlands for property intended for use primarily as wildlife habitat. See *Headwaters v. BLM*, 914 F.2d 1174 (9th Cir., 1990). Thus, the proposal to exclude the O&C lands from exchanges for lands intended for purposes other than multiple use does not conflict with the promotion of conservation of listed species under §7(a)(1), since that section does not require agencies to violate their existing statutory authorities to accomplish its purposes.

The No Action Alternative

- Comment: The No Action alternative should be no activities.

Response: It is well established that in land use plan EISs by Federal land management agencies, the No Action alternative is continuation of the existing plan. According to the Council on Environmental Quality in an action updating a land management plan where an ongoing program under existing legislation is taking place, the "no action" alternative is the alternative of "no change" from current management direction or level of management intensity. "To construct an alternative that is based on no management at all would be a useless academic exercise." (Answer to Question 3 of Council of Environmental Quality's "NEPA's Forty Most Asked Questions", 46 Fed. Reg. 18026 (Mar. 23, 1981), as amended.)

- Comment: Note the current level of survey, monitoring, and inventory, which is done regularly.

Response: Monitoring under the current plan is described in Oregon State Office Manual handbook H-1734-1, 162 pages. Survey and inventory procedures are equally detailed by resource. Copies of these procedures are available for review in the District office.

New Alternative Proposals

- Comment: Assess alternative harvest priorities that maintain more options for the “old-growth” in the General Forest Management Area. Include alternatives that rely more on partial cuttings.

Response: PRMP harvest priorities in the General Forest Management Area have been prorated so most old-growth there would be intact after the first decade. Partial cuttings (including thinning and density management) have been incorporated into the PRMP to the extent consistent with both Ecosystem Based Management and timber management objectives.

- Comment: It is recommended that BLM add a fisheries emphasis alternative. It would be based on the Alternatives for Management of Late Successional Forests in the Pacific Northwest.

Response: An integral component of the (new) PRMP is fisheries emphasis.

- Comment: Evaluate the effects of longer rotations and higher minimum harvest ages on all lands administered by BLM.

Response: Sensitivity analysis of Alternative B in the Draft RMP/EIS looked at 150 year rotations. Sensitivity analysis of the draft Preferred Alternative looked at no harvest below culmination of mean annual increment.

- Comment: Develop and analyze other alternatives that retain biologically significant old-growth stands while still producing economic opportunities.

Response: Alternatives C, D, and E and the PRMP, as well as all other alternatives analyzed in the recent SEIS, do this to varying degrees. We do not believe adding more such alternatives would be particularly useful.

Impact Analysis Generally

- Comment: A ten year short-term impact time frame is not equally appropriate for all resource categories. Consider varying according to the life spans of affected biota.

Response: The ten year period was selected as the end of the period before the PRMP is most likely to be revised. Keying to the life spans of affected biota is more relevant to a project EIS, such as for a dam or oil and gas leasing. Where available information suggest that intermediate term impact conclusions would be substantially different than the trend implied by short-term and long-term conclusions, that has been acknowledged.

- Comment: Assess spatial feasibility of the harvest plan in future decades.

Response: A major constraint on spatial feasibility in BLM’s checkerboard ownership pattern is harvest activity on other ownerships, particularly private land. Future harvests on private lands are often not the subject of long-term plans, often proprietary even if plans exist, and subject to rapid change due to market conditions, changes in ownership and other business considerations. Even spatial feasibility of the ten year scenario is speculative, given these considerations, and must be revisited during annual timber sale planning. The elaborate exercise entailed in extending the ten year scenario out several decades would prove little.

- Comment: In some parts of the document, private lands are excluded from consideration, while in others BLM appears to be using private lands for mitigation.

Response: In no case does BLM suggest that it can control activities on private lands, except for the indirect control that may occur where specific access across BLM-administered land may be denied due to overriding environmental constraints such as the Endangered Species Act. Expected management on private land is sometimes cited as providing certain consequences, for example, adequate elk forage.

- Comment: Identify where private land management is hindering the achievement of ecological objectives.

Response: Our assumption is that all private forest management, whatever it is today, may become short-rotation intensive forest management. That is the basis for all cumulative effects analysis. BLM’s ecological objectives reflect that assumption.

- Comment: Soil erosion, watershed degradation, stream sedimentation, and forest habitat

destruction must all be analyzed with adjacent lands factored in.

Response: Soil erosion (soil loss as distinguished from stream sedimentation) is a site specific concern; cumulative effects of soil loss with other ownerships are not relevant to BLM's management decision. The balance of these concerns are addressed broadly in the EIS and will be more specifically addressed in watershed analyses.

- Comment: Consideration for catastrophic loss should be factored into the plans.

Response: Projections of catastrophic loss have been explicitly factored into the proposed Probable Sale Quantity and into analysis of effects on old-growth. Adaptive management will address the locally unpredictable dimensions of catastrophic losses.

- Comment: BLM has not done a risk analysis and developed contingency plans for Old-Growth Emphasis Areas and Connectivity Areas that potentially could be destroyed by a catastrophic event.

Response: As is discussed in Appendix O of *A Conservation Strategy for the Northern Spotted Owl* (1990), the original Habitat Conservation Areas suggested in that document were distributed so as to hedge against catastrophes that could cause regional but not total extinction of the spotted owl. The late-successional reserve system is similar. The Draft Recovery Plan and the Supplemental EIS both specifically address catastrophic loss of habitat. The dispersal of connectivity diversity blocks will also function as a hedge against major ecosystem impacts from catastrophic events. Risk analysis was incorporated into the regional Supplemental EIS. Contingency planning would have to be based on a multiplicity of "what ifs." We consider it more relevant to adapt our management as appropriate after a specific catastrophic event occurs.

- Comment: The environmental costs of relying on foreign, nonsustainable resources for forest products has been overlooked. The plan also ignores the other environmental costs — higher energy consumption, increased CO₂ emissions, accelerated depletion of nonrenewable resources — of relying more on substitute building materials.

Response: Assessment of the environmental costs of substitute sources of timber or substitute building materials would entail much conjecture

about international markets and is beyond the scope of a single Resource Management Plan EIS. We are aware, however, of some regionwide analyses of this topic, and discussion of them has been added to chapter 4, Socioeconomic Conditions.

- Comment: Identify the economic, recreational, commercial, and aesthetic values of key wildlife groups or species.

Response: Recreation and aesthetic values are not distinguishable and are incorporated in the EIS sections on recreation. Stratification of values by key wildlife group or species is not practical due to lack of consistent, comparable sets of data. Some economic and commercial values of game animals and fisheries have been indirectly captured through the analysis of recreation dependent and fisheries dependent personal income and employment. We recognize that these analyses do not capture all of the values associated with key wildlife groups or species.

- Comment: Wildlife tree retention causes increased operational costs and safety risks, which have not been adequately analyzed.

Response: In the PRMP, a series of stand structural classes have been designed to meet a variety of resource management objectives and to produce stands with desired characteristics over time. An integral part of the structural class is retention of snags and green trees. Worker safety would not be compromised to achieve resource management objectives. Retention of snags and green trees for wildlife or other objectives does increase operational costs as compared to the complete harvest of stands. However, average costs for snag and green tree retention under the PRMP would not be expected to be much different than costs required to complete shelterwoods, perform overstory removals, and partial cut harvests while retaining wildlife trees under the plan for the 1980s.

- Comment: Identify the cultural and subsistence needs of Indian tribes or nations and how well the Preferred Alternative meets these needs.

Response: The identification of the "cultural and subsistence needs of Indian tribes or nations" at any time is a difficult undertaking. Each tribe or nation may define these needs quite differently. In addition, these needs change over time as does the situation in which Indian tribes or nations find themselves.

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We intend to take the needs of Indian tribes or nations into consideration. However, the identification of these needs is of necessity a shared responsibility. Therefore, we and the tribes must jointly develop a process whereby information concerning the interests and needs of each tribe or nation is shared. The Memoranda of Understanding presently in development with the Confederated Tribes of the Grand Ronde and the Confederated Tribes of the Siletz Indians constitutes an important step in this process of information sharing.

- Comment: If helicopter use is an option for accessing and harvesting timber sales, include a discussion of noise impacts.

Response: Discussion has been added in Chapter 4, Recreation and Rural Interface Areas.

- Comment: For existing or proposed livestock grazing permits, analyze effects on water quality, condition, and management strategies for riparian zones and watersheds, impacts on biological diversity, special status species in grazing allotments, cumulative effects of grazing and other management activities, and proposed livestock improvements.

Response: There are so few grazing permits on the Roseburg District that the effects are considered to be insignificant.

- Comment: Effects of insects and diseases, other than on timber production, are hardly mentioned.

Response: Discussions of forest health have been added to both Chapters 3 and 4, Biological Diversity and Ecological Health.

Air Resources

- Comment: Ten years is not an appropriate time frame for assessing effects to air quality. At a minimum, short-term air quality impacts should be analyzed under the shortest practicable period of time related to the implementation of specific activities.

Response: The short-term air quality impacts identified are actually average annual impacts throughout the ten year forecast period.

- Comment: Statements that air quality management will be in compliance with applicable

laws and regulations do not inform the decision maker or the public of *how* the District will be in compliance and the projected impacts of prescribed fire emissions.

Response: Chapter 2 has been revised.

- Comment: Various terms, such as nonattainment and designated areas, are used in the text without definition. These terms must be understandable by the public, and must be used consistently between Districts.

Response: These terms are included in the glossary.

- Comment: Smoke sensitive areas on the maps need to be labelled, and each District plan should identify which areas are most likely to be affected by that District's prescribed fire activities. This discussion should also include why each area has been designated.

Response: The air quality discussions have been revised.

- Comment: The Final RMP should discuss all the applicable regulatory and/or permit requirements, including National Ambient Air Quality Standards, Prevention of Significant Deterioration, and visibility impairment in Class I areas. The Oregon Smoke Management Plan also needs to be fully described, as well as its relationship to the State Implementation Plan.

Response: Chapter 3 has been revised.

- Comment: The Draft RMPs include reference to the BLM's smoke surveillance for intrusions. What is this, what does it measure, and how are intrusions reported? What are the District's contributions to reported intrusions? What further monitoring standards and methods will the BLM use to measure compliance with the Clean Air Act and State Implementation Plan standards?

Response: The air quality discussions have been revised.

- Comment: The Draft RMP assumes uniform burning conditions across the District. These differences need to be fully disclosed in the Final RMP.

Response: The air quality discussions have been revised. Additional consideration of these differences are more appropriately addressed at

the watershed or province planning levels, as identified in the SEIS. Fire Management plans completed at those levels will include methods most appropriate for their specific geographic areas.

- Comment: A more complete comparison is needed between regulated pollutants and expected emissions, especially PM10.

Response: The air quality section of Chapter 3 has been revised.

- Comment: The types of use of prescribed fire in the RMP need to be identified and fully discussed. Particularly, the dispersion conditions of low-intensity fire need to be discussed along with potential impacts to air quality.

Response: The air quality discussions have been revised.

- Comment: More thorough analysis of emission reduction techniques and alternatives to the use of prescribed fire is necessary in the Final RMP.

Response: The air quality discussions have been revised.

- Comment: The Final RMP needs to disclose potential impacts to persons in the Rural Interface Areas.

Response: The air quality section, Chapter 4, has been revised.

- Comment: The analysis needs to include consideration of more complete utilization of slash materials as an alternative to broadcast burning.

Response: The air quality discussions have been revised.

- Comment: The Final RMP needs a discussion on the decision process of using prescribed fire.

Response: Chapter 2 has been revised. Additional rationale can be found in the SEIS.

- Comment: The impact of the District's firewood program on neighboring communities' air quality needs to be considered.

Response: The air quality section of Chapter 4 has been revised. The amount of available firewood is expected to decline sharply, due to decreased timber harvest levels and increased

retention of coarse woody materials for Ecosystem Based Management objectives, including wildfire requirements.

Soils/Site Productivity

- Comment: Address ways to reduce soil compaction.

Response: Soil compaction is an unavoidable adverse impact when heavy equipment is permitted on the land. However, the PRMP has adopted a series of Best Management Practices (Appendix J) that are designed to prevent or mitigate the effects of compaction. Additional mitigating measures are employed on a site by site basis to reduce compaction and the subsequent productivity losses, soil erosion, siltation, and increased peak flows. Productivity losses due to soil compaction will be limited to one percent or less where ground based equipment is employed.

- Comment: The BLM should reduce or eliminate broadcast burning because burning reduces site productivity, increases erosion, kills small trees, reduces mycorrhizae, and damages adjacent timber lands.

Response: Broadcast burning is used for several purposes including providing planting sites for seedlings, controlling competing vegetation, and reducing the risk of wildfire. Logging slash, when left untreated, can burn very intensely under wildfire conditions. Best Management Practices have been used since the 1980s to reduce the impacts on site productivity due to broadcast burning. Refer to the appendices for current Best Management Practices on broadcast burning. Alternatives to broadcast burning such as hand piling and burning, lopping and scatter of limbs, and cutting of planting holes in slash are also used where feasible. Broadcast burning is one of several tools used for site preparation and will continue in the future. However, broadcast burning levels will decrease due to changes in harvest practices and other resource management objectives and constraints.

- Comment: Protective standards for potential landslide areas have not been described. Provide information regarding slope stability that is needed for, among other things, the location of waste disposal sites.

Response: BLM's intensive Timber Production Capability Classification inventory, classifies areas based on soil and site susceptibility to degradation from timber management activities. Fragile soil areas were identified at two degrees of susceptibility to management activities. One was the identification of areas where management activities would result in detrimental impacts to soil/site productivity and/or potential of site impacts. An example of this is the Timber Production Capability Classification category, Fragile Gradient Nonsuitable Woodland, which identifies the areas of potential landsliding that could enter waterways. These sites were designated as "nonsuitable woodlands" and will be managed to protect and enhance their nontimber values. The second grouping of fragile sites is the "fragile suitable commercial forest land." These areas have been identified to be fully capable of timber management without site deterioration or off-site impacts when Best Management Practices (See Appendix J) are used to protect and mitigate impacts from management activities. During site specific planning, in addition, on-site investigations are conducted on these lands so we can avoid areas subject to landslides or provide adequate protection to limit their number and size.

- Comment: Clear cutting causes soil destruction and productivity losses.

Response: Most sites that are prone to landsliding or surface erosion have been identified by the Timber Production Capability Classification inventory. Others will be identified during site-specific planning. Some of these sites, "fragile nonsuitable woodland," are not planned for harvest. The remainder of these sites have been identified as fragile and require special restrictions or mitigation measures to avoid unacceptable soil impacts and productivity loss. Using management practices referenced in Chapter 2 and Best Management Practices will minimize soil destruction and productivity losses. In addition, under PRMP management regimes, areas scheduled for harvest will have an average of at least 6-10 green trees per acre retained after harvesting activities have been completed.

Retention of green trees on the completion of harvest operations will provide future large woody debris to assist in maintaining soil productivity.

- Comment: FORCYTE-II and other ecological models should be applied to a broad range of potential management prescriptions to reduce risk of long-term site degradation. These models and

models of physical properties, such as erosion, should be employed in a realistic test of timberland suitability.

Response: The suitability of forest land for timber management was determined through the Timber Production Capability Classification inventory. The FORCYTE model is not calibrated for the xeric sites of southwestern Oregon and no specific ecological model exists that was designed to examine trends in site productivity under management by different silvicultural systems for such sites. We utilized the research literature and available stand models to examine the probable effects of management practices and rotation lengths on site productivity and resource sustainability. Analysis of structural and functional ecosystem diversity, floristic composition, and down wood for each alternative, and the relationships that exist between rotation lengths and site productivity were utilized in the design of the PRMP. An analysis of the probable effects of the different alternatives on site productivity and long-term timber yield sustainability is found in Chapter 4, Timber.

Water Resources

- Comment: Establish Riparian Management Areas of sufficient width to achieve restoration on streams in poor condition. Place a high priority on restoration in these watersheds and include the State and other interest groups in restoration plans.

Response: Riparian Reserve widths of Alternative 9 of the SEIS have been applied to BLM-administered lands by the SEIS Record of Decision and have been incorporated into the PRMP. The Riparian Reserve widths may be modified after watershed analysis is done. Watershed Analysis will consider several factors including stream condition. Review and guidance for possible modifications of Riparian Reserves would be coordinated through the Regional Ecosystem Office. Restoration will be based on watershed analysis and planning. Watershed analysis will also be used to identify and prioritize cooperative projects involving various landowners. Additional information on restoration can be found in SEIS Appendix A: FEMAT Chapter V Appendix J, and SEIS Appendix B6: Aquatic Conservation Strategy.

- Comment: The Scientific Panel has determined that “no-cut” buffers of at least 50 feet are needed to protect intermittent streams with unstable soils.

Response: The PRMP incorporates such buffers in Riparian Reserves that will include unstable and potentially unstable areas if they are not protected by Timber Production Capability Classification exclusion.

- Comment: The relegation of 1st and 2nd order streams to a lower level of protection than higher stream orders is inconsistent with the Oregon Water Quality Standards and with Environmental Protection Agency’s Regional Riparian Management Policy.

Response: The PRMP reflects the characteristic that larger stream orders generally have wider riparian zones and provide greater aquatic and terrestrial wildlife habitat than smaller stream orders.

- Comment: Intermittent streams should be managed according to specific standards. Intermittent and ephemeral streams are treated no differently than any other forest acre in the plans, yet they are major sources of landslides and debris flows and serve as critical habitats for amphibians.

Response: Management direction for intermittent streams has been derived from the SEIS and incorporated into the PRMP. In addition, a vast majority of the unstable lands, which contain these streams of concern, have been excluded from timber management as nonsuitable woodlands in the Timber Production Capability Classification.

- Comment: Best Management Practices listed in the plan contain few measurable standards. Best Management Practice language should include conditions for which Best Management Practices are applicable.

Response: Best Management Practices will be prescribed and implemented based upon site specific conditions and requirements. Best Management Practices will be monitored and evaluated and modified as necessary through an iterative process to meet water quality criteria and other resource management objectives.

- Comment: The 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution (Nonpoint Source Assessment Report) should be used in conjunction with Oregon’s 1992

Water Quality Status Assessment (305(b)) Report, and other data, to establish:

1. Desired future condition on a stream by stream basis
2. Criteria and priorities for cumulative effects analysis
3. Priorities for water quality monitoring programs
4. Criteria and priorities for watershed level activity plans
5. Priorities for watershed rehabilitation programs
6. Best Management Practices and watershed harvest deferrals

Response: We agree. These items will be established during plan implementation.

- Comment: The EIS should not rely solely on the application of Best Management Practices to satisfy the Clean Water Act. Discuss the effectiveness of Best Management Practices.

Response: It is recognized that Best Management Practices are the primary mechanism to enable the achievement of water quality standards. Best Management Practices are selected to achieve water quality standards. The iterative process that will be followed includes:

1. Design of Best Management Practices based on site specific conditions, technical, economic and institutional feasibility, and the water quality standards of those waters potentially impacted.
2. Monitoring to ensure that practices are correctly designed and applied.
3. Monitoring to determine:
 - a. The effectiveness of practices in meeting water quality standards.
 - b. The appropriateness of water quality criteria in reasonably assuring protection of beneficial uses.
4. Adjustment of Best Management Practices when it is found that water quality standards are not being protected to a desired level and/or possible adjustment of water quality standards based on considerations in 40 CFR 131.

- Comment: Include a Best Management Practice outlining specific parameters applicable to project-specific cumulative watershed effects analysis.

Response: A cumulative watershed effects Best Management Practice has been incorporated into the PRMP and considers applicable beneficial uses, Nonpoint Source Assessment and 305(b) reported conditions, and monitoring and inventory

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data. When new methods of analysis are developed and validated, they will be incorporated.

- Comment: Include a Best Management Practice with a commitment to activity deferrals when the cumulative effects analysis identifies probable beneficial use impairment. Include a Best Management Practice outlining a more conservative site specific project planning approach when cumulative watershed effects analysis tools are not available, are under development, or have not been validated.

Response: A Best Management Practice has been incorporated into the PRMP to address activity deferral or mitigation of cumulative watershed effects where impacts to beneficial uses are probable.

- Comment: BLM should not allow discretionary mining, grazing, and other discretionary activities that would increase temperatures over the long-term in streams not meeting State standards for temperature.

Response: Authorized management actions will be designed or regulated to comply with applicable water quality criteria for the protection of identified beneficial uses and the SEIS Aquatic Conservation Strategy.

- Comment: Acknowledge the limits on the availability of surface water and address surface water quality problems.

Response: Current Departmental policy requires that we follow State requirements for the acquisition of all necessary water rights. Where surface water is limited in availability, we will pursue acquisition of water rights based upon the most current Departmental policy. Surface water quality problems as identified in the Oregon Nonpoint Assessment Report and the 1992 Water Quality Assessment (305 (b)) Report and/or District inventories are described in Chapter 3 of the RMP/EIS.

- Comment: Describe watershed improvement and stream restoration activities that increase low season flow.

Response: Implementation of riparian enhancement projects which enhance the potential for bank storage and slow release through the establishment of properly functioning riparian systems will improve flood plain and upland hydrologic functions to enhance low season flow.

Mitigation of existing compaction through obliteration of roads or other compacted land surfaces to restore slope hydraulic functions will also accomplish these ends.

- Comment: Set watershed impact standards, including maximum soil compaction, erosion rates, equivalent clear cut acres, and relative percentage of seral stages.

Response: Maximum soil compaction is addressed in Chapter 4. Across the board watershed prescriptions are inappropriate. Prescriptions for individual watersheds will be based upon watershed analysis, application of Best Management Practices and assessment of cumulative watershed effects, considering watershed specific soils, geology, inherent channel stability, beneficial uses to be protected, and other relevant site specific characteristics.

- Comment: Watersheds should be classified and prioritized according to current functional or ecological conditions and importance for maintaining viable wildlife populations.

Response: Although BLM's forest inventory data provides some information on overall ecological or functional condition, this information cannot be desegregated by watershed and remain statistically valid. Data on intermingled private lands is even less useful. We are currently implementing a riparian inventory to assess functional condition of stream reaches and riparian zones.

- Comment: Watershed-specific standards should be developed in cooperation with adjacent lands.

Response: Cooperation with other parties may often be an appropriate way to implement RMP decisions most effectively, and their involvement will be encouraged. It is not appropriate, however, to make RMP implementation dependent on the cooperation of other landowners.

- Comment: Watershed concerns suggest that road culvert design standards should be based on 50-year peak flow, not 25-year.

Response: Road culvert standards have been revised to require that culverts be designed to accommodate at least the 100-year flood. This conforms the PRMP to the standards and guidelines attached to the SEIS Record of Decision.

- Comment: The goal for watershed management in watersheds providing surface water to public systems serving municipalities should be restated, as being to assure the needs of the users are addressed and to protect comprehensive water quality.

Response: Watersheds providing surface water for domestic uses will be managed to meet applicable water quality requirements established through Oregon Department of Environmental Quality.

- Comment: Display severely impaired streams identified by the Department of Environmental Quality's 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution within analytical watersheds.

Response: This information was displayed in chapter 3 of the Roseburg District Draft RMP/EIS.

- Comment: The Department of Environmental Quality's 1988 nonpoint source report identified many stream segments in the District that have serious nonpoint source pollution problems caused by forest practices. The DEIS should have updated that report with more recent information. What is BLM doing about the problems?

Response: The 1988 319 Assessment Report was a collaborative effort undertaken by many agencies and groups within the State. BLM District personnel played an integral role in providing the information contained in the report. We, in cooperation with the Oregon Department of Environmental Quality, are currently in the process of systematically updating the Assessment Report. As a Designated Management Agency under the Clean Water Act, we have worked and will continue to work closely with the Oregon Department of Environmental Quality in improving and updating the assessment of stream segments on BLM-administered lands. Opportunities to mitigate existing Nonpoint Source pollution sources will be an integral component of plan implementation.

- Comment: Contact the Oregon Department of Environmental Quality for their results of recent monitoring programs on streams.

Response: As a Designated Management Agency we work closely with the Oregon Department of Environmental Quality on all aspects of the Nonpoint Source Pollution Management Plan,

including the sharing of data relevant to BLM-administered lands.

- Comment: On-the-ground mapping of streams and stream orders, with clear identification of addressed intermittent and perennial streams is needed. The maps should also present 100-year flood plains and potentially hyporheic zones.

Response: Such mapping would be a massive undertaking and would have to cover not only BLM-administered lands, but also some of the intermingled lands in other ownerships. We currently have plans for revising and upgrading the current hydrography data themes for our GIS system to be completed concurrent with implementation of the plan. Currently, we do not have plans for mapping of perennial and intermittent stream 100-year flood plains or potential hyporheic zones.

- Comment: Ten years is not an appropriate time frame for assessing effects to water quality. At a minimum short-term, time frames should be analyzed under the shortest practicable period of time related to the implementation of specific activities.

Response: The PRMP does not fix dates for the implementation of specific activities that might affect water quality. Most site-specific activities contemplated will occur two or more decades in the future, not during the life of the plan. Most that will occur during the life of the plan are not site-specifically established but their approximate location is projected through the ten year timber management scenario. Shorter time frames can only be assessed as annual or sequential multi-year plans for site-specific treatments are developed.

- Comment: Roads cause most of the sedimentation in our rivers through surface erosion and landslides.

Response: The BLM will continue nonpoint source pollution management in accordance with the guidelines established by the Environmental Protection Agency and the Oregon Department of Environmental Quality. Appendix J contains a section on Best Management Practices that will be used to help ensure compliance with these guidelines. Some of these practices include revegetating exposed soils, restricting access to natural surface roads, and paving or rocking permanent roads. Temporary roads will be put to bed or erosion control practices will be used to

keep erosion to an insignificant level. In addition, management activities and new road construction will be designed, located, and constructed to avoid mass soil movement. As stated in the SEIS Record of Decision Aquatic Conservation Strategy, watershed restoration will include control and prevention of road related runoff and sediment production. The Timber Production Capability Classification inventory has located areas with surface erosion and landslide limitations. This inventory data will be supplemented by an on-site investigation for each proposed management activity. In Key Watersheds identified in the SEIS, there will be no net increase in roads.

- Comment: The plans for road building violate the Clean Water Act because new roads will contribute sediment to already impacted streams.

Response: Best Management Practices will be implemented to minimize potential impacts from both new and existing roads. In addition, opportunities will be identified through project planning to mitigate existing nonpoint sources of sediment.

- Comment: It is unclear how the Watershed Condition Index was generated; how it was used in planning; how it will be used in standards, guidelines and monitoring; and how it will be validated.

Response: The Watershed Condition Index has been dropped as an analytical tool for the following reasons: First, the information upon which the Draft RMP/EIS Watershed Condition Index analysis was calculated is out of date due to significant logging activities on private and industrial lands. Second, it will be difficult to update and forecast land disturbing activities on BLM-administered lands, due to soft projections of potential sale quantities in the ten year timber management scenario for the PRMP. Finally, it was felt that requirements for watershed analysis in the SEIS Record of Decision would ultimately provide a more revealing assessment of the current watershed condition and provide the foundation for appropriate resource management decisions.

- Comment: Explore the possibility that mining activities on BLM lands cause significant increases in the concentrations of metals in streams that supply public water systems.

Response: Mining activities on BLM-administered lands must comply with surface management

regulations, State water quality criteria, and Best Management Practices, to protect beneficial uses such as public water supplies.

- Comment: The people that BLM would be dosing by allowing pesticides, inerts, fertilizers, and the like to get into drinking water supplies would be at risk.

Response: The buffering of streams when such products are used is part of the commitment to provide treatable water at the point of intake. Impacts of the use of herbicides and inert carriers have been fully addressed in BLM's Western Oregon - Management of Competing Vegetation EIS and Northwest Area Noxious Weed Control EIS.

- Comment: Expand the discussion concerning the availability of groundwater and groundwater quality.

Response: Available information, mostly from other agencies, has been incorporated into the PRMP/FEIS. The extent of ground water supply effects is a site specific issue and will be evaluated at the watershed or project level. Management prescriptions will be developed in all instances where groundwater quality might be potentially impacted.

- Comment: The need for acquiring private landowners water rights and establishing instream rights should be stressed.

Response: Both of these proposals are beyond the scope of the RMP/EIS as they are beyond BLM's authority.

- Comment: Has a complete inventory been conducted to assess the District's wetland resources? How are significant impacts assessed? How will wetland inventories be conducted prior to timber harvests and other activities?

Response: We do not have inventories of all wetlands. Wetland inventories will be part of site specific interdisciplinary inventories conducted prior to activities. Activity plans and project plans will identify appropriate protection for these lands consistent with our goal for the protection of water quality and existing Federal direction for their classification and preservation. See riparian objectives in Chapter 2. Environmental analysis of these plans will lead to determination if impacts would be significant.

Biological Diversity

- Comment: Specifically name wetlands as features for which riparian management areas will be established and specifically identify wetlands that will be restored or enhanced.

Response: The PRMP/FEIS acknowledges wetlands and provides management direction for their protection. Opportunities to restore or enhance wetlands will be identified during implementation of the plan. Identification in the PRMP of specific wetlands to be restored or enhanced is beyond our current capability, lacking a complete inventory of these resources.

- Comment: Acknowledge the need to coordinate and cooperate with public and private landowners to inventory wetlands, set criteria for significance for protection and restoration, and coordinate priorities to protect and restore public wetlands.

Response: Coordination and cooperation with other landowners may be an appropriate way to implement RMP decisions most effectively and their involvement will be encouraged. It is not appropriate, however, to make RMP implementation dependent on the cooperation of other landowners.

- Comment: Provide a more thorough discussion of the potential effects on water yields and streamflow.

Response: The Chapter 4 discussion on this topic reflects the circumstance that potential effects on water yield and streamflow are highly dependent upon physio-climatic watershed conditions and the nature of management actions. Reduction of transpiration immediately following regeneration timber harvest will generally make more water available for streamflow, though the duration and timing of increased yield will be highly variable. Analysis of water yield and timing will be a component of watershed analysis.

- Comment: Withdraw Canton Creek and its tributaries from mineral extraction in order to protect water quality and reduce sedimentation.

Response: The BLM has no records that show any significant impact to Canton Creek from past mining activity and there is no significant potential for future mining activity. This lack of mineral interest in the area makes a withdrawal to protect resources unnecessary.

- Comment: Emphasis remains on single species recovery programs rather than on habitat protection and other measures that focus on maintaining biodiversity.

Response: The emphasis of the PRMP is dual, focusing on both. Emphasis on existing recovery programs must continue until a decision is made on the recovery status of species such as the peregrine falcon, Columbian white-tailed deer, and bald eagle. The U.S. Fish and Wildlife Service currently focuses on single species recovery and until an official shift to habitat recovery is made, BLM land management must satisfy single species management requirements.

- Comment: Old-Growth Emphasis Areas do not protect old-growth ecosystems from logging roads, soil compaction, and other threats to biodiversity.

Response: The PRMP substitutes Late-Successional Reserves. Thinning or silvicultural treatments within them must be beneficial to the creation of late-successional forest conditions.

- Comment: Identify and examine expected future condition for biodiversity. Relate to the compositional, structural, and functional attribute of ecosystems and include a regional perspective.

Response: Data to do this is not available.

- Comment: Provide information on the current condition of ecosystems and their compositional, structural, and functional attributes.

Response: Information gleaned from existing inventories was used to develop the information displayed in the Biological Diversity section of Chapter 3 in the Draft RMP. In the PRMP/FEIS we used data from a Forest Service synthesis of available information about the presettlement characteristics of Pacific Northwest forests to compare current forest condition and function with the range of presettlement conditions. Ecosystem functions are statements about the ways in which ecosystem processes operate. These can sometimes be the subject of inventories; for instance, inventories describing the nesting success of spotted owls provide an indicator of one aspect of ecosystem function. Where possible, such statements of ecological function are shown in Chapter 3, Biological Diversity and

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Ecological Health, or other sections describing specific resources.

More generally, ecosystem processes are implied from the presence of species, structures, and disturbance intervals known to be required for functions to occur. For instance, the retention of nitrogen fixing plants in young stands, the nitrogen fixation associated with lichens in large old trees, and microbial fixation of nitrogen in down wood result in processes that maintain site productivity. If forest conditions are maintained within the range of natural variation, which occurred before settlement began, and if species mixtures and structural complexity are retained, it is thought that ecological functions will be maintained.

- Comment: Express the amount of Large Woody Debris to be retained by size class, i.e., logs at least 20 feet long and 25 inches in diameter at the large end.

Response: We have adopted the SEIS Record of Decision standards. Pending developing of models specific to plant associations and stand types, the interim guidelines consider only logs 16 feet or longer and at least 16 inches in diameter as relevant in this district.

- Comment: Permit the retention of Large Woody Debris from the merchantable component if the unmerchantable component is absent.

Response: Both merchantable and nonmerchantable down wood will be candidates for retention in meeting structural targets within the analytic landscape; however, nonmerchantable wood will be utilized first in satisfying targets.

- Comment: Within 100 years of management under the draft plans, almost all large woody material will disappear in General Forest Management Areas.

Response: Because there are differences in the decay rate for down wood in different environments and because the contribution of down wood is usually periodic, related to root diseases, storm events and other disturbances, there will be variation in the amount and size of down wood which will exist in the forest for different structural (age) classes. For the PRMP structural targets have been set as described in Chapter 2. The shorter harvest rotations set for the General Forest Management Area would likely reduce the large woody debris component. However retention of some green trees, snags and

available large woody debris in harvest areas will prevent disappearance of "all" large woody material in the General Forest Management Area.

- Comment: Include retention of target levels of dead-and-downed wood in timber sale contract stipulations.

Response: Retention levels set forth in the plan objectives will be translated into contract stipulations.

- Comment: It is not possible to determine the proportion of mature stands that will be logged in the first decade.

Response: As modeled in the TRIM-PLUS model, some 5.8 percent of mature seral stage stands on the Roseburg District are expected to have regeneration harvest in the first decade. The effect of these harvests on seral diversity is shown in Appendix KK.

- Comment: The substitution of geographically diverse plantation stock for narrow, locally adapted families may increase diversity at the site level, but homogenizes the landscape and thus reduces overall diversity. Address the influence of BLM's tree improvement program at the species, ecosystem, and landscape levels.

Response: We expect to reexamine our tree improvement program and the extent to which we use genetically improved stock, to assure that the genetic diversity of the forest is maintained at both the stand level and at the regional level. The tree improvement program appears to increase our ability to fit naturally evolved and adapted genotypes to forest sites, to maintain the genetic quality of forest stands, and to be useful in increasing resistance of stands to global climate change.

Management of the forest with or without tree improvement has the potential to change genetic diversity. Tree improvement assures genetic conservation of desired genotypes for use in meeting resource management objectives.

Old-Growth Forest

- Comment: The Draft EIS violates NEPA by failing to adequately describe the complexity of old-growth forests.

Response: Entire books have been written describing that complexity, which the EIS recognizes. It is not appropriate for an EIS to repeat at length general information previously published.

- Comment: Preservation of old-growth forests is impossible as trees have finite life spans.

Response: Although individual tree death is a natural part of old-growth ecosystems, Morrison and Swanson (1990) and Agee (1991) showed that old-growth Douglas-fir ecosystems persisted on sites over many centuries. These ecosystems are renewed and regenerated by under-canopy and patchwork fire, and gap mortality. Our EIS examines the ability of the different alternatives to provide old-growth habitat within the general BLM managed landscape. The loss of some older stands from wildfire and other causes, and the death of trees is assumed and is included in seral diversity analyses. It is also assumed that prescribed fire and other practices would sometimes be used to control seral changes within older stands that might cause them to deteriorate away from desired old-growth conditions (for instance shifting away from conifer dominance and toward tan oak dominance).

- Comment: The old-growth inventory should be corrected or augmented to identify old-growth stands meeting the PNW-447 and GTR-285 definitions.

Response: We do not have a specific old-growth (late successional stage) inventory. We have an operational inventory of timber stands within which late successional forests are located and their timber inventory attributes identified. These attributes include overstory and understory timber size, volume, and age classes. An inventory of these forests to determine the character of old-growth is under consideration while the broad range of features needed to be inventoried are determined.

Late successional age classes are fairly evenly distributed over the general landscape. Approximately two-thirds of these stands currently occur in proposed reserves or special

management areas and be about one-third occur in the matrix. Additional inventory of these lands is expected and a determination about their late-successional values will occur in the plan implementation process.

- Comment: Old-growth could be heavily impacted by density management and lose its habitat value.

Response: Stands meeting minimum old-growth definitions are not proposed for density management. Density management is normally proposed only for stands under 80 years of age and must be beneficial to the creation of late-successional forest conditions. Density management of young mono-species/canopy plantations in Late Successional Reserves is to focus on increasing diversity within stands through development of multiple canopies with a mix of species.

- Comment: The amount of rare, old forest that will be lost if the Preferred Alternative is adopted is understated. In the long run only one-third of Old-Growth Emphasis Areas will qualify as old-growth. No uncut, natural forest existing in Old-Growth Emphasis Areas today will survive full implementation of the plans. Explain how clear cuts with minimal retention in Old-Growth Emphasis Areas, even with a 300-year rotation, maintain and enhance old-growth characteristics.

Response: This approach is no longer part of the PRMP.

- Comment: Small old-growth patches may provide necessary ecosystem functions, depending on the relative proximity of other old stands and the general structure of the landscape. Small patches may become quite valuable if they exist in the context of a natural stand that seals edges and provides connectivity. There is no evidence that BLM considered these factors in making land allocations.

Response: We agree that the matrix within which older forest patches exist is a significant component of wildlife habitat, as is the total landscape arrangement of habitat of various sizes, shapes, and seral stages. As specified in the SEIS Record of Decision, project-level NEPA analysis will address effects on the remaining late-successional forests.

- Comment: Solutions to the shortfall of older-aged components in the Coast Range should be analyzed.

Response: The SEIS analyzed a range of alternatives to protect or enhance late-successional and old-growth ecosystems including the Coast Range.

- Comment: Old-growth acreage should be reported by forest cover type.

Response: Reporting such information would be desirable but that information is not currently available. As the forest plan is implemented and further old-growth inventories are initiated, this information will become available. Unfortunately, data on the series, habitat type, or plant association do not currently exist, although the approximate associations can be estimated by province and sustained yield unit. Dominant and understory forest tree information is available and is included in the final plan inventory of forest conditions.

- Comment: The GIS technology should be used to identify patches of ancient forest embedded in mature forests that could develop interior conditions in the near future and to target other areas for restoration of interior forest habitat.

Response: Our Operations Inventory is not detailed enough to identify the features relevant to such projections. Our current GIS system lacks image processing capabilities to identify and classify these areas. The GIS technology was used, however, to help select lands for late successional reserves which will provide much of the long-term interior old-growth forest on BLM-administered lands. Watershed analysis will further consider potential future landscape arrangements.

Ecosystem Management

- Comment: The checkerboard ownership pattern makes it unlikely that the ecosystem management objectives will be achieved.

Response: The PRMP approaches Ecosystem Based Management utilizing a variety of temporal and spatial landscape allocations. Because most of the land BLM manages is in a checkerboard pattern the Ecosystem Based Management vision can not be achieved by BLM alone but through cooperation with other public agencies over a broad landscape. Such cooperation is a strong component of the SEIS decision strategy.

- Comment: Identify how silvicultural practices will lead to the goals of ecosystem management.

Response: Silvicultural systems define the sequence of management practices that take place over the life of stands in a managed forest to meet land management objectives. See Appendix L for structural retention and development of late successional stage systems. Structure in an ecosystem or community is the relationship of physical size, height, and vertical stratification of vegetation. Managing younger stands with low levels of structural diversity toward more complex conditions is important in several land use allocations to meet nontimber objectives.

- Comment: Specify methods for coordinating biodiversity and ecosystem management goals with other landowners, specifically the Forest Service and the State.

Response: The SEIS Record of Decision addresses this topic primarily in the Interagency Coordination discussion in section E of its Attachment A.

- Comment: The silvicultural systems proposed bear no resemblance to natural processes that should be emulated in a program of genuine ecosystem management. The overall effect of the intensive management regime proposed will be a highly fragmented landscape with some stands of old-growth trees but few, if any, other characteristics of an ancient forest ecosystem. Even the pattern of residual trees bears no resemblance to natural mortality. Natural catastrophic fire would leave many well-distributed snags and clumps of green survivors. The scattering of residual trees proposed would not likely survive the first major winter storm.

Response: The rationale for partial tree retention is not so much to precisely parallel natural processes as it is to provide a biological legacy and maintain long-term site productivity. See the FEMAT report, P. IV-34. A legacy is something passed on from one generation to future generations. Like trees that survived catastrophic fires or windstorms, retained legacy trees can be both well distributed and clumped, and would provide a source of seed as well as important habitat components such as large green trees, snags, and eventually, large down logs. While blowdown and breakage is a problem in some locations, experience indicates that most retained trees would remain standing for many years.

Vegetation

- Comment: Contrast the differences between early successional stages resulting from natural processes and those resulting from silvicultural prescriptions.

Response: The structural differences between seral stages resulting from various levels of natural stand replacement and conventional, even-aged management are shown in Figure 3-1. Silvicultural systems can produce early seral stages with a wide variety of structures and compositions depending on the approach taken, including structures and compositions that resemble those originating from natural processes. The primary difference between the compositions of young stands arising from natural disturbance and young stands arising from harvests are lower levels of standing dead and down wood.

- Comment: The plans should include a detailed summary of forest age class distribution through time, with a separation of two stage and multistage stands.

Response: Such projection would be complex and time consuming and would be unreliable until most watershed analyses are done. We believe it would have little utility without information on spatial distribution, which cannot be projected.

- Comment: The importance of conserving relatively rare hardwood forests is virtually ignored. Conversion of hardwoods to conifers should be approached with caution, as there are ecological reasons why many sites are dominated by hardwoods.

Response: Conversion is proposed only in the General Forest Management Area on sites considered natural conifer sites where past management led to conversion of the site from conifers to hardwoods. The PRMP provides for the retention of existing natural hardwood stands and their management for the sustained yield of hardwood resources. Species diversity requirements for reforestation actions, prescribed fire treatments, and subsequent stand management will assure the retention of native hardwood species within stands considered for active management.

- Comment: Display current acreage of major hardwoods groups in conifer dominated stands, mixed conifer-hardwood stands and hardwood

dominated stands. A further breakdown into seral hardwoods and hardwoods commonly present throughout the life of a stand would be helpful. Display projected changes in these hardwood acres by alternatives.

Response: Current data is incomplete and we have little basis for projecting future conditions in a quantified way.

- Comment: Address threats (including those on private lands) to oak and other deciduous woodlands. Identify specific management plans for all hardwood stands.

Response: Naturally occurring woodlands on BLM-administered land are threatened only by naturally occurring losses (such as fire). Where BLM management maintains such stands, an analysis of threats to stands in other ownerships is beyond the scope of the RMP/EIS. Specific management plans for such stands would be a component of implementation plans.

- Comment: Develop and display goals, objectives, and prescriptions for maintaining hardwoods, minor conifer species, and shrubs.

Response: Objectives have been added regarding native plant communities and species. Prescriptions are implicit in the management actions/direction, but would be site specifically developed in implementation plans.

- Comment: Address how current and proposed management complies with the Pacific Yew Act. Do this in addition to the separate EIS being prepared by the Forest Service with BLM cooperating.

Response: Such duplication is neither efficient nor appropriate.

- Comment: The Pacific Yew Act effectively bans even aged management and slash burning in yew habitat. The Draft RMP fails to adequately protect yew trees. The Pacific Yew Act may also require replanting of yew to the same stocking levels as before harvest.

Response: The Pacific Yew Act expired in accordance with its terms and letters to the Congress from the Secretaries of Health and Human Services, Agriculture, and Interior, in January of 1994.

- Comment: The Draft EIS violates NEPA because it fails to disclose how long the proposed yew bark harvest rates can be sustained.

Response: The PRMP/FEIS does not propose any specific rate of yew harvest. A permissible rate of harvest from National Forest System and BLM-administered lands was identified in the Record of Decision on the joint BLM/Forest Service Pacific Yew Management EIS, and its sustainability was analyzed in that EIS.

- Comment: Disclose where suitable mushroom habitat exists and the environmental impacts of logging on mushroom populations.

Response: Data on suitable mushroom habitat is currently limited. The distribution and abundance of these species has not been determined on most BLM-administered lands. Chapter 4, Vegetation, has been expanded to address such impact concerns. In general, mushrooms that are shade tolerant would be favored under Alternatives C, D, and E. Harvest of mushrooms would be done in compliance with appropriate National Environmental Policy Act (NEPA) regulations and Ecosystem Based Management practices. The final BLM Task Force Report, Managing Special Forest Products in Oregon/Washington was approved by the BLM State Director on March 31, 1993. It recommended that the BLM identify inventory, monitoring and research needs that reflect the biological sensitivity, public demand, and interest in any given species of special forest products.

The BLM Forest Ecosystem Inventory Handbook, published in October 1993 allows for collection of data on mushroom species, quantity, and quality. This inventory has begun. Several research studies have been proposed to investigate the productivity and ecological habitat of noxious mushroom species. They would involve the BLM, the U.S. Forest Service Pacific Northwest Research Station, and the National Biological Survey.

- Comment: Harvest of minor forest products (such as salal, beargrass, ferns, moss, and fungi) should be more carefully managed. Collection of such products should be by permit only, and should be monitored and enforced.

Response: Discussions of management for such products has been added to Chapter 2, and a related element has been added to the monitoring plan. Although authorized harvest would be by

permit only, monitoring and enforcement will not be totally effective due to the scattered locations of the resources.

Riparian Zones

- Comment: Define expected future condition for Riparian Management Areas.

Response: Objectives that do this for the Riparian Reserves have been added for the PRMP, derived from the Aquatic Conservation Strategy objectives in SEIS, Appendix B6.

- Comment: Establish standards for all stream orders, reflecting functional and ecological differences between orders. These factors should ensure shading, water quality, microclimate, floodplain protection, and critical habitat for wildlife and sensitive species.

Response: The Aquatic Conservation Strategy described in Appendix B6 of the SEIS requires that watershed analysis be a principal analytical foundation for management actions. Watershed analysis is required in Key Watersheds prior to land management and will eventually be accomplished for all watersheds. The information from watershed analysis will guide management prescriptions, including refining boundaries of riparian reserves, and developing restoration strategies and priorities.

- Comment: Address riparian area management at the watershed or landscape level, reflecting the current condition of watersheds.

Response: Riparian Reserves are described in Appendix B6 of the SEIS. Standards and Guidelines prohibit activities in Riparian Reserves that retard or prevent attainment of the Aquatic Conservation Strategy Objectives. Widths of Riparian Reserves are based on ecological and geomorphic factors. Those widths apply until watershed analysis is completed, a site-specific analysis is conducted and described, and the rationale for final Riparian Reserve boundaries is presented and approved.

- Comment: Clarify how average widths shown for Riparian Management Areas are utilized in on-the-ground analysis. Include both the documentation and the mechanisms to fully protect all beneficial uses for riparian areas including wetlands.

Response: See previous response. Watershed analysis will identify the riparian reserve widths needed on specific stream reaches, wetlands, or other water bodies, to meet PRMP objectives. Aquatic Conservation Strategy Objectives would be met by completing watershed analysis (including appropriate geotechnical analyses) prior to construction of new roads or landings in Riparian Reserves.

- Comment: It is inappropriate to allow roads in Riparian Management Areas to access timber harvest in other areas.

Response: Construction of roads upslope and near ridges is normally preferred, but occasionally construction within (but toward the outer edge of) a riparian reserve may reduce the total road length needed for harvest access by so much that it is considered environmentally preferable to build the shorter road. Any road construction in riparian reserves would occur only after watershed analysis.

- Comment: BLM's proposed riparian management on perennial streams is only about half as wide as recommended by the Scientific Panel on Late-Successional Forest Ecosystems, which said, "Establishing wider riparian corridors on Federal lands *across the landscape* will provide additional protection from disturbance and help initiate recovery of degraded areas."

Response: In the PRMP, Riparian Reserve widths on perennial streams have been expanded to the widths recommended by the Scientific Panel.

- Comment: If riparian buffers are not at least three times the height of the tallest trees, windthrow over time will negate the design of the buffer.

Response: Wind firmness varies among sites. We do not believe that such a generality is true.

- Comment: Restoration of riparian areas in poor or deteriorating condition should be a high priority.

Response: Priority will be given to restoration of degraded riparian areas. Watershed analysis will help identify priority areas. Key watersheds will have particular emphasis.

- Comment: Riparian Management Area width should be appropriate to meet water quality standards, supply potential large woody debris and down wood, and manage for sensitive riparian dependent species within a landscape context.

Response: The PRMP riparian reserve widths aim at all these objectives. The opportunity to meet all of them (e.g., large woody debris) will not occur for many decades along some stream reaches.

- Comment: Plant conifers within hardwood-dominated riparian areas.

Response: This will be incorporated in watershed restoration efforts where appropriate.

- Comment: Since tree diameter was selected as a measure of riparian zone health, indicate how diameter thresholds were selected.

Response: The diameter thresholds were those available from our current extensive forest inventory (the operations inventory), which divides forest stands into four diameter classes. The largest class, above 21 inches, was defined as best (good). The second largest, 11 to 21 inches, was defined as next best (fair). The others were defined as poorest (minimal).

- Comment: Since the RMP/EIS determines riparian zone forest age and size based on the timber operations inventory for adjoining up-slope trees, address the inventory's accuracy in riparian zones.

Response: Analysis of the information obtained indicates a general relationship between the age and composition of the riparian community and the instream woody structure that creates fish habitat. The relationship is far from absolute, as we are aware, but the vegetation is a good general indicator of the overall health of a system. In the absence of detailed data on all streams, we elected to use vegetation information as the best method for approximating stream health.

The upslope inventory was used as a guide to the age and composition of the riparian vegetation and this does tend to underestimate these parameters. This would result in some degraded streams being listed as in better or worse condition than they are.

- Comment: Provide tree species and density data and describe factors that may limit future riparian zone maintenance and production, such as water table alteration, in the riparian analysis.

Response: Neither our forest inventory data nor other data are consistently specific enough to be considered valid for this purpose in riparian zones. Watershed analysis is expected to begin to address such concerns.

Wildlife

- Comment: In the analysis of wildlife populations, spatially explicit models were not used (excepting for spotted owls) and hence projections may be overly optimistic.

Response: Spatially explicit models were not available for most wildlife species. The best available models that could be applied using BLM's database were used in the analysis of effects.

- Comment: There is an over reliance on riparian zones for meeting the needs of wildlife communities. Many of the upland species habitats are not considered.

Response: We disagree that there is an over reliance on riparian zones. Upland habitats will be maintained or enhanced in significant amounts in Late-Successional Reserves, Connectivity/Diversity Blocks, and Special Management Areas.

- Comment: The wildlife species have been aggregated into groups that are inappropriate for assessing viability.

Response: Aggregating wildlife species into groups with similarities in habitat requirements compliments the concepts of ecosystem management. We acknowledge that there are some differences between species' needs in a particular group (e.g., amphibians), but there are also broad similarities that can be dealt with more suitably in the development of forest plans often affecting hundreds of thousands of acres. One of the intended advantages of ecosystem management is to avoid the problems inherent on a species by species approach; primarily those of conflicting habitat requirements of individual species. A goal of ecosystem management is to provide a balance of all potential natural vegetation communities suitably distributed across the landscape. Viability assessment is primarily provided by the SEIS and the FEMAT report.

- Comment: Animal species, which occur within the planning area but with no known occurrence on Bureau lands, should be suspected as occurring on Bureau lands unless adequate inventory work shows otherwise.

Response: We agree except where strong field evidence dictates otherwise.

- Comment: The effectiveness of Connectivity Areas as corridors for wildlife movement has not been adequately addressed. Consider their width, current habitat fragmentation within the corridors, the effect of timber harvest on habitat mosaics including anticipated patch size, land ownership pattern, and the different dispersal needs of wildlife.

Response: In the PRMP, the concept has been revised. Connectivity/diversity Blocks will not be confined to specific corridors but will be spread out across the landscape. The idea is to enhance biodiversity and to provide for dispersal of mobile wildlife species. Their effectiveness for the latter purpose is unknown, however, as dispersal needs of most species have not been researched.

- Comment: A 100 or 150 foot Riparian Management Area for lakes and ponds and other water bodies may not adequately maintain or protect the inherent value and habitat use of the water body and adjacent zone, especially for fish eating raptors.

Response: The PRMP expands this width for lakes and natural ponds. All such Riparian Reserves may be adjusted based on watershed analysis.

- Comment: Conduct a District wide inventory of sensitive wildlife areas and areas with currently high densities of Off Highway Vehicle use.

Response: A partial District wide inventory of sensitive wildlife areas has been accomplished (e.g., nest sites of ospreys, great blue herons, marbled murrelets, bald eagles, spotted owls). Gathering updated information as well as additional species data will be part of monitoring and continuing inventory.

- Comment: Provide management consideration for all species contained on the District that are described the Oregon Department of Fish and Wildlife's 1992 "Sensitive Vertebrates of Oregon."

Response: Most of the species listed in Oregon Department of Fish and Wildlife's 1992 list of "Sensitive Vertebrates of Oregon" are addressed as Special Status Species in the PRMP/FEIS.

- Comment: Identify the species expected to benefit from connectivity areas, and their expected function for each species. Evaluate the ability of the areas to provide these functions, relating to their locations, width, and proposed management.

Address their lowest condition expected relative to old-growth characteristics and its relation to desired future condition.

Response: Not enough is known about the mobility patterns of species to permit a species by species discussion of the value of these areas. In the very long term (200 years) nearly all of the reserve inclusions (primarily Riparian Reserves and Reserve Habitat Areas) within the Connectivity/Diversity Blocks should be in old-growth condition. This will account for about 60% of the lands within the gross mapped allocation. Of the approximately 40% of the lands available for timber harvest, the retention of 12 to 18 green trees per acre within the harvest units coupled with the 150 rotation length should provide some additional old-growth habitat which meets the definitions of such under USFS PNW 447. This should amount to an additional 10-15% of the C/D Blocks gross mapped acreage for a total of 70-75%.

- Comment: A more formalized risk assessment regarding old-growth sensitive species is needed. Alternative E could serve as a benchmark.

Response: Risk assessment regarding such species was accomplished in the regional SEIS.

- Comment: Address how BLM proposes to improve marginal elk forage conditions and to meet habitat effectiveness and herd number objectives.

Response: We propose to conduct some forage seeding to improve elk habitat. The cover quality and spacing indices would likely be improved by establishment of reserves and Connectivity/Diversity Blocks. We also propose a variety of road closure or access limitation measures to reduce road density levels.

- Comment: Where feasible, expand forage seeding programs to benefit big game.

Response: We propose to do some forage seeding. However, this program will necessarily be limited by the reduced level of clear cutting and burning under the PRMP. For example, past observations indicate that forage germination is best after burning has produced black ash seedbeds. This condition is expected to be limited in the future. We are also considering the use of native forage species in future forage enhancement projects. Unfortunately, lack of a reliable source of seeds for native species may also limit our forage enhancement program.

- Comment: The method used to analyze effects on elk populations is flawed. The importance of "optimal thermal cover" to elk is grossly exaggerated. The fastest increase in elk populations ever recorded occurred in the Mt. St. Helen's blast zone, where optimal thermal cover does not exist. There is no evidence suggesting that "winter kill" of elk, which thermal cover attempts to ameliorate, is a problem in western Oregon.

Response: The Wisdom Model was developed for forest ecosystems and is considered the most widely accepted professional model to analyze elk habitat condition at this time. It was developed by professional biologists and represented the best information at the time of its development. Validation of the model is the subject of a research study currently being conducted by Oregon State University in conjunction with BLM.

- Comment: Reevaluate elk habitat conditions using all four habitat variables in the Wisdom model. Identify the current habitat effectiveness for the four variables by subwatershed. Include private lands in the assessment.

Response: Application of the Wisdom Model to BLM-administered lands was modified to reflect shortcomings in BLM's existing database. For example, we currently do not have sufficient vegetation data on private lands to permit an automated analysis of existing elk habitat condition over all ownerships. This limitation was shared with Oregon Department of Fish and Wildlife at an early phase of our analysis. We have, however, developed an automated analysis to evaluate elk habitat condition on BLM-administered lands using the forest inventory database. Three of the four indices are readily calculated using this method. The fourth index, the spacing index, can be calculated using automated methods but it is fairly cumbersome and time-consuming. With scattered private lands in many of the analysis areas, calculating the spacing index for only BLM-administered lands may be less meaningful than the indices produced for the other three variables. Oregon Department of Fish and Wildlife has developed criteria to approximate the spacing index by using proportions of cover and forage.

Our automated procedure produces area tables to calculate habitat effectiveness indices and graphical outputs to display habitat condition. The procedure also produces acres of private lands within the analysis area (e.g., watershed or some other polygon). Thus, estimates of elk habitat

condition on private land can be made and proportionally related to total acres of private land. Due to the very limited amount of thermal and optimal thermal cover on private lands, plus the lack of forage seeding on much of this land, index levels are anticipated to be even lower than the calculated values for BLM-administered lands only. This was the case in one sample district where this analysis was done using our gross vegetation theme as the database from which estimates on private land were made.

Evaluation of elk habitat condition was not extended to the subwatershed scale because we believed this to be most properly evaluated during watershed analysis as part of implementation planning than at the RMP/EIS level. This was also discussed with Oregon Department of Fish and Wildlife in the initial phases of our analytical work. At least one district used watersheds for the RMP/EIS analysis, but these areas were much larger than the 1,000-6,000 acre level for use on individual timber sales. However, these large watersheds can be subdivided into smaller subwatersheds that could serve as permanent compartments to keep records on elk habitat condition.

- Comment: Set measurable goals for elk habitat effectiveness on a subwatershed basis. Develop these goals in concert with Oregon Department of Fish and Wildlife.

Response: Goals have been developed by Oregon Department of Fish and Wildlife and are delineated in an Oregon Department of Fish and Wildlife document entitled "Plan Review Criteria to Conserve Fish and Wildlife Resources on Bureau of Land Management Forest Lands in Western Oregon."

- Comment: Establish habitat goals to reduce bull elk vulnerability to harvest and relate to Oregon's elk plan.

Response: The goals established by Oregon Department of Fish and Wildlife for our elk habitat effectiveness indices are related to Oregon's elk plan.

- Comment: Display the amounts of early successional stages in each alternative during the first decade. Identify the consequences to wildlife species heavily dependent on these stages.

Response: The total acreage of each seral stage at 10 years and 100 years is diagramed in

Appendix KK. The basic assumption underlying the analysis of effects in Chapter 4 is that timber harvest on the intermingled private lands within and surrounding the BLM operating area will provide adequate amounts of suitable early successional habitat for species dependent only upon the early seral stage regardless of the alternative chosen by BLM. Our planning alternatives would add varying amounts to this base. Many species that use the early seral stage for one or more life needs are also dependent upon the presence of other habitat components within the early seral stage, such as snags, fallen trees (logs), residual green trees, etc. Consequences to these species are described in Chapter 4; see, for example, *Purple Martin & Western Bluebird* under "Effects on Special Status Species", and *Secondary Cavity Users* under "Effects on Wildlife."

- Comment: Identify concrete proposals to create snags, including estimated budgets. Adjust Allowable Sale Quantity to account for snags created over time.

Response: Among the objectives of the PRMP are to manage forest lands to retain 1) specific amounts of potential snag habitat following timber harvest, and 2) all existing snags to the extent possible given essential considerations for worker safety. Amounts of timber volume to be foregone for this purpose have been estimated and the Probable Sale Quantity adjusted accordingly. The PRMP commits to provide the specified amounts of habitat through a combination of methods including retention of existing snags and creation of snags from green trees through timber sale contract requirements and by separate projects, whichever is the most efficient use of public money. "Concrete proposals" to create snags can be developed only on a site specific basis. Such proposals will be identified in implementation plans, which follow completion of the RMP/EIS.

- Comment: Clarify assumptions and goals in modeling green tree retention and snag creation.

Response: The goal of snag modeling is to describe the process of snag management and quantify impacts on both the timber and wildlife resource. There are three basic assumptions:

1. Green trees retained following timber harvest will be converted to snags at future points in time so that adequate amounts of snag habitat will be available through the life of the new stand.

2. Concerns about worker safety will prevent retention of all existing snags and in some situations snags will have to be created from green trees after timber harvest.

3. Green trees and snags left after harvest will become large woody debris when they fall.

- Comment: There should be an assessment of wildlife usage before any snags are removed.

Response: All timber sale planning will include field inspections by biologists for the purpose of assessing current and future use of the planned sale area by priority species of wildlife, including cavity users.

- Comment: The Neitro et al. model used to address the affects of wildlife tree retention on wildlife is plagued by a myriad of problems. These problems cause the model to grossly overestimate the number of wildlife trees required to maintain healthy populations of dependent wildlife species. There is no documentation or justification for the even higher levels of wildlife tree retention proposed in the Preferred Alternative.

Response: Evidence presented by scientists at Oregon State University indicates the opposite; that the model underestimates the amounts of habitat needed by woodpeckers since it is based only on woodpecker nest tree requirements and does not consider woodpecker forage substrate needs. Furthermore, the model does not consider the nest tree needs of several species of secondary cavity users that require tree cavities in early and mid seral stages. For example, snags are needed in new timber harvest areas to provide nest sites for secondary cavity users such as bluebirds, purple martins, and other swallows even where surrounding forested areas have enough snags to serve as nest trees for 60 percent of optimum woodpecker populations.

- Comment: Identify by alternative how many acres of suitable pileated nesting habitat will be available and its distribution. Do the same for suitable goshawk nesting habitat.

Response: Available data does not make such information readily projectable. We believe the key question is species viability or persistence, which has been addressed in the SEIS.

- Comment: Use the Neitro et al. model to estimate current populations of woodpeckers for all seral stages and allocations. Weight these estimated

populations by acres of each seral stage to obtain an overall population level. Display those data.

Response: The analysis was accomplished in this way. Detailed data are available on request.

- Comment: Develop comprehensive prescriptions for managing snags to achieve and maintain the population goal for woodpeckers.

Response: The focus of the PRMP is its objectives. Prescriptions must be site specific, varying with existing forest stand conditions, broad Ecosystem Based Management objectives and (where appropriate) timber management objectives. They will be developed in site specific plans.

- Comment: Assign population goals for woodpeckers for all land allocations.

Response: The PRMP allocations compartmentalize much of the landscape outside Late Successional Reserves into typically small patches of General Forest Management Area and Connectivity/Diversity Blocks separated by linear Riparian Reserves. In such a landscape, separable population goals by allocation are meaningless. Over the long-term, sizes of snags retained would be suitable for all species although other habitat conditions may influence which species are most abundant. Pileated woodpeckers, for example, are expected to be more abundant in the reserves and northern flickers may be the most abundant woodpecker in the General Forest Management Areas.

- Comment: Use the snag recruitment model by Neitro et al. to estimate how quickly green trees retained as future snags will actually become snags. Analyze whether potential snag densities will occur in the next 20 years if natural snag recruitment is insufficient. If it is insufficient, prescribe an active program of snag creation.

Response: Tree spacings that will result from density management and thinning under the PRMP are expected to forestall natural suppression mortality. There will not be natural recruitment of snags in amounts necessary to sustain viable population levels of woodpeckers on lands intensively managed. Snag creation through an active program is, therefore, vital to the success of the PRMP. Snag creation prescriptions will be developed on a site specific basis.

Appendix I

- Comment: Evaluate the resource trade offs of managing at the 80 percent population level for woodpeckers, recognizing that the Neitro et al. model likely underestimates woodpecker requirements for snags.

Response: The actual overall long-term effects of the PRMP approximates this level.

- Comment: The lands should not be managed so intensely as to have to require artificial snag creation to provide viable populations of snag dependent species.

Response: Snag creation is planned primarily for future timber harvest areas in second growth stands that may become essentially devoid of snags. (Note: See note two responses prior.)

- Comment: BLM does not adequately address the importance of its proposed management activities on neotropical migrants. Consider the July 1992 study on neotropical migrants in Pacific Northwest national forests.

Response: The habitat requirements of the 165 species of neotropical migrants as a group are so diverse as to preclude analysis of the group as a unit. The BLM is in the process of developing a monitoring strategy to begin to acquire the data necessary to analyze the impacts on each species of neotropical migrant. Currently, impacts of the various alternatives are identified for only a few priority species, some of which are neotropical migrants; for example, osprey, sharp-shinned hawk, Coopers' hawk, and purple martin.

- Comment: Address how logging practices are affecting the pond turtle.

Response: A discussion has been added.

- Comment: Road closure programs and limited recreation access during periods critical to elk can effectively mitigate the security needs of the species. The alternatives which are most likely to negatively effect elk are Alternatives C, D, E, and to a slightly lesser extent the BLM's Preferred Alternative.

Response: The PRMP has objectives for road access management that are not found in Alternatives NA, A, or B. This access management is one of the features incorporated into the PRMP specifically to reduce adverse impacts to elk. Habitat analysis was accomplished using the Wisdom model, the most widely

accepted model for this purpose. This analysis showed the PRMP to be one of the best alternatives for elk management.

Fish

- Comment: Specify goals and objectives for fish habitat.

Response: Objectives have been added for the PRMP.

- Comment: What is termed fish habitat enhancement is actually restoration or rehabilitation.

Response: It is enhancement of the current condition, but often is also restoration or rehabilitation.

- Comment: BLM proposes a substantial amount of costly stream habitat restoration. Past restoration work in the Northwest has been poorly designed and has done little to reverse declines of many stocks. Future work should be planned on a 3rd-5th order watershed basis, be based on a thorough pretreatment inventory, have clearly defined goals and objectives, and have a short and long-term monitoring plan. It should not be a substitute for protecting fish and fish habitat from the effects of land management activities. It should not be conducted in watersheds where watershed processes are not functioning naturally or where the effects of public and private land management activities combined will render restoration ineffective. It should be prioritized based on the needs of threatened stocks of anadromous fish.

Response: Watershed analysis will precede expensive restoration work. An interdisciplinary team will determine actual management prescriptions to achieve watershed standards based on site specific requirements. It has been determined, however, that simple protection of existing aquatic habitat is not enough. Much of the aquatic habitat in the Pacific Northwest is in a degraded condition, thus, aggressive restoration efforts are necessary if depressed fish stocks are to be rebuilt.

The BLM has been in the forefront in developing, monitoring, and evaluating habitat restoration projects. These projects have been evaluated not just by the BLM, but in cooperation with Oregon State University, Coastal Oregon Productivity

Enhancement Program, and the Oregon Department of Fish and Wildlife. Evaluation has clearly shown that restoration projects can increase the survival of salmonids from eggs to smolts. However, recovery of the stocks depends on overall management of the stream and estuary habitat, and the harvest in the ocean and rivers. The BLM has no control over management of habitat on nor over fish harvest management on lands that are not BLM-administered.

- Comment: The Final RMP/EIS should include a comprehensive stream biological survey; identify watersheds supporting productive or valuable remnant populations or communities of native fishes, amphibians and other aquatic biota; and delineate a well distributed network of least disturbed watersheds.

Response: We recognize the need for this information; however, it is not available at this time nor can it reasonably be acquired in a timely manner for inclusion in the PRMP/FEIS. As a part of implementation of the RMP, we will move to acquire this data. The BLM has recently released a strategy for the management of anadromous stocks in the Columbia and Snake River Basins, which has as a central focus watershed level planning. A similar plan has been developed for the coastal areas of the Pacific Northwest and also includes watershed level planning as a central focus. This plan, which will be published soon, is a road map of how the BLM intends to manage the fisheries of the region to meet the goals and objectives set forth in the PRMP.

- Comment: Sensitive and priority aquatic habitat should be identified. Recovery and restoration plans should be developed based on a watershed analysis. In addition, fish habitat and sediment yield should be utilized to establish and predict habitat quality. Summarize subwatersheds where timber harvest emphasis would occur.

Response: Priority and sensitive habitats are identified in the FEMAT report and have been taken into account when developing the PRMP. Also see previous response. Sediment yield is not reliably predictable. Watershed analysis will be accomplished eventually on all watersheds and before management actions in key watersheds. Until that level of analysis is complete, it is not feasible to identify sub-watersheds where timber harvest emphasis will occur.

- Comment: Consider the information on aquatic resources in the Draft Recovery Plan for the

Northern Spotted Owl, the Forest Service's strategy entitled PACFISH, and BLM Washington Office Information Bulletin 92-642.

Response: We are aware of this information and have considered it.

- Comment: Identify and discuss the status of various wild anadromous fish stocks and habitat conditions within whole watersheds, not just BLM-administered portions. What is the relationship between habitat conditions and the severely depressed status of many stocks?

Response: We actively seek to cooperate with other landowners in developing and implementing plans for management of aquatic habitat. We are cooperating fully with Oregon Department of Fish and Wildlife efforts to identify and protect genetically unique fish stocks, and with management proposals to protect and enhance salmon and trout communities. However, BLM does not have any control over management of habitat on private lands, which is a State responsibility. While we acknowledge that activities on private and State lands may affect habitat on BLM-administered lands, we recognize that private and State lands are managed under State regulations. We have taken these differences into account during impact analysis.

Habitat condition undeniably plays a role in the depressed status of many stocks; however, many factors other than habitat condition affect fish production (i.e., harvest, ocean conditions, etc.). These factors are not under the control of the BLM.

- Comment: Analysis of impacts on fish is flawed because it fails to consider management activities on private lands, assumes that past damage will improve on its own, and ignores effects from continued timber harvest in upland areas.

Response: See previous response.

A component of the methodology used to establish condition ratings was the related factor analysis. This analysis adjusted the condition arrived at using the vegetation information to account for such related factors as the amount of new and existing roading, soil stability, and adjacent land management practices, to name a few.

- Comment: The methodology for stream (fish) habitat quality rating is very simplistic and has not

been peer reviewed. The conclusions about existing habitat quality are wildly optimistic.

Response: Roseburg District has conducted some extensive habitat inventories. Analysis of the information obtained indicates a general relationship between the age and composition of the riparian community and the instream woody structure that creates fish habitat. The relationship is far from absolute, as we are aware, but the vegetation is a good general indicator of the overall health of a system. In the absence of detailed data on all streams, we elected to use vegetation information as the best method for approximating stream health. However, this information was not the only information used to establish condition ratings. An equally important component of the methodology was the related factor analysis. See previous response.

We are aware of the work done on stream ecology on Mt. St. Helens, as well as in other geographic areas. This work was taken into consideration in developing the procedures we used. Analysis in any situation needs to be developed on the basis of conditions in that location, with information on other locations providing only general guidance. The upslope inventory was used as a guide to the age and composition of the riparian vegetation. This does tend to overstate the age and size of the riparian vegetation in the northern Districts tend to underestimate these parameters in the southern Districts. This would result in the classification of some streams as in better or poorer condition than they actually are.

This analysis method has been peer reviewed internally but has not received peer review outside the agency. Oregon Department of Fish and Wildlife has reviewed this methodology and provided helpful comments. We recognize that up-to-date stream inventories are needed but funding has been lacking. The data collected so far was used in developing this methodology.

- Comment: The Fisheries Productivity Rating System needs further explanation.

Response: Refer to Appendix 4-15 in the Draft RMP/EIS for a description of the methodology used to calculate fish production capability. Data relating fish production capability to habitat condition was provided by Oregon Department of Fish and Wildlife. This data was considered to be the best available information and appeared reasonable when compared to habitat production capability data the BLM has.

Our fish production estimates represent the potential capability only. Many factors other than habitat condition affect fish production (i.e., harvest, ocean conditions, etc.) and actual production will vary as a result of these other factors. Since these factors are not under the control of the BLM the actual fish production under a particular alternative will likely vary from what was predicted. However, the method used does illustrate the relative difference among alternatives, thus providing a basis for management decisions.

- Comment: Effects on fish should be measured against a desired future condition, not against current conditions.

Response: An environmental impact statement normally addresses the *changes* that alternative courses of action would cause from the present condition. Desired future condition or resource condition objectives, in the planning process, are developed for a specific alternative. They would differ for each alternative. The objectives provide the standards for monitoring the effects of the implementation of the plan, while the current conditions establish the baseline against which the effects on fish by the various alternatives can be measured. Although the FEMAT team made regional comparisons of some of their alternatives against independently derived possible target conditions, those subjective ratings could not be replicated by BLM personnel on a single district basis.

- Comment: The tables showing potential fish production capability are unproved, most likely inaccurate, and are misleading.

Response: Data used in developing fish production estimates was provided by Oregon Department of Fish and Wildlife. This data was considered to be the best available information and appeared reasonable when compared to habitat production capability data we have collected. However, estimates of future condition for all resources are unproven; the state of the art in resource management make such estimates unprovable. Many factors other than habitat condition affect fish production (i.e., harvest, ocean conditions, etc.) These factors are not under the control of the BLM. Thus, our fish production estimates represent the potential capability only and actual production will vary as a result of these other factors.

- Comment: The mechanisms by which the 200-year increase in fish populations would occur are

not provided. Acute and chronic stressors such as upstream sediment inputs from unstable slopes, landslides, roads and mining may continue to degrade fish habitat. In addition, migratory species may be limited by habitat utilized at a single life history stage.

Response: The recovery of the riparian zones to healthy, properly functioning condition in respect to large woody debris recruitment, streambank stability, shading, organic input, etc. is considered to be the method by which these increases in fish populations will occur. The 200-year time frame is a reflection of this logic and reflects the length of time that can be expected to be required for recovery of these riparian zones. It is expected that a healthy, properly functioning riparian area provides all habitat components necessary for all life stages. The related factor analysis utilized in combination with riparian quality to determine habitat condition takes into account such factors as sediment production from roads and upland areas, impacts originating from other ownerships, and other activities on and off BLM-administered lands.

- Comment: Use of the average diameter of trees to predict fish habitat trends is too simplified. Much more detailed information on stream variables related to fish survival is needed, such as substrate imbeddedness, stream temperature, presence of deep pools, dissolved oxygen, sedimentation, etc.

Response: These factors were considered when performing the related factor analysis used in combination with the riparian condition method.

- Comment: There is no discussion of the very real possibility of loss of viability of some aquatic species, particularly anadromous fish stocks of concern. Consider the recent finding by Oregon Department of Fish and Wildlife that their index of coastal abundance greatly overestimated escapement and the status of wild coho stocks may be bleaker than once thought.

Response: We are aware of these findings. The SEIS addressed viability of aquatic species. Although we do not manage species, we are cooperating fully with Oregon Department of Fish and Wildlife efforts to identify and protect genetically unique fish stocks, and with management proposals to protect and enhance salmon and trout communities. The riparian and stream management in the PRMP will be adequate to protect existing habitat and to promote long-

term recovery of diminished habitat on BLM-administered lands. However, the fate of many fish stocks will be influenced more by activities on other land ownerships and by regulation of fishing. Funding priority for rehabilitation and restoration efforts will reflect stock status.

- Comment: Identify how closely the expected condition of the fishery resource will approach maximum potential.

Response: It is not possible to determine what the maximum potential is and the BLM does not control all factors affecting fish production.

- Comment: The lands in the suitable timber base classified as fragile likely represent only the BLM's most erosive and landslide prone areas. Additional fragile lands occur throughout the Coast Range, making most logging and road building potentially hazardous for fish habitat.

Response: The most erosive and landslide prone areas fall into Timber Production Capability Classification categories excluded from planned timber harvest. The potential hazards of Timber Production Capability Classification categories available for harvest are taken into account during the design of timber sales and associated roads and appropriate measures incorporated to minimize impacts. For further discussion, see previous comment responses on Soils/Site Productivity.

- Comment: Explain the information in Table S-2 of the Draft RMP that shows no change in fishery in Canton Creek in the next ten years.

Response: The time needed for stream habitat to recover is related to replacement of large conifers in the riparian area and the reintroduction of large woody debris into the stream. Depending on the extent that these habitat components are missing, habitat improvement may take decades or even more than a century in some cases.

- Comment: Withdraw the North Umpqua and other critical fishery watersheds from mineral entry or extraction.

Response: Limited mining activity in the Roseburg District and enforcement of present laws and regulations are considered sufficient to prevent significant impacts without withdrawing the land from mining activity.

Special Status Species

- Comment: Note the current status of species specific management plans. Clarify whether site specific management plans will be developed for the bald eagle and peregrine falcon, and when.

Response: Site specific management plans termed Conservation Agreements are being developed for Special Status Plants. These are interagency plans developed between BLM, U.S. Forest Service, and U.S. Fish and Wildlife Service, which identify and schedule specific management actions to prevent listing and to conserve these species. Several others are scheduled for 1994. For animal species such as the bald eagle and peregrine falcon, the objectives of recovery plans will be the basis of BLM management. Plans will be developed and maintained using information from applicable watershed analyses.

- Comment: Indicate what measures (inventories, buffers, site-specific management plans, consultation with the Fish & Wildlife Service, etc.) will be implemented to assure that actions such as timber harvest, road construction, grazing, and recreational use and development do not adversely affect listed species.

Response: Federally listed species and/or habitat will be managed in compliance with the Endangered Species Act and BLM national and State Office policy, which will include conferencing and consultation with the U.S. Fish and Wildlife Service. For species with completed recovery plans, management activities will be consistent with the plans' objectives. Inventories and identification of buffers, seasonal restriction, and other project modifications are part of the process to ensure that actions are in compliance.

- Comment: Identify the species expected to benefit from the Old-Growth Emphasis Areas and how the Old-Growth Emphasis Areas will contribute to habitat, forestalling listing, and/or delisting of each species.

Response: Reserves were not specifically intended to benefit special status plants. All special status plants, except for Assessment Species, will be managed in a way that will not contribute to the need to list, regardless of land allocation.

In general, animal species that will benefit from the Late-Successional Reserves are those whose daily and annual life cycle needs require habitat components provided in late-successional conifer forests. Those species are identified in Appendix Z. Some of these are currently Federal Listed species, some are Candidates for listing and others are not now nor will they probably ever be in need of listing protection, but all benefit from the habitat conditions inherent in the Reserves. For example, the Reserves follow the intent of the Designated Conservation Areas of the Final Draft Northern Spotted Owl Recovery Plan. This plan and its components are designed to recover the spotted owl populations, but also provide habitat for a host of other species where the occurrence is in common. The Late-successional Reserves are large tracts that will eventually have significant acreage of older forest. Species such as the marbled murrelet, goshawk, bald eagle (where the Reserves are near water bodies) salmonid fishes and numerous species of small mammals, birds, and amphibians will be able to sustain populations in these areas.

A Reserve may contain several populations of a given salamander species while for more far ranging species such as the goshawk and spotted owl it may require multiple Reserves to serve the needs of a population. Key items in the Fish and Wildlife Service's review of whether a species should be listed or delisted are whether the habitat of the species is being lost and whether there are regulatory mechanisms in place to protect the species. The Reserves serve as cornerstones for meeting both of these items of concern and thus should weigh heavily in the listing/delisting considerations. The viability ratings in the SEIS also provide an indirect identification of species expected to benefit.

- Comment: The Federal status of several species is incorrectly noted.

Response: The special status species list has been corrected and updated.

- Comment: Consultation under the Endangered Species Act regarding effects of activities on mining claims on Federally Listed threatened and endangered species is the responsibility of BLM.

Response: Consultation with U.S. Fish and Wildlife Service for mining is the responsibility of the claimant if there is a notice of intent in place. It is the BLM's responsibility if there is a plan of operation filed. However, we would certainly be in contact with the U.S. Fish and Wildlife Service in

both cases, regardless of responsibility for consultation.

- Comment: A minimum viable population of a species is on the brink of catastrophe. Managing special status species for populations above the minimum is recommended.

Response: Our goal is to manage for healthy populations of all fauna and flora, including special status species, by employing policies, land use allocations, and management direction that will ensure stable populations.

- Comment: Inventory sensitive wildlife species.

Response: Inventories are an ongoing process but are not a standard decision element of an RMP. Wildlife inventories are very expensive and thus subject to budget constraints.

- Comment: The Draft EIS violated NEPA by failing to adequately analyze the effects of the RMP on marbled murrelets, songbirds, declining amphibians, western pond turtles, many important species of plants sensitive to disturbance and candidates for the endangered species list.

Response: In the PRMP/FEIS, those effects are analyzed at a level of detail consistent with what is known about the habitat needs of the many species at issue. They are also analyzed in the SEIS. Additional research is needed about the habitat needs of most such species before more can be said. Monitoring is a critical component of the RMP and will increase our knowledge of habitat needs. This information will be used to adjust management strategies whenever necessary in order to ensure that management objectives are achieved.

- Comment: Provide clear direction for site specific protection of other Oregon sensitive (wildlife) species. The Preferred Alternative should contain allocations and management standards for bald eagles, peregrine falcons, wild turkeys, Townsend's big-eared bats, great blue herons, and band-tailed pigeons. It should also commit to develop site specific habitat management plans for each known site and other sites as they are found.

Response: The PRMP contains management direction for various wildlife species. In many cases, allocations such as reserves and special management areas will provide habitat for wildlife species. The concept of ecosystem management is to provide habitat sufficient to meet the needs of

all wildlife species rather than to provide species by species allocations. Chapter 4 provides species by species discussions of how the allocations will serve the species. Where the basic RMP allocations and general prescriptions are not sufficiently detailed to guide management of these species, a Habitat Management Plan will be prepared.

- Comment: The treatment of marbled murrelets is inadequate.

Response: The discussion of marbled murrelets was expanded in the PRMP/FEIS.

- Comment: Commit to a process for identifying all marbled murrelet nesting habitat and flight corridors, in consultation with the U.S. Fish and Wildlife Service. Help fund and accelerate research on murrelet use of BLM-administered habitat.

Response: Provisions in the PRMP call for general inventories of BLM-administered lands for murrelets. Additionally, all proposed project areas will be surveyed according to protocol for murrelets (which requires two years of site visits) prior to implementing any projects. All lands where murrelet occupancy is confirmed will be unavailable for planned timber harvest. Research on marbled murrelets is a priority.

- Comment: Clearly state the impacts on marbled murrelet habitat on BLM-administered lands, not merely the overall future conditions on all lands.

Response: Impacts to the identified marbled murrelet habitat on BLM-administered lands are specifically addressed in Chapter 4.

- Comment: Analysis of murrelet habitat loss should consider areas of mature forests with some old-growth trees as possible murrelet habitat.

Response: The definition of potential marbled murrelet habitat includes mature stands with scattered old-growth trees, thus that acreage was included in the analysis of effects.

- Comment: All potentially threatened stocks of wild anadromous fish on BLM-managed lands should be included on the list of special status species.

Response: The Umpqua Chub is the only fish which we have determined to merit special management consideration on the Roseburg District.

Appendix I

- Comment: Take a more active role in improving habitat for sensitive fish species and stocks. Describe more completely how the Preferred Alternative will affect sensitive fish stocks and how adverse impacts would be mitigated.

Response: The BLM does not manage species or communities; we do manage the habitat on which these species depend. We are cooperating with Oregon Department of Fish and Wildlife efforts to identify and protect genetically unique fish stocks, and with management proposals to protect and enhance salmon and trout communities. Habitat restoration is an important component of the PRMP. We also have an extensive monitoring program for salmon and steelhead.

- Comment: Identify all existing sites for Listed and Candidate plant species. Work with other State and Federal agencies to prioritize their study and monitoring.

Response: All existing known sites for Listed and Candidate species are mapped on our GIS. As new sites are discovered through inventory they will be added to the GIS. Inventory will continue throughout the life of the plan. Extensive coordination already occurs with State and Federal agencies and private organizations. Memoranda of Understanding and/or Cooperative Agreements have been developed with the Oregon Department of Agriculture, the Oregon Natural Heritage Program, The Nature Conservancy, and the Center for Plant Conservation.

In addition to memoranda of understanding and cooperative agreements, interagency management plans called conservation agreements are being developed between all Federal landowners throughout a species range. Cost share agreements are in place for studying and monitoring many Listed and Federal Candidate plant species.

- Comment: Discuss the effects of management alternatives on special status plant species similarly to the discussion of effects on special status animal species. Bureau sensitive plant species get too little attention. Use the Oregon Natural Heritage Plan list for identifying habitats of plant species that could become threatened or endangered.

Response: Special status plants are not discussed individually because of the large number of special status plants and the limited amount of information available on their biology.

More research is needed before more can be said. The Oregon Natural Heritage Plan list provides only species names and status and cannot be used to identify habitats. Location information for the District which is stored in the Oregon Natural Heritage Plan Element Occurrence Database was provided for the most part by BLM personnel. Location information is exchanged between the Oregon Natural Heritage Plan and the BLM on an annual basis under a Memorandum of Understanding and Cooperative Agreement.

- Comment: All plant species on the Oregon Natural Heritage Program sensitive list should be considered in the RMP/EIS. Standards addressing the protection of the Oregon Natural Heritage Plan sensitive species and their habitats should be included in all land use allocations. The orientation of management for sensitive species should shift from individual species and habitats to ecosystems.

Response: Plant species occurring on BLM-administered land, which are identified as threatened or endangered on the Oregon Natural Heritage Plan sensitive lists, are addressed in the PRMP. Species on the Oregon Natural Heritage Plan four sensitive lists have widely varying needs for management. The BLM Oregon State Office special status species policy includes all plant species in the Oregon Natural Heritage Plan lists, according different levels of attention based on the species sensitivity. Plant species on BLM-administered land which are threatened or endangered throughout their range (Oregon Natural Heritage Plan List 1) are Federal Candidate or Bureau Sensitive species; those threatened or endangered in Oregon but more stable or abundant elsewhere (List 2) are BLM Oregon/Washington assessment species and are addressed in the PRMP. Plant species on List 3 ("review") and on List 4 ("watch") are BLM Oregon/Washington tracking species. They are identified by the Oregon Natural Heritage Plan as species needing more information (List 3) and as being of concern but not presently threatened or endangered (List 4). When funding permits, we would collect information on tracking species but special management is not planned.

The PRMP provides management direction for those species considered in jeopardy of extinction and in need of special management attention. This includes Federal Listed, Federal Proposed, Federal Candidate, State Listed, and Bureau Sensitive species. These species were identified from U.S. Fish and Wildlife Service lists of Federal Listed,

Spotted Owl

Proposed, and Candidate species, State of Oregon lists of State Listed and Candidate species and the Oregon Natural Heritage Plan species lists. Management strategies for special status plants do not vary with land use allocation in the PRMP. The PRMP will provide for Ecosystem Based Management to protect special status species.

- Comment: To follow State and Federal guidelines, rare plant habitats should be “protected” rather than “managed.”

Response: Proposed management prescriptions are in full compliance with all State and Federal guidelines. “Protection” alone will not be sufficient for maintaining many plant species. Active management such as prescribed fire may be necessary to maintain or restore the structure and function of certain plant habitats.

- Comment: The Proposed Alternative in the Final RMP should contain a standard set of land allocations and management standards for each of the Special Status Species. These standards should be developed using the expertise of species specialists. Standards should specify where vegetative manipulation is an option.

Response: We have taken the approach of ecosystem management, rather than single species management. Habitats will be managed so as to produce a variety of seral stages and habitat components that meet the needs of many species. Thus, specific objectives for individual species are not identified. However, the PRMP has identified land use allocations and/or management direction for some species or species groups when scientific knowledge permits identification of appropriate standards to supplement ecosystem management. Many of those standards were developed for the SEIS and included in its Record of Decision.

- Comment: Define the scope and direction used for site specific protection of species that may be threatened or jeopardized by timber harvesting activities within all the land use allocations categories.

Response: Management direction for the PRMP has been expanded to address this.

- Comment: There is no scientific evidence that the forest structure needed as spotted owl habitat can be grown over time using long rotation forestry.

Response: Although the evidence may not be complete, there is promise that long rotation forestry may produce suitable spotted owl habitat. For that reason the BLM has initiated research to aid future forest managers who will deal with the issue in the next century. The BLM will maintain all suitable habitat in Late-Successional Reserves and foster old-growth forest conditions in the current young forests in the Late-Successional Reserves as they mature.

- Comment: Address management direction for timber sale areas exempted by the Endangered Species Committee in 1992.

Response: The BLM will not pursue the harvest of any of the previously planned timber sales exempted by the Endangered Species Committee. Harvest may occur at a future time on the same land acres, but the prescriptions will not jeopardize the continued existence of the spotted owl or any other Federal Listed species.

- Comment: Identify the standards under which known spotted owl nest sites will be protected.

Response: At a minimum, at least one center of activity at all known sites of resident single and territorial pairs of northern spotted owls known as of January 1, 1994, will have up to 100 acres of the best available surrounding habitat excluded from timber harvest. Obviously, sites that fall within Reserves or Special Management Areas would have more acres protected surrounding the site.

- Comment: Clarify whether surface occupancy for mining activities will be allowed in northern spotted owl sites.

Response: As a general rule, disturbances such as surface occupancy, would not be authorized within 0.25 mile of a northern spotted owl site. This will vary by site and by season of the year so it is not an absolute exclusion. In instances where the mining activities can occur in harmony with the owl occupancy of the site, efforts will be made to accommodate the mineral resource use.

Appendix I

- Comment: BLM proposed inappropriately to provide connectivity for spotted owls by managing connectivity areas.

Response: The purpose of Connectivity/Diversity Blocks is to serve a variety of wildlife species, not only spotted owls. Connectivity/Diversity Blocks, along with other allocations such as Riparian Reserves and Special Management Areas, are expected to mix with the General Forest Management Areas to provide for dispersal of many species including spotted owls.

- Comment: Explain how the connectivity areas compare to the 50-11-40 rule outlined in the Interagency Scientific Committee report.

Response: Management of BLM-administered lands within a quarter township in a connectivity-diversity block will meet or exceed 50-11-40. In the short-term there will be quarter townships where this is not true but in these areas conditions will not decline and recovery will occur in future decades.

- Comment: The adequacy of connectivity areas for spotted owl dispersal should be demonstrated.

Response: That can only be demonstrated through monitoring. Given other requirements of the plan, it may be impossible to isolate the effects of Connectivity/Diversity Blocks.

- Comment: Several activities are proposed in deferred Old-Growth Emphasis Areas that appear inconsistent with the draft spotted owl recovery plan. These include density management in older second growth and large scale salvage.

Response: Old-Growth Emphasis Areas have been dropped from the PRMP. Activities in Late-Successional Reserves must be beneficial to the creation of late-successional conditions.

- Comment: The potential synergistic effects of low habitat, low population, and reduced dispersal on the survival of the spotted owl should be addressed.

Response: A discussion of this subject has been added to Chapter 4.

- Comment: Assess the viability of the spotted owl under the Preferred Alternative, in the short-term, at the lowest point in habitat development, and in long-term.

Response: An assessment of the viability of the spotted owl included in the SEIS is discussed in Chapter 4 of the PRMP/FEIS.

- Comment: Evaluate the effects of the plan on designated critical habitat.

Response: An assessment of the effects of the plan on designated Critical Habitat has been added to the analysis of effects. No actions will be implemented that will result in the destruction or adverse modification of Critical Habitat.

- Comment: The discussion of the discrepancy between the spotted owl population model's projection of current population and the observed population should include problems with the model.

Response: Since SEIS Appendix J superseded our analysis, we have dropped the McKelvey model as an analytical tool except to acknowledge and reference the SEIS analysis.

- Comment: Assess the risk that density management would negatively affect suitable spotted owl habitat.

Response: There is no density management proposed in suitable owl habitat in the Reserves or in occupied residual habitat areas in the matrix. Otherwise, owl habitat in the matrix is available for management and loss of habitat over time in the matrix is acknowledged.

- Comment: Evaluate the level of risk to the stability of spotted owl populations under the Preferred Alternative.

Response: The Chapter 4 discussion has been expanded to describe risk in general terms. The SEIS evaluates risk from implementing the new PRMP strategy as it integrates with other Federal plans.

- Comment: Provide information on the quality and distribution of suitable spotted owl habitat after 100 years. Identify the extent to which the development of future habitat is dependent on the ability to create or speed its development through silvicultural practices.

Response: Information on the acreage of suitable habitat expected on BLM-administered lands after 100 years is provided in tabular form in Chapter 4. The development of quality habitat is dependent on time. The younger stands of today that hold the

key to habitat recovery will be 100 to 140 years of age in 100 years. In this age range, stands are beginning to move from primarily foraging substrate to furnishing high quality foraging and nesting habitat. The role of density management is to diversify the stands structurally so that they might attain the higher quality status at approximately 120 years of age. The silvicultural practices serve as an enhancement technique that, if it is successful, will bring habitat on line faster. If it is not successful, however, stand development could be retarded and the time till habitat conditions were reached could be lengthened. Many of the answers to questions on this topic are unknown at this time, but the objective is to apply the management prescriptions over time within an adaptive management framework.

- Comment: Discuss the capability of Old-Growth Emphasis Areas, and the management proposed within them, to maintain population levels sufficient to provide internal stability within the areas.

Response: This capability in relation to Late-Successional Reserves has been fully addressed in the SEIS.

- Comment: Given the lack of experience in developing and maintaining old-growth characteristics capable of supporting viable populations of spotted owls and the lack of detailed knowledge on the components of structurally diverse forest important to spotted owls, the prediction that as much as 40 percent of the Old-Growth Emphasis Areas may be subject to density management increases the risk of catastrophic failure of the network concept. Evaluate the risk of failure of the techniques and the potential impact on the species of such a failure.

Response: The Old-Growth Emphasis Areas have been dropped from the PRMP. The SEIS analyzed the effects of density management in the Late-Successional Reserves.

- Comment: Specifically assess the effects of the Preferred Alternative on spotted owls in the Coast Range province.

Response: This is fully addressed, provincewide in the SEIS.

- Comment: Indicate how spotted owl dispersal will be maintained.

Response: Dispersal habitat for owls will be provided by the vegetation pattern and condition inherent in the management allocations and prescriptions of the Late-successional Reserves, Riparian Reserves, Special Management Areas, Connectivity/Diversity Blocks, and the General Forest Management Areas.

- Comment: Provide rationale or documentation for the statement that isolation is not thought to be a factor under the Preferred Alternative.

Response: The issue of isolation of segments of the population was addressed in the Final Draft Recovery Plan for the Northern Spotted Owl and was accounted for by the size and arrangement of Designated Conservation Areas and the management of the matrix between them. The PRMP adopted the reserve system identified in Alternative 9 of the SEIS and will manage the intervening Special Management Areas, connectivity/diversity blocks, and General Forest Management Area lands to ensure adequate survival and movement of young owls.

- Comment: Discuss the impact of the Preferred Alternative on all quarter townships, not just those in connectivity areas. Evaluate how the deficient (re the 50-11-40 rule) quarter townships are distributed and how their location affects inter and intra-provincial dispersal.

Response: The impact of the PRMP (which incorporates all decisions from the SEIS Record of Decision) on dispersal habitat has been addressed in the SEIS.

- Comment: The management regime for spotted owls and marbled murrelets should be designed to meet at least minimum provisions of the U.S. Fish and Wildlife Service recovery plans.

Response: The PRMP is designed as the BLM implementation of the Final Draft Recovery Plan for the northern spotted owl. It varies from the Final Draft Recovery Plan due to the considerations of other resources. It closely conforms to the Record of Decision for the SEIS which is intended to constitute the BLM and Forest Service contribution to the recovery of the northern spotted owl. The Draft Recovery Plan for the marbled murrelet had not been released as the PRMP was prepared for printing.

- Comment: While the long-term conditions of the spotted owl are of interest, the short term impacts and an evaluation of conditions at the lowest point

are critical to assessing the impacts to the species. The discussion of short-term and medium-term effects should be expanded.

Response: This discussion has been expanded.

- Comment: Discuss the fact that spotted owls have been found nesting in younger trees.

Response: Spotted owls have been found to nest in younger forests with significant older forest structural characteristics. Recent regeneration harvests, especially clear cuts, have not retained these structures, including large retention trees, numerous snags, and large amounts of down woody debris.

- Comment: The number of known owls or pairs of owls keep rising and as of now the number of owls known to exist far exceed the numbers that were estimated in the past.

Response: The increase in the known number of spotted owls in recent years is primarily due to the much increased intensity of surveys during the breeding season. The apparent increase in population size does not contradict the projected decline of the species rangewide. Neither does the number of known spotted owls exceed estimates from Thomas, et al (1990) or the Final Draft Recovery Plan.

- Comment: Due to the controversy surrounding the type of science employed, the BLM's documentation must disclose not only the assumptions used in estimating land management impacts on the species, but the associated level of confidence as well.

Response: Some of the documentation is listed in Appendix 4-16, 4-17, 4-18, 4-19, and 4-20 of the Draft RMP/EIS. Additional documentation has been provided in the SEIS.

- Comment: Provide an indication of how Residual Habitat Areas will be placed on the landscape and the reason they are only provided for eight decades.

Response: Although no longer called Residual Habitat Areas, they are allocated as 100 acres of the best suitable habitat around owl activity centers as of 1/1/94. The eight-decade deferral is no longer proposed; they are now classified and managed as Late-Successional Reserves.

Special Areas

- Comment: Protection of Areas of Critical Environmental Concern instead or additionally as Outstanding Natural Areas is needed to assure truly meaningful agency protection.

Response: Outstanding Natural Area is a recreational designation (CFR 8352.0-2) and may not be appropriate for all Areas of Critical Environmental Concern. The Federal Land Policy and Management Act requires protection of all the relevant and important natural features for which an Area of Critical Environmental Concern is designated. Area of Critical Environmental Concern designation provides adequate protection under existing law and policy. Secondary designations such as Research Natural Area or Outstanding Natural Area have been provided for some Areas of Critical Environmental Concern only to clarify management objectives.

- Comment: All Areas of Critical Environmental Concern should be posted to prevent unintentional use, and should be closed to off-road vehicle use.

Response: Posting and other protective measures will be undertaken for each Area of Critical Environmental Concern, commensurate with values at risk, threats from inappropriate uses, and physical and biological factors. Actions taken to prevent unintentional uses will depend on the primary values for which an Area of Critical Environmental Concern was designated and will be developed during watershed planning and/or activity planning after completion of the PRMP.

- Comment: A stronger policy is needed to prevent the harvesting of minor forest products from special areas.

Response: A stronger policy has been developed for minor forest products, which are now referred to as Special Forest Products. The discussion of them has been expanded. See Chapter 2, Special Forest Products.

- Comment: Designate the proposed Bushnell Irwin Rocks Area of Critical Environmental Concern/ Research Natural Area.

Response: The Roseburg District decided not to designate the proposed Bushnell Irwin Rocks as an Area of Critical Environmental Concern/ Research Natural Area. Rationale for the District's

decision is provided in the Special Area section of Chapter 4 in the Proposed RMP/Final EIS.

- Comment: Areas proposed for Area of Critical Environmental Concern status should be additionally protected as Outstanding Natural Areas to assure truly meaningful agency protection.

Response: An Outstanding Natural Area is an area which contains unusual natural characteristics where management of recreation activities is necessary to preserve those characteristics. A potential Outstanding Natural Area must first be designated as an Area of Critical Environmental Concern. None of the proposed or existing Area of Critical Environmental Concern sites have been determined to meet Outstanding Natural Area criteria. However, the North Umpqua River Area of Critical Environmental Concern, Cow Creek Canyon, and Umpqua River/Loon Lake road have been designated as a Special Recreation Management Areas which provide special management attention from the recreation program.

- Comment: Designate Odd Lots (also referred to as Lookingglass Viewpoint and Backcountry as an Area of Critical Environmental Concern/ Outstanding Natural Area, and Canton Creek as Areas of Critical Environmental Concern.

Response: These areas have been accepted as nominations to designate them as Areas of Critical Environmental Concern or Areas of Critical Environmental Concern/Outstanding Natural Areas. An interdisciplinary team will determine if these areas meet relevance and importance criteria for designation as Areas of Critical Environmental Concern. Interim management will be provided each nomination to protect the features for which the area was nominated and to ensure there is no loss of future management options.

Cultural Resources

- Comment: The cultural resources discussion does not accurately address governmental bodies of Federally recognized Indian tribes.

Response: The text has been revised to identify such bodies by the appropriate names or collectively refer to them as “Federally recognized Indian tribes” or as “Indian nations.”

- Comment: The cultural resources section of the document should include interaction and consultation with appropriate tribal governments regarding cultural/archeological issues.

Response: The Chapter 2 discussion of Cultural Resources has been expanded to address these interactions. The provision of the Draft RMP to the tribal governments is regarded as the first step in the consultation process. Further interaction and consultation regarding site specific actions of tribal interest can be initiated either by the tribe or by the BLM as tribal concerns are identified. BLM has suggested (and is in the process of consulting with each of the tribal governments) the development of Memorandums of Understanding that will encourage more interaction and consultation between the tribal governments and the BLM.

Visual Resources

- Comment: Describe existing visual conditions along major highways, identify those segments appropriate for visual management, and direct management plans to achieve expected future conditions.

Response: BLM-administered lands have been inventoried, evaluated, and assigned inventory classes based on their relative worth from a Visual Resource Management point of view. Chapter 3 describes the results of the inventory process. The alternatives recommend various classes of Visual Resource Management for BLM-administered lands including lands along major highways. Each Visual Resource Management class has objectives (See Chapter 2 for the prescriptions) and these objectives are used to identify management prescriptions that would maintain, enhance, or preserve scenic values.

- Comment: Long-term visual management objectives should consider the use of silvicultural practices to accomplish the Visual Resource Management objectives.

Response: Such practices will be used in Visual Resource Management Class II and III areas, where consistent with land use allocations protective of other resources. See PRMP Management Actions/Direction.

- Comment: Work with adjacent landowners and others to maintain visual continuity.

Response: BLM has authority or responsibility for Visual Resource Management only on BLM-administered lands. We will work with adjacent landowners who are interested, to coordinate visual resource managements primarily during watershed analysis.

- Comment: Visual Resource Management II areas were not included in the analysis of mineral restrictions.

Response: All Visual Resource Management classes have some effects on activities as some mitigation for visual resources may be required. However, only Visual Resource Management I areas are considered to have any potential for significant modification of proposed mining activities.

- Comment: Where is the location of the 25 acres listed in the Draft RMP as being protected by congressional designation?

Response: Myrtle Island in the Umpqua River, Tye Resource Area is a 28 acre Area of Critical Environmental Concern and Research Natural Area. The management decision is to maintain a natural landscape under the Visual Resource Management Class I objective. This area was established by Executive Order in September 1951.

- Comment: The RMP recommends Visual Resource Management classes that will unnecessarily constrain harvesting operations.

Response: The majority of lands are designated as Visual Resource Management Class IV (396,546 acres - 95% of the District) which do not unnecessarily constrain harvesting operations. The remaining 5% of the District in Visual Resource Management Class I (28 acres), Class II (18,045 acres) and Class III (4,385 acres) will be managed according to their designated Visual Resource Management objectives. Resources within these areas include developed recreation sites, state and federal highways, state scenic waterways, rivers designated under the federal Wild and Scenic Rivers Act, Areas of Critical Environmental Concern/ Research Natural Areas, rural interface areas, and available forest land where Federal ownership consists of more than half of the watershed. Although Visual Resource Management III designations constrain the size, shape, and type of harvest area, the Probable Sale Quantity is not affected.

Wild and Scenic Rivers

- Comment: State whether BLM land management actions that could impact designated State scenic waterways will be coordinated with the State.

Response: This coordination will occur in accordance with the Memorandum of Understanding for River Management between BLM, the Forest Service, and the Oregon Parks and Recreation Department.

- Comment: Clarify how technical procedures were used by BLM to determine wild and scenic river suitability.

Response: Although a number of explicit technical criteria were used to determine which rivers would be found suitable under Alternatives A, B, C, D, and E, the suitability findings in the PRMP were based on a more subjective weighing of these criteria plus public comment on the various rivers.

- Comment: Consider the following additional criteria in suitability determinations.

- a. Aggregated values of a given stream.
- b. Importance of aggregated values on both a Statewide and Statewide Comprehensive Outdoor Recreation Plan regional level.
- c. Importance of smaller "less stellar" streams to program.
- d. Nonlocal as well as local support for a given stream.

Response: These factors were considered in the PRMP.

- Comment: How is it possible to recommend a given eligible river segment for national wild and scenic river status in one alternative and not in another?

Response: To show a range of alternatives the variation is based on the relative importance attached to economic tradeoffs, quality of the river segments, and manageability of Outstandingly Remarkable Values by BLM. The purpose of alternatives is to consider varying management direction and resource allocations.

- Comment: Wild and scenic river suitability is not based on a "Top Four" recognition.

Response: The "top four" assessment was used to structure alternatives B, C, and D but was not

directly used in the suitability determination for the Draft RMP/EIS Preferred Alternative or the PRMP.

- Comment: The cursory suitability studies in the RMPs do not fulfill the BLM policy requirement. It is especially important to evaluate degradation to Outstandingly Remarkable Values should a river not be given wild and scenic status.

Response: The Wild and Scenic River assessment reports in Appendix R were prepared in accordance with BLM policy. Probable degradation of Outstandingly Remarkable Values, should a river not be given wild and scenic status, is addressed in the section of each report titled Effects on Outstandingly Remarkable Values.

- Comment: Another management option does not preclude wild and scenic status. RMPs are not permanent and will no doubt change. BLM should protect those rivers deserving of such status.

Response: The suitability findings proposed considered all those aspects of the question.

- Comment: All values on eligible rivers should be maintained at their current level until Congress acts.

Response: Neither the Wild and Scenic Rivers Act nor any related policy suggest that an agency's negative suitability determinations on eligible rivers will be referred to Congress for action. The standard protocol is that the agency's negative determination resolves the issue.

- Comment: How long will interim management occur on eligible rivers not studied in the RMP?

Response: Since BLM has no plan to study these rivers and neither does any other agency, interim management will probably last a long time.

- Comment: Interim guidelines for eligible Wild and Scenic Rivers result in de facto designation and management of those rivers in violation of the Wild and Scenic Rivers Act and the Federal Land Policy and Management Act. Further, the interim guidelines exceed the Department of Interior's own regulations by excluding timber management activities along these rivers.

Response: The de facto designation is only for the period until suitability is determined or, if found suitable, a river's status is settled by legislation. This is consistent with the Federal Land Policy and Management Act and in accordance with the Wild

and Scenic Rivers Act. Timber management activities are excluded within the full half-mile wide corridor for protection of such rivers only if they are eligible for wild classification.

- Comment: The simple fact that a river has anadromous fish, scenic, or recreational qualities does not qualify it as eligible for further study under the Wild and Scenic Rivers Act.

Response: True. The values must be found to be "outstandingly remarkable" under the terms of the Act.

- Comment: The Roseburg Draft RMP should provide greater protection of Canton Creek.

Response: The protection of Canton Creek has been significantly increased in the Proposed RMP. Compared to the Preferred Alternative in the Draft RMP, Canton Creek has larger Riparian Reserves, and is located in a Key Watershed and Late-Successional Reserve. In addition, Canton Creek has been accepted as a candidate Area of Critical Environmental Concern.

- Comment: The alternative management options for "not suitable" rivers may not give them protection comparable to wild and scenic status.

Response: Eligible rivers studied but found "not suitable" in the Roseburg District (Smith River and Canton Creek) were classified for potential recreational status only. The land allocation along Smith River and Canton Creek is Riparian Reserve with initial widths on these segments of 300 feet on each side of these fish bearing streams. Explicit Riparian Reserve standards and guidelines are land management prescriptions necessary to meet Aquatic Conservation Strategy objectives. The standards and guidelines relate to management of timber, roads, grazing, recreation, minerals, fire/fuels, lands, fish and wildlife, watershed and habitat restoration, research and general riparian area management and provide significant protection for these areas.

- Comment: Not all streams eligible for Wild and Scenic River designations are studied for suitability in the RMP.

Response: Out of five streams found eligible, two were studied (Canton Creek and Smith River). The other three (Cow Creek, South Umpqua, and Umpqua River) were not studied because BLM land ownership along these segments is minor, and the BLM position is that these segments

should be studied by the agencies which have more jurisdiction along those segments. Under interim protective management, all authorized actions on BLM-administered land within a one-half mile wide corridor of these rivers must have either a positive or neutral effect on identified Outstandingly Remarkable Values that resulted in rivers being found eligible/suitable. Interim management for the Roseburg District for eligible recreational rivers involves excluding timber harvest in the riparian reserves, moderate restrictions on development of leasable and salable minerals, and protecting the segment's free-flowing values and identified Outstandingly Remarkable Values.

- Comment: Canton Creek should be designated as a Wild and Scenic River because otherwise, 1600 acres of timber could be harvested and five miles of roads could be constructed which would impact the basin's overall fisheries.

Response: The suitability study done for Canton Creek determined that the fishery and water quality values would be adequately protected under the management regime prescribed for the Canton Creek drainage. Most of the area encompassing Canton Creek will be managed as a Late-Successional Reserve. These areas would be managed to protect and enhance habitat for late-successional and old-growth related species including the northern spotted owl. These reserves are designed to maintain a functional, interacting, late-successional and old-growth forest ecosystem. Additionally, Canton Creek falls in a Riparian Reserve requiring attainment of Aquatic Conservation Strategy Objectives. The Canton Creek watershed has been designated as a Key Watershed. This requires that a watershed analysis must be completed before management practices are implemented. Canton Creek has also been nominated for status as an Area of Critical Environmental Concern.

- Comment: Little River should be studied to determine suitability for Wild and Scenic River status.

Response: An eligibility assessment was made for Little River which determined that this segment did not possess any outstandingly remarkable features which would qualify it for subsequent suitability study.

- Comment: Will there be hazard tree removal along the North Umpqua Wild and Scenic River corridor including along the North Umpqua Trail?

Response: It is the policy of the BLM to remove hazard trees any time there is high risk imposed to public investments or users of public lands. This policy applies to the North Umpqua Wild and Scenic River Corridor. Removal of danger trees is specifically authorized in the North Umpqua Wild and Scenic River Plan.

Recreation

- Comment: Coordinate with State and local government on actions that may influence the Regional Strategies and Community Initiatives programs. Develop a multiple agency recreation planning program to promote recreational development and tourism.

Response: Such coordination is provided for in the plan and discussed where relevant but specific multiple agency planning is an implementation planning process function, not a part of the RMP.

- Comment: Develop trail plans.

Response: Trail plan development is a part of activity planning, which would follow RMP completion.

- Comment: Include provisions for designating areas to meet Off Road Vehicle demand.

Response: It is BLM policy that Off Highway Vehicle use is acceptable wherever it is compatible with established resource management objectives. BLM-administered lands have been designated as limited or closed to motorized use in the Roseburg District to promote safety, protect sensitive resources, and minimize user conflicts. After completion of the RMP, the District will develop an Off Highway Vehicle implementation plan with specific management provisions. 11,681 acres of the Hubbard Creek area have been identified as a "Limited" Off Highway Vehicle area where Off Highway Vehicle where enthusiasts may ride recreational motorized vehicles on a network of roads and trails. A management emphasis will be placed on recreational Off Highway Vehicle use in this area.

- Comment: Strengthen standards and guidelines for off highway vehicle use.

Response: Those guidelines are contained in the Bureau's regulations (43 CFR 8340). Revision of these regulations is beyond the scope of the RMP.

- Comment: Use of the term “Off Road Vehicle, rather than “Off Highway Vehicle,” implies that vehicles leaving roads or trails is OK, which is not so.

Response: The term has been revised to Off Highway Vehicle.

- Comment: Incorporate the Recreation Opportunity Spectrum rating system into the final plan.

Response: Due to the fragmented land ownership pattern and the density of the existing road system on BLM-administered lands in the planning area, the Recreation Opportunity Spectrum is considered largely irrelevant to BLM decisions there.

- Comment: Identify impacts of Off Road Vehicle use on wildlife, including special status species.

Response: The effects of motorized use on wildlife and on a variety of other resources have been added to chapter 4.

- Comment: Clarify Off Highway Vehicle restrictions.

Response: Off Highway Vehicle designations have been clarified and rewritten due to errors and omissions in the draft document. Closed areas to motorized use include six Research Natural Areas, 53 progeny test sites and several hiking trails (2,166 acres). All remaining acreage in the District is limited to official use (7,976 acres) or limited to existing roads and trails (415,446 acres). Within limited and closed areas, future needs and opportunities for motorized use are to be addressed through an Environmental Assessment or Environmental Impact Statement. Decisions to allow new roads or trails in limited or closed areas will be determined by an individual management decision.

- Comment: Provide opportunities for public comment on road closures or restrictions.

Response: In the Draft Resource Management Plan, 19,500 acres of public lands were proposed to be closed to motorized travel to the public. This was provided for public comment. Because the list of spur roads to be closed had duplications, errors and omitted roads in the Draft RMP/EIS, corrections have been incorporated into the Proposed RMP/Final EIS. New areas identified for motorized closure to the public include 517 spur roads (230 miles for a 50 foot wide corridor),

cumulatively totaling 1,395 acres. This designation falls in a limited Off Highway Vehicle use category; the limitation is on the type of user.

- Comment: Close Area of Critical Environmental Concern/Research Natural Areas and Areas of Critical Environmental Concerns to Off-Road Vehicle use to protect relevant resources.

Response: Six Area of Critical Environmental Concern/Research Natural Areas are closed to motorized use; the two Areas of Critical Environmental Concern which are not Research Natural Areas restrict motorized use to existing roads and trails. The North Bank Habitat Management Area which is designated an Area of Critical Environmental Concern is limited to official use.

- Comment: With many acres open to year round Off Road Vehicle use, the preferred alternative places far too much emphasis on Off-Road Vehicles. Instead of trying to increase Off Road Vehicle opportunities, BLM should conduct a districtwide inventory of sensitive wildlife areas and areas with currently high road densities or Off Road Vehicle use. BLM should then remove or close roads in these areas and prohibit Off Road Vehicle use.

Response: The PRMP does not increase Off Highway Vehicle opportunities. Roseburg District's Off Highway Vehicle designations place all public lands in limited and closed Off Highway Vehicle use categories. No lands are open to indiscriminate Off Highway Vehicle use.

- Comment: The Draft RMP relies too heavily on a concentration of recreation opportunities in the North Umpqua Watershed which does not encourage visitors to seek recreation in other parts of Douglas County. Recreation opportunities should be more evenly distributed throughout the Roseburg District.

Response: A majority of the recreation developments are currently located in the North Umpqua corridor. This area's outstanding recreation attributes and settings have attracted the public for many years. Developments have resulted due to public needs and management concerns. The Proposed Resource Management Plan identifies several other recreation efforts outside of the North Umpqua corridor: three new Back Country Byways, two new Special Recreation Management Areas (Lower Umpqua River and Cow Creek Canyon) and 16 potential

recreation sites and 13 potential trails to be developed as funding becomes available. Recreation emphasis will include hiking, camping, day use, educational interpretation, driving for pleasure, river activities, watchable wildlife sites, and bicycling.

- Comment: Identify and inventory every recreational use of district lands, from hiking to 4-wheeling and develop relationships with the user groups.

Response: The Roseburg District's inventory process is an ongoing process for each planning effort such as the RMP and will also be incorporated into landscape analysis. The Recreation Management Information System is a statistical analysis completed annually. BLM is also involved in a public outreach program which enlists the involvement of organizations and interested individuals in the recreation program.

- Comment: Designate the Odd Lot area (T 28 S, R 7 W, Sec. 15 and Sec. 21 including those lands described as Lots 11, 12 and 13) for recreational and natural area purposes. Meet public needs in this area by building hiking trails within the area and a parking lot.

Response: The parcel described does not meet definition of a Special Recreation Management Area, specifically, an area where special or more intensive types of recreation management is needed, recreation management plans are required and greater managerial investment can be anticipated. The parcel falls in an Extensive Recreation Management Area along with the majority of lands in the Tye Resource Area. This is an area where dispersed recreation occurs, with nominal management, consistent with the Bureau's stewardship responsibility. However, the area has been nominated for Area of Critical Environmental Concern/Outstanding Natural Area designation to protect natural features which promote the site's use for recreation purposes.

- Comment: Almost no trails exist or are planned in lower elevation areas closer to large population centers on the Roseburg District. Explain the criteria used to determine which areas were to be chosen for trail locations.

Response: BLM's trail location criteria does not include "lower elevations in close proximity to larger population centers." Even though BLM recognizes advantages for having public hiking trails close to large population centers, the fact is

that BLM manages no lands closer than several miles from Roseburg. These lands have not been identified as suitable for development of trails. Potential trails listed in the RMP have been identified and will be developed as limited funding becomes available. In addition, the following five new potential trails have been added to the list:

Bushnell-Irwin Rocks
Alexander Butte
Cougar Creek
Ben Irving
Red Top Pond Trail

Some of the BLM trail manual location criteria include:

- 1) Use of existing trails as much as possible.
- 2) Terrain and elevation should not be extreme; the trail should be suitable for a wide variety of uses.
- 3) Locate predominately or entirely on public domain, other Federal lands, state, or private lands in descending order or priority.
- 4) Trail grades should contour rather than undulate up and over steep topography; Avoid steep grades and switchbacks.
- 5) Locate trails on stable soils as much as possible.

Timber - Management Direction/Practices

- Comment: Timber supply does not appear to be an important part of alternative formulation.

Response: Timber supply was a consideration, both in the RMP/EIS and the SEIS. Since timber supply concerns paralleled concerns regarding socioeconomic conditions, which had higher visibility, its role in the formulation of alternatives was less visible.

- Comment: Discuss the Bureau's willingness to accept "departure" from nondeclining yield. If management in Old-Growth Emphasis Areas is modified in the future, then harvest in future decades will change.

Response: It is implicit in any decadal or other cyclical planning process that management guidelines will change when the plans are revised. New information from research and monitoring as well as new legislation and policies may drive such changes. In subsequent planning cycles, the

identified sustainable harvest may decline or increase, but is unlikely to stay the same. That perception does not make the currently estimated sustainable timber harvest a “departure”. A departure is a deviation from currently estimated sustainable levels.

- Comment: Explain the rationale for minimum harvest ages.

Response: The minimum harvest age is the youngest aged forest stand to be scheduled for regeneration harvest. Minimum harvest ages were selected to move the managed forest toward a long-term balance in age class distribution and forest condition. Relatively low minimum harvest ages provide flexibility in scheduling regeneration harvest ages for stands. When older age classes on lands available for harvest are limited or their harvest is restricted during the early decades of the plan and younger merchantable age classes are abundant, some of the younger age classes may be subject to regeneration harvest until adequate rotation aged timber is again available. In the long-term most regeneration harvest would take place at or above the target rotation age.

- Comment: The RMP calls for harvest of one-quarter of the stands 100 to 200 years old during the next decade, a rate not sustainable.

Response: The requirement that harvest be sustainable is applicable to harvest from all age classes combined, not to separate age class groups. The PRMP will harvest 8.5 percent of such stands on Roseburg District BLM-administered land in the first decade.

- Comment: There are no provisions for phasing down timber harvest levels. BLM should consider a one decade departure from the nondeclining harvest level.

Response: BLM’s sustained yield mandate makes no provision for such a phase down of planned harvest. BLM lacks such authority, other than for a departure that would cause a negligible subsequent drop below sustained yield levels. The stand conditions on lands available for timber harvest in the PRMP, and overall plan objectives, would cause any significant departure to result in substantial drop in sustained yield levels in future decades.

- Comment: The practicality is questionable of logging patches of five acres or less and of leaving a few green trees per acre (which might be

genetically inferior but would likely overstock planted regeneration areas if not blown over first).

Response: This approach has been de-emphasized in the PRMP.

- Comment: It is inappropriate to include “deferred” old-growth areas and watersheds in the timber harvest assumptions.

Response: The O&C Act requires BLM to identify the sustainable harvest level. There are no longer deferred areas.

- Comment: Lack of trained silviculturists may be a barrier to implementing the proposed silvicultural activities.

Response: We recognize a need to modify our skill mix and provide or obtain additional training.

- Comment: More detailed silvicultural prescriptions are needed.

Response: Due to the somewhat experimental nature of many prescriptions, they must be adaptive and variable from site to site, as we learn from our own experience and that of others attempting active Ecosystem Based Management.

- Comment: It is difficult to determine how proposed silviculture will actually influence stand growth, yield, and structure.

Response: We agree, thus the emphasis on adaptive management.

- Comment: Use of formaldehyde as a binder in fertilizers is illegal.

Response: The use of formaldehyde in fertilizers is not illegal. When selecting products for use, Federal agencies screen for the presence of formaldehyde and select products without it if they are similar in effectiveness. For aerial fertilization, only pelletized fertilizers are considered highly effective because their weight carries them through the canopy to the forest floor. The only binder commonly used for pelletizing is formaldehyde, which forms urea into hardened crystals that not only prevent dusting but protect against caking and provide slow release of the fertilizer.

- Comment: The court injunction on BLM's use of herbicides has not been lifted.

Response: As long as the injunction remains in place, herbicides will not be used. The Probable Sale Quantity is not dependent on the use of herbicides, but in the absence of their use on a long-term basis, costs of management would increase.

- Comment: The plan makes no allowance for failure to meet timber production goals that hinge on the success of intensive management practices. Past efforts to increase yields through intensive management have fallen short of expectations.

Response: During the period of 1984-1992, the Bureau's intensive management investment in western Oregon supported 117 percent of the offered volume, and 90 percent of the planned volume. The PRMP provides for reduction of timber sale offerings below the Probable Sale Quantity if investments in timber management do not support offering the Probable Sale Quantity.

Intensive management practices on all available lands will provide opportunities to increase harvestable materials at some time in the future. These will be especially important as future harvest becomes more dependent on density management and commercial thinning in the 4th-6th decades.

- Comment: The Allowable Sale Quantity should be reduced to reflect realistic assumptions for funding intensive management practices.

Response: Annual timber sale levels will be adjusted to reflect any sustained shortfall in funding for the intensive management practices on which the Probable Sale Quantity is partly contingent. The Probable Sale Quantity itself properly estimates the level of harvest that is biologically sustainable given the agency's management direction.

- Comment: Explain how district management strategy and harvest levels will be revised as a result of new scientific information or change in technology.

Response: The Proposed RMP incorporates the concept of adaptive management. Under this concept, which is explained in detail in the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (this document resulted from the Forest Conference of April 1993), new information will be evaluated and

adjustments or changes in management will be made as needed. Changes may be minor and be accomplished through administrative actions or may be of a magnitude that would require plan amendments. Changes in laws or regulations may be required in some instances.

- Comment: Clarify the maximum harvest unit size in the Roseburg District General Forest Management Area.

Response: There is no specific acreage limit on harvest units in the General Forest Management Area. Harvest unit size will be dependent on multiple factors such as watershed, landscape analysis, fragmentation, etc. In general, harvest units in the General Forest Management Area will usually be limited by the size and arrangement of Riparian Reserves and Late-Successional Reserves including spotted owl activity sites. The arrangement of these other land use allocations will usually cause harvest units to be smaller than was the custom in traditional forest management under the previous plan.

- Comment: Display Roseburg District's historic silvicultural accomplishments versus planned levels.

Response: The shift from traditional forest management to an ecosystem based approach as in the Proposed RMP makes such a comparison impractical for the purpose of comparing alternatives.

Timber - Productivity/ Sustainability/Forest Health

- Comment: Set specific goals and objectives for forest health, detailing how proposed management strategies will address it and what measures will be implemented to improve unhealthy forest conditions.

Response: Ecosystem (forest) health was defined the FEMAT report as the state of an ecosystem in which processes and functions are adequate to maintain diversity of biotic communities commensurate with those initially found there. As such the concept includes the condition and characteristics of stands and landscapes we considered under the topic of Biological Diversity and Ecological Health. General forest health and

ecosystem diversity and function goals were set as part of the PRMP. The result of application of these goals at the planning level and the extent to which the plan alternatives will result in forests that are within the range of natural conditions is described in Chapter 4. Further analysis will occur in landscape analysis.

- Comment: Assess forest health issues, particularly the role of salvage operations.

Response: Salvage operations will harvest the result of accelerated mortality of trees caused by poor forest conditions in periods of drought or other environmental stress. Attainment of higher levels of forest health will result in mortality declining to levels that are normal for relevant seral stages. Salvage does not by itself have a positive ecological effect and may have a negative effect if carried to excess.

- Comment: The BLM plans timber harvest rotations of 60 years, close to the rotation period the FORCYTE-II model suggests is unsustainable.

Response: The FORCYTE-II model suggests that harvest rotations (repeated harvest cycles) of less than 50 years would be unsustainable. Although the proposed plan allows a minimum regeneration harvest age of 60 years, the rotation length for future stands in the GFMA is set to Culmination of the Mean Annual Increment (CMAI), and 150 years for the Connectivity/Diversity Blocks. For the Roseburg District lands, CMAI ranges from about 80 to 110 depending on the site quality, stand type, and cultural treatments.

- Comment: Failure to retain the large, old, insect resistant trees has been attributed to much of the forest health problems presently being experienced in the Northwest.

Response: Resistance to insects is a function of tree/forest vigor more often than size or age of individual trees. Vigorous low density widely spaced trees rarely succumb to insect problems. In stands where density is greater than long-term site potential to support vegetation during drought periods the vigor of trees is lower. Insects, disease, or fire thin out the most susceptible trees.

Size of trees is a factor in resistance to natural disturbance regimes such as frequent fires that reduce forest density by killing trees with thin bark and/or foliage that provides fire-ladders. Older trees are insulated from such thermal intrusion and normally have elevated tree crown bases. Selective

harvesting of older, larger sized trees or removing older stand components has contributed to homogenous stands in fire prone areas, lowering overall stand fire resistance and thus patch survival following catastrophic events.

Not permitting fire to play its traditional (natural) function has had a significant impact on both eastern and western Oregon. In fire prone areas removal of the large fire resistant trees has also contributed to problems in implementing underburning to reduce density of brush/hardwoods/understories of conifers. In moderate to very dense stands the recent drought cycle has placed some of the largest trees within these stands at risk since they have not been able to compete successfully for limited soil moisture. Once weakened or killed by drought, they are readily attacked by insects.

- Comment: Existing conditions of insects and diseases are not addressed or are superficially addressed and quantitative data are not included. Little or no effort is made to project effects of new management practices on future insect and disease impacts.

Response: This is an emerging issue that was not identified during scoping of the plan. Consequently, previous inventories did not address such existing conditions. These concerns are part of the focus of ecosystem management, but too little is known for us to forecast comparative outcomes. As we learn more, our management will adapt.

- Comment: The plan indicates that a control methods will be applied to insects and pathogens if large outbreaks develop. A prevention approach, never allowing outbreaks to develop, is preferable.

Response: A preventive approach is preferred for insect and pathogens as well as dealing with competing vegetation and animal damage. Identifying ecosystem potentials, using density management and underburning appear to be the preferred prevention/control method.

- Comment: Forest health is not defined.

Response: Discussion has been added to Chapter 3, which includes a definition.

- Comment: The Roseburg Draft RMP proposes to convert hardwood stands to conifer stands. This is not consistent with ecosystem management.

Appendix I

Response: Hardwood conversion in the General Forest Management Area and Connectivity Area would be conducted on those natural conifer sites which are classified as Commercial Forest Lands where past management practices have resulted in hardwood stands. Sites classified as hardwood sites would not be converted to conifers. Any habitat manipulation in Late-Successional Reserves and Riparian Reserves would be consistent with the objectives and management direction for those land use allocations.

- Comment: The Roseburg District, which contains a small amount of hardwood acreage, will log in the Bushnell Irwin Rocks area where stands of hardwoods exist.

Response: Hardwood stands are generally not part of the Probable Sale Quantity base and therefore would not be harvested. Individual hardwood trees that are intermingled in conifer stands that are part of General Forest Management Area or Connectivity Area, and part of the Probable Sale Quantity base would be harvested. Some individual hardwood trees may be retained in the harvest units as part of the biological legacy where practical.

- Comment: The Roseburg District Draft RMP does not adequately discuss the importance of biodiversity as a means of maintaining forest health.

Response: The discussion of forest health has been expanded in the Proposed RMP/Final EIS.

Timber - Allowable Sale Quantity

- Comment: Include a discussion of the Allowable Sale Quantity philosophy and identify whether the Allowable Sale Quantity is a goal or a mandated level of timber production.

Response: A discussion has been added to the Introduction to Chapter 4.

- Comment: Clarify growth and yield assumptions.

Response: A general description of growth and yield assumptions and the modelling procedure used for each Sustained Yield Unit is contained in Appendix K of the PRMP/FEIS. The actual yield

tables used are available for review at the District office.

- Comment: The approach used for incorporating genetic improvement into the growth and yield models is inappropriate.

Response: Predicted genetic gains are based on individual tree growth differences in young progeny evaluation plantations. We recognize that it has not yet been demonstrated that these gains are achievable as per unit area yield gains at rotation. Field tests comparing performance of improved and unimproved stock continue to be established to verify the estimates. The Northwest Tree Improvement Cooperative, of which BLM is a member, has initiated a series of genetic gain trials to evaluate genetic gain on a yield per unit area basis. In the meantime, the results from progeny evaluation plantations are the best data we have. The effect on the calculated Probable Sale Quantity is negligible.

- Comment: Adjustments to the yield models for genetics and fertilization are speculative.

Response: Considerable detail under the various treatment conditions and a high level of confidence from demonstrable responses is indeed lacking. There is prediction involved and this prediction is based on the current evidence available.

The expected gains from the genetic selection program in western Oregon are currently estimated from conifer species studies and the results of early progeny tests from the Northwest Tree Improvement Cooperative. From other forest tree studies it has been found that the major changes in growth attributes can be estimated through changes in growth height-age curves. Young stand growth studies are in place throughout western Oregon to provide data on benefits of growth of selected progeny trees. The current young growth of these trees has then been modelled through growth simulators to estimate gain in volume. Tests comparing performance of improved and unimproved stock continue to be established to verify the BLM estimates.

Part of the predictive process is indicating what to do now in order to increase the likelihood of a desired future condition. In the instances of genetic selection and fertilizer, gain is both an increase in volume and the quality/return from the resultant products. We have used average responses for acreage predicted to be treated and will monitor as well as continue research.

Genetic effects will become important in approximately four decades when currently treated stands will be a major part of Probable Sale Quantity when those areas planted with genetically improved stocked undergo thinning and limited regeneration harvest. Thus, the evidence should be available when the gains are being realized. Most simulators demonstrate low impact on current Probable Sale Quantity calculations and are appropriately conservative.

Fertilization and commercial thinning results are more immediate in their effects, as treatment and harvest in commercial thinning can occur within the same decade. Plots exist in western Oregon that indicate the expectation of average gains for treated stands is reasonable. Gains related to fertilization at time of precommercial thinning are more speculative. But again, as in the case of genetic selection, the effects will occur in the future.

- Comment: Compare modeled, first-decade growth to historic, empiric growth.

Response: The inventory design utilized to estimate current standing volume does not permit the derivation of actual decadal volume growth in the forest. Growth of stands is projected in the TRIM-Plus model using empirical yield tables, approach to normality functions, partial-cut yield tables derived from ORGANON, and managed stand yield tables developed from ORGANON. Comparisons of projected growth with empirical data and research data occurs in the BLM paper "Modeling the Future Condition and Yield of BLM Managed Forests" available at the Roseburg District.

- Comment: Compare the stands scheduled for treatment in decade one from the TRIM analysis and those stands scheduled in the operational plan for the first decade.

Response: The ten year scenario is not an operational plan but a modeling tool that selects the quantity of stands with similar age and previous management attributes as those modeled in the TRIM-PLUS harvest simulator.

- Comment: It appears that Allowable Sale Quantity is based on a linear model similar to FORPLAN.

Response: TRIM-Plus is a timber yield model similar in many ways to FORPLAN timber yields. Major advantages were that TRIM-Plus could be run on enhanced IBM/AT compatible

microcomputers and many runs could be made inexpensively and directly available for District personnel access, thus making runs adapted to local conditions and age classes. TRIM-Plus is a binary search model with the capability of structuring the forest in unlimited units based upon site, species, stocking levels, and management prescription. Different minimum harvest ages can be used on component units.

FORPLAN, in comparison, is a linear program optimization model requiring production coefficients for various resource values. It includes many more "inputs" and addresses many "outputs" in addition to timber yield.

- Comment: Display a plot incorporating expected yield per acre at various rotation lengths multiplied by pond value per cubic foot. Include rotations up to 300 years.

Response: There is not enough data to form a realistic basis for such estimates. Speculation on long-term future pond values would be more misleading than useful.

- Comment: Short-term harvest limitations due to emerging concerns over threatened and endangered species, watershed protection, and the cumulative effects may limit Allowable Sale Quantity more than sustained yield constraints do.

Response: The interaction between Probable Sale Quantity calculation and our ten year timber management scenario has permitted us to address cumulative watershed effects as well as is practical in a checkerboard ownership pattern where private actions are speculative. Ecosystem Based Management is intended to minimize the need to add unforeseen restrictions on timber harvest due to listing of additional threatened and endangered species.

- Comment: Use a model such as FORPLAN or SARA, or expansion of your 50-11-40 rule analysis model, to determine the potential harvest acreage by subarea and type in the first few decades of the plan.

Response: The ten year scenario identifies potential harvest acreage, which can be determined by subarea, for the first decade. Extending the scenario into the future would lose reliability due to the adaptive nature of the plan.

- Comment: The Roseburg District should eliminate the constraint of the sustained yield unit concept

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when modeling allowable sale quantities.

Response: The elimination of sustained yield units would require changes in existing laws and regulations and therefore is beyond the scope of this RMP/EIS.

- Comment: Roseburg District's Draft RMP only states that, "Empiric yield curves were generated for unmanaged conifer stands for the average site index for each Sustained Yield Unit". Provide additional information on how Roseburg District's empiric yield equations were developed.

Response: Additional information has been added to Appendix K of the Proposed RMP/Final EIS.

- Comment: Report any reduced yield projections on the Roseburg District for soil compaction.

Response: This has been added to the Proposed RMP/Final EIS.

- Comment: Explain why the Roseburg District does not appear to be sensitive to management intensity assumptions (2.1% impact on Allowable Sale Quantity).

Response: The primary reason for insensitivity to intensive management practices in the Roseburg District is the age class distribution of timber stands in the Probable Sale Quantity base acres.

Timber - Inventories

- Comment: Update the starting timber inventory for Allowable Sale Quantity calculation to October 1, 1993.

Response: For the PRMP/FEIS it was updated to October 1, 1992. Only slight change (increase) occurred in the following year.

- Comment: Use data from the Forestry Intensified Research project, Oregon Department of Forestry, and other studies to continue to validate the accuracy of forest inventory data and further evaluate lands currently determined to be unsuitable. If it can be determined that these lands can be managed for timber production, return them to the suitable base. Likewise, lands in the suitable base, which are determined to be unsuitable through monitoring, should be taken out of the base.

Response: Adaptive management as discussed in the Use of the Completed Plan section of Chapter 2 provides for such adjustments.

- Comment: Revisions in inventory procedures to monitor growth and yield are likely to be necessary.

Response: Revisions in inventory procedures are expected and are currently underway. As part of the adaptive management philosophy, monitoring is a critical function in the forest management plan and this includes growth and yield. As the objectives of management by land use allocation become clearer, expected outcomes are projected, and multiple resource data needs are determined, the inventory systems will be delineated. Peer review is anticipated.

- Comment: How does the starting inventory in the TRIM+ model compare to the Bureau's most recent inventory?

Response: The two inventories are linked, through the base data that they share, but they are quite different in purpose. The most recent BLM decadal Continuous Forest Inventory (CFI) was designed to estimate total timber volume for all forest lands within each Sustained Yield Unit (SYU). The forest base was stratified prior to sampling to enhance the efficiency and accuracy of the inventory. This stratification allocated each stand, an Operations Inventory (OI) unit, by its SYU, site productivity, age group, and predominant cover type. The composite volume estimates for the SYU's, and the district, were computed using strata expansion factors generated from the stratification.

The base CFI data was used to derive empiric yield curves for existing unmanaged stands. It was also used, in conjunction with the ORGANON Growth and Yield Model, to develop yield curves for existing and future managed stands. These empiric yield curves link the base CFI data with the TRIM-Plus model. The starting inventory in TRIM-Plus reflects the marriage of Land-Use Allocations and the empiric yield estimates for 10-year age classes. The TRIM-Plus starting inventory only represents those lands available for harvest under an alternative.

Basically, the CFI inventory represents an estimate of the total amount of timber. Whereas the starting inventory in TRIM-Plus only represents the LUA's associated with and available for timber management as a component of the PSQ.

- Comment: Volume equations and site index equations may be giving rise to biased estimates in the standing inventory.

Response: A bias in estimation in small diameter trees is recognized. BLM volume equations had high volume levels in small diameter trees. The net effect on Probable Sale Quantity calculations dependent on older age classes was not considered worth correcting in the DEIS stage. Since the PRMP Probable Sale Quantity is less dependent on older age classes, adjustments have been made. These newer equations compare favorably with other estimates.

- Comment: Display the acreage of Suitable Commercial Forest Land allocated for enhancement and/or protection of each of the several resources together with the reduction in Allowable Sale Quantity attributable to the allocation.

Response: The land use allocations in the Proposed RMP are not discrete in that they are not specifically for any one or several resources. The land use allocations overlap in many cases and usually serve the purpose of enhancement or protection of multiple resources. For example, Riparian Reserve objectives include both aquatic and terrestrial species. This makes a display of resource by resource allocation and associated reduction in Allowable Sale Quantity impractical except in very broad terms.

Timber - Demand, Supply, and Market Effects

- Comment: Analysis of the timber supply situation is more optimistic than warranted. Portray additional scenarios reflecting lower potential harvests by other parties, as well as uncertainty of implementing proposed BLM sale levels.

Response: The Timber Supply Analysis has been revised for the PRMP/FEIS. The analysis now reflects implementation of the President's Forest Plan on the National Forests, and includes updated private land timber harvest information consistent with the analysis in the final SEIS. Each BLM alternative is analyzed in this updated regional timber supply setting. The result is lower regional timber supply for all alternatives than shown in the draft RMP.

Energy and Mineral Resources

- Comment: Identify State owned mineral rights and acknowledge nonimpact of the plan on those and other existing valid rights.

Response: BLM has no record of the owners of nonfederal mineral rights. The acknowledgement has been added.

- Comment: A mineral inventory should be conducted before withdrawals are recommended.

Response: The withdrawal proposals in the PRMP are based on the sensitivity of other resources to significant damage from mineral exploration and/or development activities as they would be anticipated to occur under present laws and regulations. The formal recommendation to the Secretary of the Interior for withdrawal will be accompanied by a mineral potential report to support a fully informed decision by him.

- Comment: The appendix showing locatable mineral management requirements shows only standard requirements under 43 CFR 3809. Additional restrictions in management areas such as Areas of Critical Environmental Concern, wild and scenic rivers, Visual Resource Management class II areas, and special status species habitat should also be shown.

Response: Such restrictions will be broadly identified on the mineral management restriction maps for the PRMP that will be developed for the Record Of Decision. The effects of such restrictions are site specific and mining plan specific, and cannot be known without a specific proposal to analyze.

- Comment: Categorizing as low potential all areas where there is insufficient information to determine mineral potential is inappropriate.

Response: The relevant column header in the Chapter 3 tables has been revised to reflect that the identified acres are a combination of low and unknown potential.

- Comment: Discuss small scale streamside mining operations.

Response: The Roseburg District has only six small scale streamside mining operations.

Operations within laws and regulations keep their impacts insignificant.

Land Tenure

- Comment: Coordinate with adjoining Districts regarding land tenure decisions.

Response: This coordination has been accomplished.

- Comment: State BLM's responsibility to accommodate the State's 5,202.29 acres of in lieu land entitlement with public domain land.

Response: This has been added to Chapter 3, Land Tenure.

- Comment: The Geographic Information System (GIS) used by BLM should also be used to identify areas of nonfederal land that, if acquired by the Federal government, will facilitate Ecosystem Based Management.

Response: BLM's GIS for western Oregon includes only limited resource data (hydrography) on the intermingled lands. Acquiring the data necessary to explore such a question comprehensively would cost millions of dollars and take several years.

- Comment: If land should be considered for disposal, the Confederated Tribes should have the opportunity to acquire it, either by transfer to the Bureau of Indian Affairs or other means.

Response: Current legislative authority makes no provision for such a preference for Indian tribes. Most lands considered for disposal would only be exchanged for other lands, however.

- Comment: Acknowledge existing or potential State ownership claims on navigable waterways.

Response: This has been added to Chapter 3.

Roads

- Comment: Develop a comprehensive road management plan.

Response: Such plans will follow completion of the RMP. Transportation management objectives will be developed for all roads.

- Comment: Coordinate with adjacent landowners and others in the development and implementation of a comprehensive road management program.

Response: We recognize the importance of coordination with intermingled landowners and other road users. Reciprocal right-of-way agreements require coordination with the intermingled landowners and road users who are parties to them.

- Comment: Outline how BLM will cooperate with other landowners to build the permanent road system and accomplish road management objectives.

Response: Most of the permanent road system already exists. Cooperation with other landowners is an integral part of road development planning and the development of transportation management objectives.

- Comment: Clarify how administrative road closure and decommissioning roads relate to specific issues and objectives. Address maintenance of roads administratively closed. Also address road maintenance priorities if funding is not adequate.

Response: Road closures are driven by issues and objectives for protection of other resources, such as wildlife. If roads are to be retained for future management but closed to public use, most closures would be accomplished by gates, allowing access for maintenance. Transportation management objectives in transportation management plans will address maintenance priorities.

- Comment: Explain how the proposed road density objective will be achieved in light of the contention that partial cut systems often require greater road densities than clear cut systems.

Response: Some additional roads will be temporary and will be revegetated. Some existing local and collector roads will also be closed to help meet this objective and use of aerial logging systems will increase.

- Comment: Develop a methodology for prioritizing those roads BLM is planning to build, as well as for prioritizing road closure and restoration.

Response: Transportation management objectives will address such prioritization.

Fire

- Comment: Consider letting naturally caused fires burn while protecting life and property.

Response: Most naturally caused fires in the District occur during times when the fire risk (thus, danger to life and property) is high. Among the “property” at stake are timber and residences on intermingled private land. Therefore, it would rarely be appropriate to let a fire burn, except where prescribed fire and vegetation management objectives would be met.

Socioeconomic Conditions

- Comment: Assess the forest wide economic efficiency of the new plans.

Response: Assessing such efficiency would require placing dollar values on a variety of Ecosystem Based Management benefits that we do not believe can be effectively quantified on an equal economic standard with commercial product (e.g., timber) benefits. Ecosystem considerations are more appropriately assessed on their qualitative merits.

- Comment: Assess the economic efficiency of stand management prescriptions, including a comprehensive look at wood quality and value.

Response: Since stand management prescriptions are driven substantially by ecosystem management concerns, we do not consider economic efficiency analysis very relevant.

- Comment: Update economic data to reflect more current information.

Response: Additional and more recent employment, personal income, and County revenue information has been added to the Final EIS. Although the official baseline (1984-1988) remains unchanged, the added information allows absolute and relative comparison of the alternatives and their impacts.

- Comment: The BLM should include an analysis of Statewide impacts of the alternatives and proposed action in the final RMP/EIS.

Response: An additional layer of analysis has been added to analyze the western Oregon impacts of BLM alternatives and the PRMP.

- Comment: BLM has not considered the impacts of Measure 5 in its planning process.

Response: A discussion of Ballot Measure 5 and the constraints it places on local government revenues has been added. This discussion recognizes that Ballot Measure 5 is part of the economic environment in which BLM decisions are made.

- Comment: BLM has failed to identify viable mitigation measures for the “very real and severe” social and economic impacts associated with the alternatives. Consider compensating adversely impacted citizens, maintaining/increasing County revenues, and provision of social and economic development programs that tap the spirit of rural people to mitigate social and economic impacts.

Response: The BLM has neither the authority nor ability to provide compensation, social services, or other economic assistance to impacted Counties, businesses, or individuals. Such proposals are beyond the scope of the RMP, but they are addressed in Chapter 7 of the FEMAT report, and the Economic and Community Assistance Program discussion in Chapters 3 and 4 of the SEIS.

- Comment: Since 1953 the O&C Counties have relinquished one-third of their statutory entitlement. These foregone County monies were “invested” by the Counties with the expectation they would receive a “return” on their investment through increased harvest levels in future decades. Nearly one billion of otherwise County revenue has been so appropriated since 1953.

Response: The 25 percent plow back by the O&C Counties between 1953 and 1981 was used to increase management intensity of the O&C lands. Although many expenditures, such as road building and reforestation, were made with additional future use and harvest in mind, these activities also enabled immediate access to and harvest of timber otherwise inaccessible. This resulted in increasing levels of sustainable harvest being identified throughout this period, as well as increasing timber receipt collections.

- Comment: BLM should “support/endorse” Federal and State loans and grants to encourage local businesses to invest in the equipment for milling smaller logs.

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Response: Discussion of potential legislative agendas is beyond the scope of the RMP/EIS.

- Comment: Re-evaluate the impacts to total employment of harvest reductions.

Response: Different models representing different employment and income multipliers were used to assess BLM and cumulative impacts. Although this appears inconsistent, we felt the different type of analysis conducted required the use of different models, thus multipliers. The analysis of BLM actions was conducted as a marginal analysis, examining only the actions of BLM. For these analyses BLMPACT was used. The western Oregon cumulative effects analysis examined BLM actions together with assumed management actions of the U.S. Forest Service, State, and private forests. For this analysis the subregion multipliers cited in the SEIS were used. Unlike the multipliers used in the DRMP/EIS these multipliers only examine impacts within the timber industry, including self-employment.

- Comment: An alternative that emphasized recreation opportunities could have served as a benchmark from which to compare jobs gained from the various alternatives presented in the plans.

Response: Using information available in Hospodarsky (1989) the BLM projected future recreation demands (year 2000) expected on BLM-administered lands. This identified demand was assumed to represent the maximum recreation potential of these lands. No alternative was developed specifically to address meeting the maximum recreation potential of BLM-administered lands. However, based on the expected provision of recreation opportunities under each alternative, we determined what level of potential demand could be met. See Table 4-20, Anticipated Short-Term Capability of BLM-administered Facilities and Resources to Meet Projected Recreational Demand for 11 Major Use Categories by Alternative. Designing and analyzing specific plan alternatives merely to provide benchmarks for comparative analysis would make the RMP/EIS unwieldy.

- Comment: Provide the analytical groundwork for an effective policy response to the fundamental social and economic changes that would follow the implementation of the Preferred Alternative.

Response: This is outside the reach of BLM's statutory mission and beyond the scope of the

RMP/EIS. Chapter 4 of the SEIS has addressed this, however, in its Economic and Community Assistance Program discussion.

- Comment: Promote restorative work for ex-loggers.

Response: Labor intensive management activities, including restorative work, that have been incorporated into the PRMP, will provide additional employment opportunities in the local economy. The level of employment identified cannot fully replace employment losses caused by reduced harvest levels. In addition, BLM has no authority to assure that those employed in such work are ex-loggers or former workers of a specific industry.

- Comment: BLM has not examined the national and international impacts of reduced lumber and wood products production in the Pacific Northwest. Identified areas of impact include:

Economic & environmental impacts of using substitute building materials
Housing cost impacts
Changing import/export flows (especially from developing countries)
Economic and environmental impacts of harvesting timber elsewhere in the world

Response: A generalized discussion of the national and international impacts of using substitute building materials and fiber sources has been added using information from recent publications. These studies examine the range of resource substitution impacts individually. The extent and rate at which these effects will combine in response to reduce Pacific Northwest timber harvests is unknown.

- Comment: Add export base analysis.

Response: Attempting to do an export base analysis for western Oregon communities would entail making substantial assumptions about the "export" content of incomes in many sectors of the economy of each community. The results would not contribute substantial new knowledge about which communities are sensitive to "export" markets. Sensitivity of communities to changes in "exports" has been identified through numerous sources including: (1) Oregon Legislature, Joint Legislative Committee on Land Use, *Dependent Communities Desktop Analysis* (1990); and Oregon Economic Development Department,

Oregon's Coordinated Timber Response Program
(Updated 1993).

- Comment: BLM failed to identify the importance of changes in the natural environment and amenity values (scenic beauty, clean water and air, recreation resources) in attracting businesses and retirees to western Oregon.

Response: Those changes would be long-term, not within the ten year time frame of our socioeconomic analysis. Additional discussion has been added, however, to Chapter 4, Socioeconomic Conditions. Quantitative analysis and comparisons were not made for these amenity values.

- Comment: An economic analysis of the benefits and costs of a "Holistic Natural Watershed Management Plan" alternative, compared to the alternatives, should be made. Include greatly increased commercial and sport fishery benefits.

Response: The SEIS addressed such an alternative in its Alternative 1. The comparative economic benefits of such an alternative would occur many decades in the future. Full recovery of fish habitat, for example, is not expected for 200 years under any alternative. The cost of heavily protective alternatives, however, in lost revenues, employment and local income, would be immediate. Economic analysis, with traditional discount rates for future benefits, would attach little current value to any such long-term benefits.

- Comment: Identify other forest industries that are becoming significant contributors to the local economy, such as special forest products. Identify industry potential.

Response: The types and value of special forest products sold from BLM-administered lands have been identified. See Chapter 3. The economic impacts of these sales have not been examined due to lack of information on which to base estimates or projections of employment and personal income.

- Comment: Projected high stumpage prices (are unlikely to persist) (will increase substantially more).

Response: As discussed in Appendix OO projected future prices are lower than current prices. Upon implementation of the PRMP and the assumed resumption of timber sales on the national forests, prices are expected to decline

from the high levels associated with the current Federal timber supply crisis. Less Federal timber will be available in the future compared to the 1984-1988 baseline period, thus higher prices can reasonably be expected.

- Comment: Use appropriate models to measure social impacts and systematically analyze them.

Response: No models were used to measure or analyze social impacts in the PRMP/FEIS. However, several recent publications, not available at the time of the Draft, were used to enhance the discussion to social impacts. These publications generally relied on surveys, focus groups, and interviews to assess impacts. No models were developed or used.

- Comment: Add demographic and occupational profiles of communities.

Response: This type of data is not readily available for all communities potentially impacted by BLM management alternatives. A profile of "at risk" communities was developed by the FEMAT and is discussed. This profile contains demographic, occupational, and other characteristics.

- Comment: Add an occupational profile of displaced workers.

Response: This information was provided by the Oregon Employment Division. Because of the wealth of information and length of the report only a few points could be highlighted in our PRMP/FEIS. A full reference was provided for those wishing to request the information from the Oregon Employment Division.

- Comment: Describe the linkage and dependency (social, economic, spiritual) of local and regional communities, groups, industries, etc. on ecosystems within each land allocation.

Response: Social and economic analyses were conducted for each alternative, representing a complete set of allocations. Individual allocations were not examined. Spiritual dependency and linkages to BLM lands are, with the exception of traditional tribal use areas, individual in nature. The RMP/EIS was unable to comprehensively address these linkages to ecosystems due to the lack of information.

- Comment: Disclose the economic impacts of ground disturbing activities on the mushroom harvesting industry.

Response: Although qualitative information regarding the ecological impacts of ground disturbing activities exists for most plant species (see revised Chapter 4, Vegetation), quantitative information for many is not available. The economic impacts of ground disturbing activities for any given mushroom species could only be defined on a site and time specific basis. Therefore, it is not possible to identify any general economic impacts at this time.

- Comment: School programs will be cut as revenue declines from diminished O&C receipts.

Response: Unlike county payments from the National Forests which must be used to fund schools (25%) and roads (75%), O&C payments enter directly into the county general fund. Distribution of these general fund monies is discretionary. All counties in western Oregon have at some time transferred monies from the general fund to the local school districts or Educational Service District. Most counties continue to make these transfers annually. It is through these transfers that changing O&C payments to the counties could impact school funding. An analysis conducted in 1988 concluded that O&C funds appear to contribute between zero and 2.75 percent of school funds. (Hackworth, 1988)

Distribution of county general fund monies to the schools could change dramatically from past distribution patterns due to reductions in National Forest payments to counties and the implementation of Ballot Measure 5.

In Douglas and Coos counties, where Coos Bay Wagon Road lands are located, payments are made by the BLM to the local taxing districts, including school districts. These payments are compensation for tax revenues lost because these lands are federally owned. The formula has two components, a fixed payment and a payment similar to severance taxes that are paid when timber is harvested from the lands. School district revenues would be negatively impacted by harvest reductions on these lands.

Rural Interface Areas

- Comment: BLM's strategy of buffering Rural Interface Areas adjacent to Federal lands will do little to alleviate new inappropriate developments in Rural Interface Areas.

Response: The PRMP strategy is intended only to address the relationship to existing and planned development. Development of private lands will be guided by local comprehensive plans in conformity with Statewide planning goal 4. The BLM has no direct authority to limit or constrain development on private lands.

- Comment: Increase BLM's participation in Oregon's Statewide land use planning program.

Response: When the PRMP is approved for implementation, we expect to participate in Statewide and local planning whenever proposed adjacent land uses are perceived to be inconsistent with PRMP goals and objectives.

- Comment: The BLM should have clear policy guidance for addressing rural interface issues.

Response: The PRMP will define the objectives against which we will measure the significance of future rural interface land use issues.

- Comment: In cooperation with the State, establish and apply a revised definition of Rural Interface Areas that takes into account existing uses; current Federal, State, and local plans; and other land use factors.

Response: After the PRMPs are complete, such a comprehensive effort can be considered. Such an effort would be dependent on the availability of local, State and BLM staffing to participate, consistent with management prioritization of workloads.

Consistency with other Agency Plans & Programs

- Comment: Document how the selected alternative complies with the statutory authorities and regulations of the Oregon Coastal Management Program.

Response: This documentation is provided in Appendix NN, Relationship of Proposed RMP to Statewide Planning Goals.

- Comment: Acknowledge that preservation of BLM wetlands contributes to attainment of the Oregon Benchmark goals on wetlands.

Response: A statement has been added to the PRMP/FEIS.

- Comment: The RMP/EIS should better outline how the alternatives compare to the following: Recovery Plan for the Northern Spotted Owl, the Forest Service EIS on Management for the Northern Spotted Owl, the Endangered Species Committee Record of Decision, Alternatives for Management of Late-Successional Forests of the Pacific Northwest, and A Conservation Strategy for the Northern Spotted Owl.

Response: The first of these is only a final draft agency document, discussion has been added to the Consistency with Other Agency Plans and Programs section of Chapter 4. The second has been rendered moot by court ruling and superseded by the SEIS and its Record of Decision. The third merely required that BLM consult with the Fish and Wildlife Service before proceeding with certain timber sales, and such consultation is embedded in the process for completing and implementing this PRMP. The last two are considered ad hoc reports. The first of these two makes no single set of recommendations. The last makes a single set of recommendations that are specifically followed in Alternative D only.

- Comment: The BLM should conduct a consistency review or make a formal request to Douglas County for such a review.

Response: A consistency review has been done and can be found in Chapter 4.

- Comment: The Draft RMP fails to comply with the U.S. Fish and Wildlife Service Spotted Owl Recovery Plan.

Response: The Fish and Wildlife Service's Biological Opinion on the SEIS says that the SEIS plan, which is incorporated into the Proposed RMP, provides protection for more known spotted owl sites and currently suitable habitat than does the Final Draft Recovery Plan, and that the number of acres subject to matrix management is

less under this plan. Thus, we believe it meets the objectives of the Final Draft Recovery Plan.

Requirement for Further Environmental Analysis

- Comment: The RMP/EIS should identify criteria for determining what sort of NEPA documentation will be required for future projects. In addition, it should provide guidance for the scope of analyses expected in these tiered documents, to clarify what analyses and issues are considered fully addressed in the RMP/EIS, and what analyses and issues should be further considered based on site specific resources and conditions.

Response: The BLM National Environmental Policy Act Handbook provides some guidance on this topic. Supplementation of that guidance, with specific reference to the western Oregon RMPs seems premature until we gain experience relating to the ecosystem management concept and its many new management approaches.

- Comment: The "Further Analysis" section should clearly disclose the cumulative watershed effects analysis procedure to be used for site specific projects during RMP implementation. At present it appears undirected, fails to consider fish and fish habitat, and is simplistic. To be credible, the process must be peer reviewed and deemed acceptable.

Response: The discussion has been strengthened to address the relationship to the watershed analysis process and how that process will enhance cumulative impact analysis. The watershed analysis processes is still evolving as the BLM and the Forest Service conduct pilot analyses.

- Comment: Describe how cumulative watershed effects analysis will be coordinated among adjacent landowners.

Response: Information available from private landowners will be gathered and considered. Most private management plans, however, are subject to change due to changing economic conditions, so we will make some assumptions about probable private management.

Use of the Completed Plan

- Comment: Detail how BLM intends to integrate management, monitoring, and research to continually apply adaptive management and improve the scientific basis for Ecosystem Based Management.

Response: The discussion in Chapter 2 has been expanded. Further elaboration is contained in the SEIS Record of Decision and its Monitoring and Evaluation Plan.

- Comment: Clarify how timber sale volumes and associated programs will be reduced if annual funding is not sufficient to support monitoring.

Response: The discussion in Chapter 2 has been expanded.

- Comment: Do not plan any timber sales until there is an approved RMP and all court injunctions are lifted.

Response: Since planning of individual timber sales usually takes a year or more, it would be irresponsible for BLM to defer all such planning until final RMP approval. Tentative site specific plans based on unapproved versions of the RMP can be adjusted as needed to conform to the RMP as approved.

- Comment: Individual forest project plans should evaluate protection needs for intermittent 1st and 2nd order streams, and apply protection as needed to protect channel integrity and identified beneficial uses. Project planning should also evaluate potential cumulative effects on beneficial uses outside the project area sub-basin.

Response: The Aquatic Conservation Strategy, which is part of the Record Of Decision for the SEIS, addresses this concern and is incorporated in our PRMP. Watershed analysis will address it at the sub-basin level.

Monitoring

- Comment: Detailed monitoring plans should be developed within one year after final plan completion. They should contain procedures that have undergone appropriate peer review. They should also identify thresholds that trigger changes in practices or procedures or result in plan changes.

Response: Further detail in the monitoring plan awaits refinement of the Monitoring and Evaluation Plan for the SEIS.

- Comment: The monitoring plan should include written standards for sampling design, monitoring parameters, analytical techniques, statistical methods, reporting units, location of sampling, indicator species, budget, and procedures for using data or results in plan implementation. Availability of results to interested and affected groups should also be included. It should also have a clear feedback mechanism that enables the use of monitoring results to adjust standards and guidelines, Best Management Practices, standard operating procedures, monitoring intensity, and project implementation.

Response: We believe some of these details belong in technical handbooks. Others will be developed after the SEIS Monitoring and Evaluation Plan is refined or within the SEIS Monitoring and Evaluation Plan.

- Comment: Why aren't monitoring standards presented for each land allocation (Old-Growth Emphasis Areas, Connectivity Areas, General Forest Management Areas)?

Response: This kind of stratification is included in the SEIS Monitoring and Evaluation Plan for the allocations made in the SEIS Record of Decision. The PRMP Monitoring Plan parallels the SEIS Monitoring and Evaluation Plan.

- Comment: Why haven't monitoring questions been tied to measurable standards?

Response: For most topics, this tie awaits refinement of the SEIS Monitoring and Evaluation Plan.

- Comment: Is a threshold level plus or minus 20 percent appropriate for changes in all resource outputs or impacts to resources?

Response: No. The 20 percent figure is explicitly linked only to changes in the Probable Sale Quantity. For other output resource, thresholds would be linked to confidence in the original estimates, which typically are lower than for the Probable Sale Quantity calculation.

- Comment: Is there a tie between implementation and effectiveness that is necessary for meeting the expected future condition (Ecosystem Based Management)? Does BLM have a long-range monitoring framework that will direct the agency over the next 100 years in order to meet these expected future conditions?

Response: The Monitoring and Evaluation Plan for the SEIS is expected to provide both the tie and the framework.

- Comment: The extent of cumulative watershed effects analysis validation should be described.

Response: This description awaits refinement of the SEIS Monitoring and Evaluation Plan.

- Comment: Consider on-site inspection to monitor Best Management Practice implementation.

Response: This will be part of contract administration.

- Comment: Consider Riparian Management Area monitoring to assess long-term organic debris contribution to stream systems.

Response: The SEIS Monitoring and Evaluation Plan calls for this in Key Watersheds. It is also incorporated in our Monitoring Plan.

- Comment: Consider a research/monitoring program to determine the effects of spatial/temporal segregation of timber harvests on sediment and hydrology.

Response: Consideration of this awaits refinement of the SEIS Monitoring and Evaluation Plan.

- Comment: To obtain more specific data from evaluation and monitoring, subdivide analytical watersheds greater than 10,000 acres into smaller units.

Response: Much of the aquatic systems monitoring will focus on watersheds smaller than 10,000 acres.

- Comment: Monitor activities in each watershed to determine cumulative effects on water, soil, fish, and other resources.

Response: The SEIS Monitoring and Evaluation Plan will be based on a determination of the level of such monitoring that would be cost effective.

- Comment: Mining activities in or adjacent to streams should be monitored to determine if they are adversely affecting riparian area vegetation.

Response: Such effectiveness monitoring may be included in the SEIS Monitoring and Evaluation Plan. Activities in approved plans of operations would be monitored for conformity to RMP direction (implementation monitoring).

- Comment: Monitor to ensure target levels of dead and down wood are attained.

Response: The SEIS Monitoring and Evaluation Plan addresses this.

- Comment: Give more attention to monitoring the population and geographic distribution of special status plant species.

Response: Conservation of the special status plant species will include preparation of management plans considering the geographic distribution of these species and the role of BLM populations in the survival of the species. As needed to conserve the species, these plans will direct: determination of species requirements where BLM can act to enhance survival or recovery, implementation of BLM actions in recovering or enhancing the species and assessment of the effectiveness of those actions. Sampling of population trends will be a means of assessing what needs to be done as well as effectiveness and appropriateness of these actions in recovery of the species.

- Comment: Use recent advances in technology to monitor special status plants, especially listed plants.

Response: Monitoring guidelines in the RMP must be general in nature. There is too much variation between populations and site specific management objectives to provide more detail. More detail will be developed during activity planning following completion of the RMP and refinement of the SEIS Monitoring and Evaluation Plan. The most cost effective technology will be used.

Appendix I

- Comment: Riparian Management Area monitoring should focus partly on amphibians or other key dependent species.

Response: The extent of such validation monitoring in Riparian Reserves will be defined as the SEIS Monitoring and Evaluation Plan is refined.

- Comment: Monitoring fish and fish habitat in one stream per Resource Area seems insufficient.

Response: All key watersheds will be monitored.

- Comment: Previously logged areas should be selected for study and monitoring of experimental efforts to restore old-growth conditions.

Response: Such studies are ongoing in existing monitoring and research programs by other agencies. Some areas have been identified where past logging on lands BLM administers appears to be leading to early development of old-growth conditions, and these are being monitored.

- Comment: A monitoring program should be established to identify noxious weeds before they become a problem.

Response: As part of the Cooperative Agreement between the BLM and the Oregon Department of Agriculture, the latter conducts noxious weed field surveys; collects and redistributes biological control agents; and monitors results and efficiency of bio-control sites. Noxious weed infestations have already been identified with townships and sections. We continue to locate problem areas during proposed project planning when sites are surveyed.

- Comment: Incorporate the rural interface issue into BLM's agreement for monitoring implementation of BLM plans.

Response: Rural interface area monitoring is included in the PRMP Monitoring Plan.