

Date: 5-14-98

Dear Public Land User:

Thank you for your interest in the amendment to the Eugene District Resource Management Plan (RMP), on retention, exchange, and disposal of public land. The enclosed Plan Amendment and Environmental Assessment (EA) addresses the alternatives for land tenure adjustments which involve a land exchange with John Hancock Mutual Life Insurance Company (Hancock), sale of two small tracts of land encumbered with inadvertent occupancy trespass, and sale of a solid waste transfer site and former landfill. The Plan Amendment/EA also provides assessment of resource criteria and issues involving the Hancock exchange.

The purpose of the EA is to analyze the probable environmental impacts of the proposed management alternatives. We would appreciate your comments on the adequacy of the analysis. The following are the types of comments which will be most helpful in the decision process: 1) be specific as possible; 2) address appropriateness of the alternatives; 3) identify unaddressed issues; 4) provide new information; 5) address adequacy of analysis; and 6) identify errors in data or analysis.

Written public comments may be sent to:

Eugene District Manager
Bureau of Land Management
Eugene District Office
PO Box 10226
Eugene, OR 97440-2226

All comments must be submitted no later than 6-29-98.

Based on information contained in this EA, a preliminary Finding of No Significant Impact (FONSI) is presented and concludes that an Environmental Impact Statement is unnecessary and would not be prepared. A proposed decision will be prepared and made available to the public after the end of the public comment period on the Plan Amendment/EA. Any person who has participated in the planning process and has an interest which is, or may be, adversely affected by the proposed decision will have the opportunity to protest such decision after it is made available, in accordance with 43 CFR 1610.5-2.

A summary of the plan amendment was published in the *Federal Register* on September 18, 1997 as a Notice of Intent; Plan Amendment, providing a thirty day comment period. A Notice of Exchange Proposal, Proposed Exchange of Lands in Lane County, Oregon was published in local news papers on July 1, 1996 providing a forty-five day comment period, and an Amendment to Notice of Exchange proposal, Proposed Exchange of Lands in Lane County, Oregon was published in local news papers on June 20, 1997 providing a two week comment period. Those issues identified by the comments received have been addressed in the Plan Amendment/EA. We feel that this document portrays the best array of alternatives concerning public land tenure adjustments and exchange.

If you would like further information about the RMP amendment or environmental assessment process beyond what is presented in this document please contact Wayne Elliott or Ron Wold at (541) 683-6600. We appreciate the public involvement to date and encourage your continued interest in the management of public lands in the Eugene District.

Sincerely,

Dennis Williamson
District Manager

DRAFT

**EUGENE DISTRICT
RESOURCE MANAGEMENT PLAN
AMENDMENT**

WITH

ENVIRONMENTAL ASSESSMENT

FOR

PROPOSED HANCOCK EXCHANGE

EA #OR-090-97-42

Case File #OR 45978

MARCH 1998

**Prepared by
Eugene District
Bureau of Land Management
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INTRODUCTION

The Eugene District Resource Management Plan (RMP) was approved in June 1995. Since then, several potential land tenure adjustments have been identified that require amendment of the RMP. This Environmental Assessment (EA) OR-090-97-42 analyzes the effects of amending the RMP to change the Land Tenure Zone assignment of 4 parcels of land involved in these potential adjustments. The potential land tenure adjustments include a land exchange with John Hancock Mutual Life Insurance Company (Hancock), sale of two small tracts of land encumbered with inadvertent occupancy trespasses, and sale of a solid waste transfer site and former landfill, which are also analyzed in this EA.

The Land Tenure Zones are defined in the RMP as follows:

Zone 1: generally retain these lands under BLM administration.

Zone 2: "block up" areas in Zone 2 with significant resource values and exchange other lands in Zone 2 to "block up" areas in Zones 1 and 2 with significant resource values.

Zone 3: retain lands with unique resource values; dispose of other lands in this zone using appropriate disposal mechanisms.

The Land Tenure Zone adjustments identified in the proposed action would place 2 small land parcels into Zone 3 to facilitate the future resolution of inadvertent occupancy trespass. The Land Tenure Zone adjustments would also place a solid waste transfer and former rural landfill site into Zone 3 to facilitate the future assignment of the site to Lane County.

The Plan Amendment would also amend the RMP to place lands resulting from survey hiatuses and unintentional encroachments on public land, which are discovered in the future, into Land Tenure Zone 3. Any future disposal actions would be required to meet the RMP criteria. Lands affected by this amendment may be retained if the consultations, clearances, reports, or Environmental Assessment show any resource values worthy of permanent Federal retention.

A notice of intent to prepare the RMP amendment was published in the *Federal Register* on September 18, 1997.

I. PURPOSE AND NEED FOR PROPOSED ACTION

A. NEED FOR ACTION

The Eugene District Resource Management Plan assigns all lands administered by the Eugene District to one of 3 Land Tenure Zones. Lands in Zone 1 are identified for retention and may not be transferred out of Federal ownership by exchange or sale, while lands in Zone 2 may be considered for exchange, and those in Zone 3 may be considered for sale or exchange. The regulations at 43 CFR 2711.1-1(a) require that no parcel of public land may be offered for sale until it has been specifically identified in an approved land use plan (i.e., assigned to Land Tenure Zone 3).

The proposed Hancock Exchange includes a 113.70 acre parcel in Douglas County that is currently assigned to Land Tenure Zone 1. The Tract must be reassigned to Land Tenure Zone 2 or 3 before it can be included in the final exchange package.

The 2 parcels of public land that are encumbered by longstanding unauthorized use situations, containing approximately 4 acres, are currently assigned to Land Tenure Zone 2. Both parcels meet the criteria for disposal as disclosed in Appendix J of the Eugene District Record of Decision and Resource Management Plan, June 1995 (ROD/RMP). However, they cannot be sold until they are reassigned to Land Tenure Zone 3 by plan amendment. One of these parcels, discovered by BLM in 1997, is a survey hiatus (narrow strip of land between parcels that were transferred out of public ownership many years ago).

The parcel proposed for transfer to Lane County contains approximately 17 acres and is currently assigned to Land Tenure Zone 2. The site has been used by the County under authority of a Recreation and Public Purposes Act (R&PP) lease since 1963 when a small rural landfill was established. The use was changed to a transfer site in 1973. Current Bureau policy states that landfills and transfer site leases should not be renewed when they expire and, if continued use of the site is needed, ownership of the land should be transferred to the lessee. The lease for the subject site expires in 1998. Although the site could be exchanged to Lane County under the current RMP, it cannot be sold until it is reassigned to Land Tenure Zone 3 by plan amendment. Reassignment to Zone 3 would permit the option of a proposal for either a direct sale or land exchange with Lane County.

A proposed RMP provision to allow the disposal of lands without a plan amendment where survey hiatuses and unintentional encroachments on public land are discovered in the future would provide for such lands to be automatically assigned to Land Tenure Zone 3 where legal disposal criteria are met. Under the present RMP, such sites cannot be sold until a plan amendment is completed assigning them to Land Tenure Zone 3. An unintentional encroachment or survey hiatus in the Eugene District is discovered on the average about once a year. Such sites generally range in size from a fraction of an acre up to 2 or 3 acres. A separate Environmental Assessment would be required as part of any future proposal for the sale of such a parcel.

The BLM has been attempting to acquire the private lands offered to the United States in the proposed Hancock Exchange since the mid 1980s. Their acquisition would place approximately 2¼ miles of Whittaker Creek and associated Riparian Reserve into public ownership. Hancock has indicated that these tracts have been scheduled for timber harvest in the near future if they remain in private ownership. Hancock approached the BLM in 1992 to reopen negotiations for a land exchange involving Whittaker Creek because of the known high value anadromous fisheries habitat. Acquisition of the Hancock parcels by the BLM would place most of the primary stream

bed in public ownership. Placing the offered tracts into public ownership is consistent with the ROD/RMP. Completion of the proposed land exchange would increase the opportunities for additional stream habitat enhancement projects that would compliment those existing stream improvements provided under Hancock management. Opportunities for additional recreation facilities complimenting the adjacent Whittaker Creek Recreation Site would also be created with this exchange. Such habitat enhancement projects and recreational developments would be subject to further environmental analysis before they could be implemented.

B. ISSUES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

BLM guidelines require consideration of a variety of resource values when analyzing a land tenure adjustment proposal. This section of the Environmental Assessment identifies those resource values that were considered but eliminated from detailed analysis for the Hancock Exchange and related realty actions. No individual disposal actions to accomplish the other land tenure adjustment actions described above would be completed until the appropriate environmental analysis and public and interagency reviews were completed in the future.

1. CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

These elements are specified in Appendix 5 of the BLM National Environmental Policy Handbook (NEPA Handbook H-1790-1, BLM, October, 1988). The "critical elements" eliminated from detailed analysis are: air quality, cultural resources (as related to the Federal parcels), prime or unique farmlands, flood plains, native American religious concerns, hazardous or solid wastes, water quality, wetlands and riparian zones, wild and scenic rivers, and wilderness. There would be either minor, beneficial or no impacts to these "critical elements" as a result of the plan amendment, land exchange and other title transfer actions; therefore, the elements were dropped from further analysis. Exhibit A, Table 1, attached and incorporated into this EA, summarizes the anticipated environmental impacts to these "critical" resources.

2. OTHER RESOURCE AND LAND USE ISSUES ELIMINATED

Other resources and issues requiring consideration (by BLM guidelines) include: existing or proposed wild horse and burro management areas, mineral resources, water resources, rangeland resources, visual resources, recreation resources, and existing land uses (rights-of-way, permits, leases, etc.). There would be no impacts to these other elements as a result of the plan amendment or land exchange; therefore, the elements were dropped from further analysis. Exhibit A, Table 2, attached and incorporated into this EA, summarizes the anticipated environmental impacts to these resources.

Impacts to minority/low-income populations were considered (as required by Executive Order 12898) and the proposed plan amendment, Hancock Exchange and lands sales are expected to have no impact, either direct or indirect, on such populations, because of the location, land uses and small acreage of the lands involved.

C. ISSUES TO BE ANALYZED

The following issues have been identified for detailed analysis in this EA. Issue identification resulted from consultation with other local and Federal agencies, interdisciplinary (ID) team review, and comments resulting from public involvement procedures.

1. IMPACTS TO SPECIAL STATUS SPECIES

- **SPECIAL STATUS PLANTS** - What effect will the proposed exchange have on special status plant species? Method of measurement: Known habitat or populations of special status plants; potential for disturbance to special status plant habitat.
- **ANADROMOUS FISH** - Would the proposed exchange have impacts on anadromous fish stock? Method of measurement: Comparison of anadromous fish habitat between Federal selected parcels and private offered parcels.
- **NORTHERN SPOTTED OWL** - Would the proposed exchange have impacts on the northern spotted owl? Method of measurement: Location of parcels and changes in acreage of suitable owl habitat.
- **MARbled MURRELET** - Would the proposed exchange have impacts on the marbled murrelet? Method of measurement: Location of parcels and estimate of potential for use.

2. **IMPACTS TO ALLOWABLE SALE QUANTITY (ASQ)**

How would the proposed exchange of timber lands impact the amount of timber volume the BLM may offer for sale? Method of measurement: Change in annual Allowable Sale Quantity (ASQ).

3. **POTENTIAL CHANGE IN LAND USES**

How could the proposed exchange potentially change the existing land uses of the offered and selected parcels? Method of analysis: Current Lane and Douglas County Zoning Ordinances and change in BLM Land Use Allocation acreage.

4. **POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY**

How would the proposed exchange potentially change the level of local economic activity and revenues received by local government? Method of analysis: Change in acreage, timber volumes, and distribution of age classes between public and private lands; change in BLM Land Use Allocation acreage.

II. PROPOSED ACTION AND ALTERNATIVES

A. PROPOSED ACTION

The proposed action consists of the following elements:

1. AMENDMENT OF EUGENE DISTRICT RESOURCE MANAGEMENT PLAN

- Change a 113.70 acre Tract described as Lots 1, 2, and 3 of Section 7, Township 19 South, Range 8 West, Willamette Meridian, from Land Tenure Zone 1 to Land Tenure Zone 2.
- Change 2 parcels with longstanding unauthorized use situations from Land Tenure Zone 2 to Land Tenure Zone 3. Land Tenure Zone 3 status would authorize the BLM to resolve the unauthorized use by disposal of these parcels through direct sale. These parcels contain approximately 4 acres and are located within Section 11, Township 16 South, Range 7 West (Amy Road occupancy) and Section 2, Township 21 South, Range 3 West (Caroline Creek hiatus), Willamette Meridian. The exact acreage and legal descriptions are yet to be determined by cadastral survey. Maps showing the location of these tracts are included in Exhibit B.
- Change one parcel proposed for transfer to Lane County from Land Tenure Zone 2 to Land Tenure Zone 3. The Tract (Low Pass Transfer Site) contains approximately 17 acres and is located within Section 7, Township 16 South, Range 6 West, Willamette Meridian. The exact acreage and legal description are yet to be determined by cadastral survey. A map showing the location of this Tract is included in Exhibit B.
- Add the following provision to the Land Tenure Adjustment - Management Actions/Direction for All Land Use Allocations section:

“Where survey hiatuses and unintentional encroachments on public lands are discovered in the future that meet disposal criteria, the lands may be automatically assigned to Zone 3 for disposal.”

“Disposal Criteria” are defined in Appendix J of the Eugene District Record of Decision and Resource Management Plan, June 1995.

This provision would potentially affect lands located in portions of Benton, Douglas, Lane, and Linn Counties, Oregon. No specific disposal action would occur until it is analyzed and impacts of the disposal disclosed in an Environmental Assessment for that specific realty action. A specific disposal would not be completed until this assessment is completed and the disposal found to meet RMP disposal criteria. Lands affected by this amendment may be retained if the consultations, clearances, reports, or Environmental Assessment show any resource values worthy of Federal retention.

2. HANCOCK LAND EXCHANGE

The BLM Eugene District proposes to exchange all or a portion of 299.84 acres of public land (parcels D, F, H, and I) managed by BLM in Lane and Douglas counties, Oregon (hereinafter called "selected" lands) for all or a portion of approximately 410 acres of private land (parcels A, B, and G) in Lane County, Oregon (hereinafter called "offered" lands) under authority of Sec. 206 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716) and the procedures of 43 CFR 2200. The legal descriptions of the lands involved are provided in Exhibit C and descriptions of the parcels are included in Exhibit D. A map showing the location of these tracts is included in Exhibit B.

As required by Bureau regulation, the exchange values shall be fair market value as determined by appraisal. In the event appraised values are not equal, the exchange values would be equalized by a cash payment not to exceed 25 percent (25%) of the value of the Federal lands or by deleting a parcel or parcels or a combination of both. In the event that the value of the offered lands exceeds the value of the selected lands the BLM may access the balance of the ledger account from assembled land exchange OR49847 and/or Hancock may reserve sufficient timber on its offered land to balance values related to the proposed action.

Disposal would be subject to valid existing rights of record.

This Environmental Assessment (EA) discusses all potential Federal selected parcels and Hancock offered parcels, although it is anticipated that not all parcels will be included in the final exchange.

3. ACTIONS SUBSIDIARY TO HANCOCK EXCHANGE

The following actions are proposed either before or following completion of the Hancock Exchange:

- Prior to conveyance of the selected BLM lands an easement would be granted to the U. S. Forest Service (USFS) across selected Tract D to preserve USFS control of the existing road.
- Reciprocal right-of-way agreement E-806 (OR 52486) with Hancock would be amended at or following exchange closing to provide for the post-exchange access needs of both parties rather than using easement reservations and other provisions in the conveyance documents. A draft copy of the proposed amendment is attached as Exhibit E. If some of the parcels included in the proposed exchange are not included in the final transaction, the amendment document would be altered to remove those provisions that would no longer be relevant. Authority for the amendment of right-of-way OR 52486 is Sections 501-507 of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1761-1767).
- Following completion of the exchange, 44 LD 513 appropriations and right-of-way reservations for roads located on lands transferred to Hancock would be canceled.
- Upon acquisition, if selected Tracts C, D, and F are all included in the final exchange conveyance, the north three-quarters of Tract A would be assigned Public Domain status, with the balance of the acreage being assigned O&C status. If 2 of the 3 parcels are included in the final exchange, the north half of Tract A would be assigned Public Domain status, with the balance of the acreage being assigned O&C status. If only one of these tracts is included, the northernmost 40 acres of Tract A would be assigned Public Domain status, with

the balance of the acreage being assigned O&C status. If none of Tracts C, D, or F are included in the final conveyance, all parcels acquired by BLM would be assigned O&C status.

4. MANAGEMENT OF LANDS ACQUIRED IN HANCOCK EXCHANGE

The offered lands acquired by BLM would be managed in accordance with the provisions of the RMP. They would be assigned to the Late-Successional Reserve Land Use Allocation and Land Tenure Zone 1. The following additional land use allocations would apply:

- **Locatable Minerals** - Open to location with standard requirements
- **Leasable Minerals** - Open to leasing subject to Controlled Surface Use Stipulation
- **Salable Minerals** - Open with additional restrictions
- **Rights-of-Way** - Designated a rights-of-way avoidance area
- **Off Highway Vehicles** - Designated as Limited for off highway use

5. SALE OF TWO OCCUPANCY TRESPASS TRACTS

The BLM Eugene District proposes to sell two parcels containing approximately 4 acres, located within Section 11, Township 16 South, Range 7 West (Amy Road occupancy) and Section 2, Township 21 South, Range 3 West (Caroline Creek hiatus), Willamette Meridian. The tracts would be sold under authority of Sec. 203 and Sec. 209 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716) and the procedures of 43 CFR Parts 2710 and 2720. The exact acreage and legal descriptions will be determined by cadastral survey prior to sale. Maps showing the location of these tracts are included in Exhibit B. These parcels could be offered for sale following completion of mineral potential reports and inventories and clearances for special status species, cultural and historical resources and hazardous substances, provided that no resources or conditions were found that would require their retention in federal ownership.

As required by Bureau regulation, the sale price shall not be less than fair market value as determined by appraisal. Disposal would be subject to valid existing rights of record.

6. SALE OF LOW PASS TRANSFER SITE TRACT

The BLM Eugene District proposes to sell the Low Pass Transfer Site and former rural landfill to Lane County, Oregon. The tract contains approximately 17 acres and is located within Section 7, Township 16 South, Range 6 West, Willamette Meridian. The tract would be sold under authority of Sec. 203 and Sec. 209 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716) and the procedures of 43 CFR Parts 2710 and 2720. The exact acreage and legal descriptions will be determined by cadastral survey prior to sale. A map showing the location of this tract is included in Exhibit B. This parcel could be offered for sale following completion of a mineral potential report and inventories and clearances for special status species, cultural and historical resources and hazardous substances, provided that no resources or conditions were found that would require its retention in federal ownership.

As required by Bureau regulation, the sale price shall not be less than fair market value as determined by appraisal. Disposal would be subject to valid existing rights of record.

B. ALTERNATIVE A

In this alternative, selected parcels C and E would be added to the exchange described in the Proposed Action above. This would result in the exchange of all or a portion of 418.96 acres of public land managed by BLM in Lane and Douglas Counties, Oregon for all or a portion of

approximately 410 acres of private land in Lane County, Oregon under authority of Sec. 206 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716) and the procedures of 43 CFR 2200. The legal descriptions of the lands involved are provided in Exhibit C and descriptions of the parcels are included in Exhibit D. A map showing the location of these tracts is included in Exhibit B.

Parcels C and E are included in this alternative because they have been reviewed as exchange candidates and may be needed to equalize exchange values or otherwise achieve a balanced exchange package.

Other aspects of the Proposed Action would remain the same under Alternative A, including the management of lands acquired by BLM.

C. NO ACTION ALTERNATIVE

This option would be to not proceed with the Hancock Exchange, and there would be no amendment to the Eugene District RMP. The existing pattern of land ownership and potential for development would remain unchanged. The Hancock parcels would continue to be utilized as indicated in the analysis. The occupancy trespasses on 2 small tracts of public land could not be resolved permanently by sale of the land. BLM and Lane County would not have the sale option to transfer ownership of a solid waste transfer site to the County. Survey hiatuses and unintentional occupancy trespasses discovered in the future could not be resolved by sale of the land until a plan amendment were approved in the future.

D. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

The alternative of pursuing a cash purchase of the Hancock property was considered but not carried forward for detailed analysis. The BLM has no funds for this purpose and no such funding is anticipated in the future.

III. AFFECTED ENVIRONMENT

This chapter describes the parcels of land proposed for inclusion in the Hancock Exchange in relation to the issues identified previously for detailed analysis. Other elements of the existing environment are discussed in Exhibit A, Tables 1 and 2. Exhibit D, incorporated by reference into this EA, provides a parcel by parcel description of the lands involved, including general setting, access, timber and wildlife values, special status species habitat, etc.

The 3 tracts proposed for transfer to Land Tenure Zone 3 are described as to those aspects that are currently known. No disposal of these tracts would occur until appropriate resource surveys and NEPA and public participation procedures were completed for the specific land sale or exchange action.

A. SPECIAL STATUS SPECIES

1. SPECIAL STATUS PLANTS

Tract C (included in Alternative A but not the Proposed Action) contains a viable population of *Cimicifuga elata*, a Bureau sensitive species that is managed according to the guidelines set forth in the Conservation Strategy for *Cimicifuga elata*, 1996. Plants are disbursed throughout the eastern portion of the 80-acre tract in locations that would not accommodate the transfer of a portion of the tract while maintaining the entire population. This population is considered to be significant under the Conservation Plan for this species.

A small population, 12 plants of *Cimicifuga elata*, a Bureau Sensitive Species, is located on Tract I. This population is located just north of the road that bisects the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and near the west line of the NE $\frac{1}{4}$ SE $\frac{1}{4}$. The site is situated in a north-facing stream headwall area with about a 45 percent slope. A portion of the population occurs on adjacent private timberlands, which have been recently cut over. The plant site contains considerable old road and logging debris and mountain boomers are creating much soil disturbance in the vicinity of the plants. Due to the adjacent clear cut, the site has a fairly open, sparse over story. The under story is a dense layer of tall herbs and shrubs. The soil is a loose, gravelly, sandy clay. Other than this population, the closest known populations are 3 and 4 miles away. The other populations of *Cimicifuga* are protected according to guidelines in the Conservation Strategy for this species. The overall area where the San Antone population occurs has been botanically surveyed only minimally, so the area potentially harbors more *Cimicifuga* sites. The site elevation, aspect, seral stage and plant association are represented by sites already included in the Conservation Strategy. The site is not on the edge of the range of the species and is not one of the southerly, morphologically distinct populations.

2. ANADROMOUS FISH

Whittaker Creek is a tributary of the Siuslaw River in T. 18 S, R. 8 W., Section 21, and is a major spawning stream for salmon and trout. It drains approximately 10.5 square miles. It contains an estimated 13 miles of habitat suitable for resident and anadromous fish, of which 7.5 miles are managed by BLM. About half the useable habitat is inaccessible to anadromous fish due to a series of Falls in NW 1/4 of Section 6, T 19 S., R 8 W. A culvert drop located at a tributary near Road No. 18-8-32 blocks access for fish into that tributary.

Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), steelhead trout (*O. mykiss*), resident and searun cutthroat trout (*O. clarki*), and Pacific lamprey

(*Lampetra tridentatus*) are known to spawn in Whittaker Creek. A population of cutthroat trout is found above the Falls in Section 6, and is genetically distinct from the cutthroat trout below the Falls. Whittaker Creek is currently being used by the Oregon Department of Fish and Wildlife as a source of eggs from wild steelhead. A trap is operated at the BLM Whittaker Creek Recreation Site to capture steelhead for the eggs and to study adult returns. Whittaker Creek supports some of the largest runs of coho and steelhead in the Pacific northwest and is considered a core stream for rebuilding runs. Sculpins (*Cottus* sp.), dace (*Rhinichthys*), shiners (*Richardsonius*), and brook lamprey (*Lampetra richardsoni*) are also present although no estimate of population size has been done. Macroinvertebrate samples have also been taken, but systematics only carried to family or genus level.

Because of its runs of chinook and coho salmon Whittaker Creek has become a popular Watchable Wildlife site for people wishing to view spawning fish. In addition, Whittaker Creek is used by Salmon Watch, school groups, and other organizations for educational programs concerning salmon.

Whittaker Creek is in an area dominated by marine sediments generally referred to as Tyee sandstone. The sandstones typically are in stria of various thickness. Rock and gravel entering the stream channel from the sandstones are short-lived, dissolving to sand. There is some igneous intrusion material in the headwaters of Whittaker Creek that provides a source for boulders and gravel. Since only a few larger boulders are naturally present, retention of gravel and other sediments in the stream channel depends primarily on large woody debris. Spawning gravel, pools, and off-channel rearing areas needed by anadromous and resident salmonids are created by the large woody debris. In the absence of woody structure, the sediments flush out of the system, and the channel downcuts until it reaches a hard surface or a more moderate gradient. Most of the woody debris in Whittaker Creek was lost as a result of past management activities related to logging and road building, reducing the amount and quality of habitat. Many reaches of this stream channel are deeply incised, which has resulted in a loss of structure. The riparian zone has also been effected by the of building roads.

The Whittaker Creek basin is managed primarily for timber production. Most of the private lands and much of the BLM managed lands are in a second or third rotation. BLM managed lands in Sections 18-9-36 and 19-9-1 include older age classes. Federal lands in the basin are designated Late-Successional Reserves under the Northwest Forest Plan. Riparian communities are dominated by red alder with some bigleaf maple. Patches of older conifer trees are found mostly in headwater areas with only scattered older, larger trees in the riparian zone.

In 1986, 1987, 1992, 1995, and 1997 aquatic habitat projects were carried out on public lands in Whittaker, North Fork Whittaker, and Bounds creeks. In addition, the Oregon Department of Fish and Wildlife in 1995 and 1997 placed root wad and boulder structures in Whittaker Creek on private lands offered for exchange under the proposed action. Projects by BLM and ODFW have been coordinated with cooperative planning and similar methods. Offered tracts A and B contain approximately 2½ miles of the main channel and associated riparian zone of Whittaker Creek.

Reference Appendix B - Biological Assessment for additional information.

3. NORTHERN SPOTTED OWL

Formal consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to Section 7 of the Endangered Species Act and 50 CFR 402.14 is in process. Critical habitat for the spotted owl has been identified in the Biological Assessment on selected Tract H (114 acres) and not identified on any offered tract. Suitable habitat for spotted owls has been identified in the Biological Assessment on selected Tracts D (3 acres) and I (24 acres), and identified on offered Tracts A (31 acres) and B (7 acres).

Reference Appendix B - Biological Assessment for additional information. The decision for the proposed action will be subject to the findings of the Biological Opinion provided by the U. S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act and 50 CFR 402.14.

4. MARBLED MURRELET

Formal consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to Section 7 of the Endangered Species Act and 50 CFR 402.14 is in process. Critical habitat for marbled murrelet has been identified in the Biological Assessment on selected Tracts F (38 acres), H (114 acres) and I (108 acres) and not identified on any offered tract. Suitable habitat for marbled murrelet has been identified in the Biological Assessment on selected Tract D (3 acres), and identified on offered Tract A (31 acres).

Reference Appendix B - Biological Assessment for additional information. The decision for the proposed action will be subject to the findings of the Biological Opinion provided by the U. S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act and 50 CFR 402.14.

B. ALLOWABLE SALE QUANTITY (ASQ)

Tracts F, H, and I of the selected tracts are classified as Late-Successional Reserve. Tract D is classified as General Forest Management Area. All of the offered tracts would be included as Late-Successional Reserve. Lands classified as Late-Successional Reserve do not contribute to the base lands for ASQ calculations.

Tracts D and F are Public Domain and tracts H and I are O & C Land Grant lands. Of the offered tracts, the south half of Tract A and all of Tracts B and G would become O & C Land Grant lands. The north half of Tract A would become Public Domain.

The Allowable Sale Quantity base includes all General Forest Management Area lands that are suitable for intensive forest management. Tract D of the selected tracts is classified as General Forest Management Area. Of the 40 acres in Tract D approximately 25 acres are not included in the ASQ base because of riparian management buffers, roads, and excessively steep slopes, thus leaving 15 acres in the ASQ base. All of the 15 acres are stocked with Douglas-fir under 30 years of age.

C. LAND USES

The future management goals of public lands administered by BLM are described in the Eugene District Record of Decision and Resource Management Plan dated June 1995.

John Hancock is primarily engaged in managing lands in this area for commercial timber production and related forest uses.

The Amy Road occupancy trespass is used as part of a rural residence and contains a garage and portion of a barn constructed in error on public land approximately 20 years ago. The parcel is allocated to Late-Successional Reserve by the RMP and is zoned F-1 (Nonimpacted Forest Land Zone) by Lane County.

The Caroline Creek survey hiatus is approximately 55 feet wide, a half mile long, and is used as a roadway providing access to several adjoining private parcels. The existence of this tract was not known when the RMP was prepared, so it has no existing land use allocation. It is zoned F-2 (Impacted Forest Land Zone) by Lane County.

The Low Pass Transfer Site and landfill has been used by the County under authority of a Recreation and Public Purposes Act (R&PP) lease since 1963 when a small rural landfill was

established. The use was changed to a transfer site in 1973 and the landfill was closed. The landfill and transfer site occupy about 5 acres of the tract, with the balance being an access road to the transfer site and forest land bordering Highway 36. The parcel is allocated to Late-Successional Reserve by the RMP and is zoned F-1 by Lane County.

D. LOCAL GOVERNMENT REVENUE AND THE ECONOMY

The Amy Road occupancy trespass and Low Pass Transfer Site tracts are exempt from property taxation and currently contribute no tax revenue to local government. The Caroline Creek hiatus is identified as a "gap" on the Lane County assessment records and does not contribute any property tax revenue to local government. The Amy Road and Low Pass Transfer Site parcels have O&C status. Fifty percent of any revenue generated from right-of-way or lease rentals or from the sale of forest resources on these 2 tracts would be deposited to the O&C Fund to be distributed to the O&C counties with the balance going to the U.S. Treasury.

The Caroline Creek hiatus has Public Domain status. Any revenue generated from this tract would be distributed to various Federal accounts, except for 4 percent of revenue from the sale of land or resources that would go to the State of Oregon.

IV. ENVIRONMENTAL CONSEQUENCES

A. IMPACTS OF PROPOSED ACTION

1. SPECIAL STATUS SPECIES

a. SPECIAL STATUS PLANTS

A botanical survey of the selected lands, Tracts D, F, H, and I, was conducted and no threatened or endangered species were found, although a Bureau Sensitive Species, *Cimicifuga elata*, was located on Tract I. There are no known special status plants located on offered Tracts A, B, and G.

The proposed action would result in the transfer of the *Cimicifuga elata* (Bureau sensitive species) site found on Tract I to private ownership. Since management under private ownership is most likely to be oriented towards intensive timber management the population is subject to disturbance. Even though populations located on other sites within the Eugene District have survived clear cutting, and populations with a greater amount of light tend to flower and fruit more consistently (Kaye and Kirkland 1993), there is no certainty of the viability of this population under private timber management activities.

b. ANADROMOUS FISH

Upon acquisition of the offered tracts, BLM would control all of the primary channel and riparian zone of Whittaker Creek drainage. The Whittaker Creek system is considered by BLM to be an extremely valuable anadromous fisheries basin, containing rearing habitat for salmon and steelhead.

Completion of the exchange would increase the opportunities for stream habitat enhancement projects, such as those discussed in Environmental Assessment No. OR090-96-11 (Whittaker Creek Aquatic Habitat Improvement Project). These stream enhancements may include projects that would: (1) increase and retain accumulations of sediments, particularly spawning gravels, in stream channels to deepen channel beds and improve quality and quantity of salmonid habitat; (2) increase the diversity and complexity of inchannel anadromous and resident fish spawning and rearing habitat by increasing the size and depth of pools, cover, and off-channel habitat; (3) improve access to usable habitat now blocked by human activities; and (4) increase the percentage of conifers in riparian areas as a long-term source of large woody material.

The proposed exchange was presented to National Marine Fisheries Service for informal conferencing. Because the effects determination was "Likely to Affect, Not Likely to Adversely Affect", no formal consultation was necessary. The determination was based on the fact that there would be no loss of habitat for steelhead or coho salmon. Management of the habitat in Whittaker Creek by BLM under the Forest Plan could be expected to provide greater protection for coho and steelhead habitat than might occur in private ownership under the less stringent Oregon Forest Practices Act management requirements.

c. NORTHERN SPOTTED OWL

The proposed action "May Affect, and is likely to Adversely Affect" the northern spotted owl. This determination is based upon the proposed transfer of 27 acres of suitable habitat for spotted owls; 38 acres of suitable habitat for spotted owls would come into public ownership.

Additionally, the proposed action "May Affect, but is Not Likely to Adversely Modify" Critical Habitat suitable for spotted owl based upon the transfer of 114 acres of Critical Habitat from Federal ownership. The basis for this determination is the fact that these parcels are scattered tracts and, in some cases, disjunct and isolated from other Federal ownership.

The 410 acres of offered lands, which would become Late-Successional Reserve, would likely be designated as Critical Habitat for the spotted owl after a review process by the U.S. Fish and Wildlife Service. Official designation would become effective upon publication in the Federal Register after a public comment period. The net result of the exchange would be an increase of 296 acres of federal critical northern spotted owl habitat.

Reference Appendix B - Biological Assessment for additional information.

d. MARBLED MURRELET

The proposed action "May Affect, and is likely to Adversely Affect" the marbled murrelet. This determination is based upon the proposed transfer of 3 acres of suitable habitat for marbled murrelet to private ownership. There would be a transfer of 31 acres of suitable habitat for marbled murrelet to public ownership.

Additionally, the proposed action "May Affect, but is Not Likely to Adversely Modify" Critical Habitat suitable for marbled murrelet based upon the transfer of 260 acres of Critical Habitat from Federal ownership. The basis for this determination is the fact that these parcels are scattered tracts and, in some cases, disjunct and isolated from other Federal ownership.

The 410 acres of offered lands, which would become Late-Successional Reserve, would likely be designated as Critical Habitat for the marbled murrelet after a review process by the U.S. Fish and Wildlife Service. Official designation would become effective upon publication in the Federal Register after a public comment period. The net result of the exchange would be an increase of 150 acres of federal critical marbled murrelet habitat.

Reference Appendix B - Biological Assessment for additional information.

2. ALLOWABLE SALE QUANTITY (ASQ)

The proposed action affects the overall distribution of timber stand age classes for both parties. The net effect for BLM would be approximately as follows:

<u>Age</u>	<u>Acreage Change</u>
Nonforest	+ 21
< 30	- 135
30-70	+ 134
71-100	+ 38
> 100	- 11

The increase in nonforest acreage largely reflects the acquisition of Whittaker Creek channel.

All of the offered tracts would be classified as Late-Successional Reserve. Lands with this classification are not included in the base for ASQ calculations. These tracts would include 80 acres of Public Domain and 330 acres of O & C Land Grant lands.

From the selected lands 40 acres of General Forest Management Area (of which 15 acres are suitable for forest management purposes under the Eugene District Resource Management Plan) would be removed from the ASQ land. The remaining lands, 259.84 acres, are classified as Late-Successional Reserve and are not included in determining ASQ.

The exchange would result in a loss of 15 acres from the ASQ base. Since these selected lands are Public Domain, there would be no impact upon O&C County timber sale revenues.

3. POTENTIAL CHANGE IN LAND USES

BLM management goals for the offered tracts, 410 acres (Tracts A, B, and G), would be primarily to restore and maintain the ecological health of watersheds and aquatic ecosystems within them, and to protect and enhance habitat for late-successional and old growth related species, including the northern spotted owl, rather than commercial timber production. BLM management would be consistent with the objectives of the Aquatic Conservation Strategy, Riparian Reserves, and Late-Successional Reserve, all of which are major components of the District Resource Management Plan. The north half of Tract A would be managed as Public Domain and the remainder of the offered tracts would be managed as O & C Land. The future availability of the offered parcels for timber management operations, including timber harvest, is likely to be less under BLM ownership than under private ownership. The majority of acres transferred to public ownership would become part of the Riparian Reserve for Whittaker Creek. Because of the proximity to Whittaker Creek Recreation Site, both Tracts A and B are likely to have recreational use for fishing and hiking. These lands are already used by fishermen and other recreationists on an informal basis.

The proposed action would result in the transfer of 299.84 acres of forest lands (Tracts D, F, H, and I) to John Hancock Mutual Life Ins. Co. The lands would likely be managed for commercial timber production and related forest uses. Any timber harvest would be subject to the standards and guidelines included in the State of Oregon Forest Practices Act.

The land tenure designation for Tract I of the selected tracts would be changed from Zone 1 to Zone 2 to enable the exchange of this parcel. All of the offered tracts are within the boundaries of a Zone 1 area and would be classified as Zone 1 upon transfer.

Given the land use allocations in the Resource Management Plan the proposed action would result in net acreage changes, by land use allocation, as follows:

<u>Land Use Allocation</u>	<u>Net Change (acres)</u>
Late-Successional Reserve	+150
General Forest Management Area	-40

The effect of the land exchange by adding the 410 acres to Land Tenure Zone 1 would be an overall increase of 296.3 acres, increasing the Eugene District total from 78,175 acres to 78,471.3 acres. The overall effect on Land Tenure Zone 2 would be a reduction of 113.7 acres from 238,398 acres to 238,284.3 acres.

The effect of the exchange would be a 2.16 acre increase in Public Domain and an increase of 110 acres of O & C Land Grant lands.

The proposed action, which includes an amendment to a reciprocal right-of-way agreement, will assure that both parties retain the access rights they need for future management of their respective lands. The proposed agreement amendment provisions would not have any additional environmental consequences. The amendment will not provide either party access to any of its lands where it did not already have such access.

The proposed action provides legal access for the public to the lands acquired (410 acres). No lands with existing legal public access would be traded except Tract D (40 acres). However, the public would retain the right to cross Tract D after recordation of an easement to the United States of America, through the U. S. Forest Service, prior to closing.

The proposed action would increase BLM acreage with moderate potential for oil and gas by 110.16 acres. There would be a gain for BLM of 110.16 acres of low potential locatable mineral estate and no change in acreage of moderate potential locatable mineral estate. There would be no loss for BLM of acreage with high, medium or low potential salable mineral estate.

Completion of the exchange as proposed would reduce public land boundary mileage by 4.25 miles, thus reducing property line surveying and maintenance costs for BLM. The number of mid-slope property lines would also be reduced with subsequent reductions in the costs of land management. Property line mileage would also be reduced by approximately 1.75 miles for Hancock, thus reducing its operating costs.

The Amy Road occupancy trespass tract and Caroline Creek hiatus have been used for residential and roadway purposes, respectively, for many years. Existing uses would be expected to continue. It is also considered unlikely that sale of the Low Pass Transfer Site parcel to Lane County would result in any change from the present use.

It is also considered unlikely that the sale of any occupancy trespasses or survey hiatuses discovered in the future would result in any change to the current land use, since such tracts would in almost all cases have been used for many years by abutting landowners who thought they already owned the land.

4. POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY

If all parcels were included in the final exchange the result would be an increase in public land by approximately 110.16 acres in the Eugene District. In Lane County public land would increase by 223.86 acres. In Douglas County private land would increase by 113.70 acres. The acreage of private land ownership would decrease in Lane County by 186.14 acres.

Timber severance taxes collected by the State of Oregon from timber harvest operations on private land would not likely change much as a result of the exchange because the total acreage and timber volumes on the lands to be traded and the distribution of age classes on the offered and selected lands are so similar.

Assuming that all of the selected lands would be placed in forest deferral status upon acquisition by John Hancock, and also assuming that property tax collections would be about the 1996-1997 average for the offered lands (\$4.00/acre), the estimated annual change in property tax collections resulting from the proposed exchange would be as follows:

Lane County	-\$895/yr
Douglas County	+\$455/yr
overall	-\$440/yr

Timber severance taxes collected by the State of Oregon from timber harvest operations on private land would not likely change much.

Sale of the Low Pass Transfer Site to Lane County would not result in any change to property tax revenues, as the land is tax exempt in either ownership. Any revenues generated from the sale of forest resources or from rental for use authorizations would go entirely to Lane County rather than 50 percent of such revenue being shared among the O&C counties.

Local property tax revenues would increase slightly when approximately 4 acres from the Amy Road and Caroline Creek parcels and an estimated 1 acre per year from occupancy encroachments discovered in the future are added to the tax base. Such tracts would most likely not be "forest deferral" for tax purposes, but any quantitative change in county tax revenues would probably be quite slight due to the small acreage involved. The parcels do not currently generate any revenue that would be shared with local government so their transfer should not result in any decrease of revenue from BLM receipts. If these tracts would be retained by BLM and the unauthorized uses authorized, they would generate a small stream of rental revenue in the future.

Future sales or exchanges to resolve inadvertent occupancy trespass should not result in any new construction or rural residential development, since the disposal lot sizes would be designed to resolve existing land title problems, not create new buildable rural residential tracts.

Since survey hiatus parcels are not currently known to BLM, there is no Federal revenue that would be shared with local government, and their transfer to private ownership would result in no loss to local government revenues from that source. The sale of any survey hiatuses discovered in the future (estimated at an average of one acre per year) would increase the local property tax base by a negligible amount or not at all if they were included in tax lots already on the property tax rolls.

B. IMPACTS OF ALTERNATIVE A

1. SPECIAL STATUS SPECIES

a. SPECIAL STATUS PLANTS

The inclusion of Tract C would expose viable populations of *Cimicifuga elata* to future private timber management activities. The impact to this population would be similar to those discussed for the proposed action for Tract I. There were no special status plant species found in Tract E.

b. ANADROMOUS FISH

The impacts to anadromous fish would be similar to those discussed in the proposed action.

c. NORTHERN SPOTTED OWL

In addition to the impacts discussed for the proposed action, Alternative A "May Affect, and is likely to Adversely Affect" the northern spotted owl. This determination is based upon the proposed transfer of an additional 7 acres,

totaling 34 acres, of suitable habitat for spotted owls. There would be a transfer of 38 acres of suitable habitat for spotted owls to Federal ownership.

Additionally, Alternative A "May Affect, but is Not Likely to Adversely Modify" Critical Habitat suitable for spotted owls based upon the transfer of an additional 119.12 acres (Tracts C and E), totaling 234 acres of Critical Habitat, from Federal ownership. The basis for this determination is the fact that these parcels are scattered tracts and, in some cases, disjunct and isolated from other Federal ownership.

d. MARBLED MURRELET

Alternative A "May Affect, and is likely to Adversely Affect" the marbled murrelet. This determination is based upon the proposed transfer of an additional 7 acres, totaling 10 acres of suitable habitat for marbled murrelet. There would be a transfer of 31 acres of suitable habitat for marbled murrelet to Federal ownership as part of Alternative A.

Additionally, Alternative A "May Affect, but is Not Likely to Adversely Modify" Critical Habitat suitable for marbled murrelet based upon the transfer of an additional 119.2 acres (Tracts C and E), totaling 380 acres of Critical Habitat from Federal ownership. The basis for this determination is the fact that these parcels are scattered tracts and, in some cases, disjunct and isolated from other Federal ownership.

2. ALLOWABLE SALE QUANTITY (ASQ)

Similar to those discussed in the proposed action.

3. POTENTIAL CHANGE IN LAND USES

An additional 119.12 acres (Tracts C and E) of public lands would be transferred to the private sector within Lane County.

Given the land use allocations in the Resource Management Plan, Alternative A would result in acreage changes by land use allocation, as follows:

<u>Land Use Allocation</u>	<u>Net Change (acres)</u>
Late-Successional Reserve	+ 30
General Forest Management Area	- 40

The impacts from the potential sale of the Amy Road occupancy tract, Caroline Creek hiatus, Low Pass Transfer Site, and any occupancy encroachments or survey hiatuses discovered in the future would be the same as under the Proposed Action.

4. POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY

The impacts to Douglas County would remain the same as in the proposed action. The impacts to Lane County would be modified to an increase in public lands by 119.2 acres to 305.26 acres. Timber severance taxes collected by the State of Oregon from timber harvest operations on private land would not likely change significantly as a result of the exchange under this alternative.

Assuming that all of the selected lands would be placed in forest deferral status upon acquisition by John Hancock, and also assuming that property tax collections would be

about the 1996-1997 average for the offered lands (\$4.00/acre), the estimated annual change in property tax collections resulting from the proposed exchange would be as follows:

Lane County	-\$1,221/yr
Douglas County	+\$ 455/yr
overall	-\$ 781/yr

Timber severance taxes collected by the State of Oregon from timber harvest operations on private land would not likely change significantly.

The impacts from the potential sale of the Amy Road occupancy tract, Caroline Creek hiatus, Low Pass Transfer Site, and any occupancy encroachments or survey hiatuses discovered in the future would be the same as under the Proposed Action.

C. IMPACTS OF NO ACTION ALTERNATIVE

1. SPECIAL STATUS SPECIES

a. SPECIAL STATUS PLANTS

There would be no impacts to known populations of special status plants.

b. ANADROMOUS FISH

Opportunities for further enhancement of the Whittaker Creek fisheries habitat by the Bureau of Land Management would be foregone. The riparian buffers along Whittaker Creek would be managed to standards established by the Oregon State Board of Forestry instead of the Aquatic Conservation Strategy, which was adopted by the Bureau of Land Management as part of the Resource Management Plan. Under State guidelines, the private landowner would be required to leave a buffer no wider than 100 feet on each side of Whittaker Creek and would not be required to leave all large trees within this buffer. Under the Aquatic Conservation Strategy, BLM would be required to leave a buffer equivalent to the height of two site potential trees (approximately 420 feet at this location) on each side of the creek and would not be able to harvest large trees within the buffer. Under private ownership, it is expected that there would be less large woody material available for recovery of the stream over time and that there would be greater risk of adverse impacts to Whittaker Creek from actions or activities occurring outside the buffer.

c. NORTHERN SPOTTED OWL

The opportunity to consolidate lands along Whittaker Creek into a larger block of public ownership would be lost. Opportunities to provide for managed connective corridors for dispersal of fledglings and protected flyways along Whittaker Creek riparian zone would be lost when timber harvest activity proceeded on private lands according to State Forest Practice standards.

d. MARBLED MURRELET

As with the spotted owl, the opportunity to consolidate lands along Whittaker Creek into a larger block of public ownership would be lost. Over time, with timber harvest activity on the private lands, there would be a loss of approximately 31 acres of suitable habitat for the marbled murrelet.

2. ALLOWABLE SALE QUANTITY (ASQ)

No change from the status quo.

3. POTENTIAL CHANGE IN LAND USES

There would be no land use changes resulting from the proposed land exchange. Tract H would remain as Land Tenure Zone 1.

There would be no land use changes if the Low Pass Transfer Site, and any survey hiatuses discovered in the future would be retained in Federal ownership under their current land tenure status.

If the Amy Road occupancy tract, Caroline Creek hiatus, and any occupancy encroachments discovered in the future would be retained in Federal ownership under their current land tenure status, BLM has the authority to require that the unauthorized uses be removed and the site(s) be rehabilitated. If appropriate, the existing uses could be authorized through permit, lease or right-of-way grant and thus continued.

4. POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY

There would be no change to local government revenues resulting from the land exchange.

There would be no local government revenue changes if the Amy Road occupancy tract, Caroline Creek hiatus, Low Pass Transfer Site, and any occupancy encroachments or survey hiatuses discovered in the future were retained in Federal ownership, except that any survey hiatuses currently included in tax lots on the property tax rolls would no longer be subject to such taxation after they were identified as being public lands under BLM jurisdiction.

V. CUMULATIVE EFFECTS

A. PROPOSED ACTION

1. SPECIAL STATUS SPECIES

Exchanges completed by the Eugene District from 1987 to the present have contributed to blocking both BLM and private ownership patterns, resulting in decreased fragmentation of federal lands. This trend is expected to continue as provisions of the RMP/ROD are implemented. The RMP/ROD states: "Make exchanges to enhance public resource values and/or improve land patterns and management capabilities of both private and BLM administered land within the planning area by consolidating ownership and reducing the potential for land use conflict." (Management Actions/Direction for All Land Use Allocations - RMP/ROD page 93). The directions for Riparian Reserves (RMP/ROD page 92) provide that BLM "Use land acquisition, exchange, and conservation easements to meet Aquatic Conservation Strategy objectives and facilitate restoration of fish stocks and other species at risk of extinction." The directions for Late-Successional Reserves (RMP/ROD page 93) state "Consider land exchanges especially to improve area, distribution, and quality (connectivity, shape, and contribution to biodiversity) of Late-Successional Reserves and where public and private lands are intermingled." The Hancock Exchange would continue the ownership consolidation trend and would contribute to meeting the 3 quoted goals.

Ownership consolidation is expected to have a beneficial effect for fish as " ...land tenure adjustments . . . will permit increased control over important riparian and aquatic habitat and increase the ability of the District to develop and implement aquatic habitat rehabilitation projects for anadromous and resident fish species." (Eugene District RMP/EIS pages 4-67 and 4-68). Completion of the Hancock Exchange would give BLM almost total contiguous ownership of Whittaker Creek. Management of the Whittaker Creek riparian zone under the Forest Plan, including the implementation of specific habitat improvement projects, is expected to lead to an improvement in fish habitat over the long term.

Ownership blocking within Late-Successional Reserves and Riparian Reserves under the provisions of the Forest Plan is also expected to have a beneficial long term effect for the marbled murrelet and northern spotted owl as it should increase the ability of BLM to develop and implement habitat management and rehabilitation plans for these species. The Hancock Exchange would lead to BLM ownership consolidation in both reserve allocations.

Due to the location, size, and land uses involved with occupancy trespass and hiatus tracts sold in the past, their sale is believed to have had little or no effect (beneficial or adverse) on special status species. Sale of the Amy Road, Caroline Creek, and Low Pass Transfer Site tracts will not change this situation. Since any occupancy trespass and hiatus tracts discovered in the future must be inventoried and cleared for special status species before they can be offered for sale, their sale should likewise have little or no effect on special status species.

2. ALLOWABLE SALE QUANTITY (ASQ)

Exchanges completed by the Eugene District from 1987 to the present have resulted in a net increase of 228 acres of public land managed as Matrix land under the RMP (including lands where the land use allocation was estimated because they were transferred out of public ownership prior to the RMP or have been recently acquired and a land use allocation has not yet been formally determined). Completion of the

Proposed Action would reduce this net gain to 188 acres. One of the District's considerations in conducting exchanges during this period was to minimize changes in the acreage of BLM land assigned to the Matrix land use allocations on an overall basis. Although individual exchange transactions may result in either increases or decreases to the acreage of Matrix lands, the goal of seeking no net change over time is expected to continue into the foreseeable future (see RMP/ROD, page 92, which states that "As a matter of practice, O&C forest lands allocated to timber management would only be exchanged for lands to be managed for multiple-use purposes").

The amount of land transferred out of federal ownership through sale by the Eugene District over the past decade has averaged approximately an acre per year. No significant change is anticipated in the future. The cumulative effect of such sales on the Allowable Sale Quantity has been, and is expected to remain, slight.

3. POTENTIAL CHANGE IN LAND USES

From an overall perspective, the cumulative effect of BLM land tenure adjustments on the change of land uses within Lane, Douglas, Benton, and Linn Counties is slight. Lands now managed for forest purposes are expected to continue to be managed for those purposes. Those parcels affected by the plan amendment are expected to continue to be utilized for their current use upon approval of the amendment.

Almost all of the lands transferred or acquired by exchange by the Eugene District over the past decade are zoned for forest management purposes. No change in use of these lands is known to have occurred following completion of an exchange, although the intensity of forest management activities may have decreased for some of the parcels acquired by BLM and increased for some of the parcels transferred to private ownership. Exchanges completed since 1987 have resulted in a net BLM acreage gain of 1005 acres, an increase of 0.3 percent. Completion of the proposed Hancock Exchange would result in a new addition of a maximum of 110 acres (if no parcels are dropped to equalize exchange values). Over time it is anticipated that BLM acreage will remain nearly static, although individual exchange transactions may cause either net increases or decreases.

Almost all lands sold by BLM over the past decade were either survey hiatuses sold to an adjoining landowner or were encumbered by unintentional occupancy trespasses. It is believed that all of these tracts have continued to be used for the same land use they were utilized for prior to the sale. It is not anticipated that future sales that would be authorized by the plan amendment would be any different.

4. POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY

Exchanges completed by BLM since 1987 have resulted in a net Eugene District gain of 1005 acres, which represents an increase of 0.3 percent. Almost all of the lands acquired by BLM have been in forest deferral status, so the net decrease in property tax revenues to the counties is believed to be very minor. Completion of the proposed Hancock Exchange would result in a new addition of a maximum of 110 acres (if no parcels are dropped to equalize exchange values). Over time it is anticipated that BLM acreage will remain nearly static, although individual exchange transactions may cause either net increases or decreases. As discussed under Allowable Sale Quantity above, exchanges since 1987 have resulted in a net increase of 228 acres of public land managed as Matrix land under the RMP. Over time it is anticipated that BLM Matrix acreage will also remain nearly static so that local government revenues coming from BLM forest management operations are not expected to increase or decrease as a result of land exchanges.

Land sales are anticipated to continue into the future at the rate of about one acre per year, as has occurred in the past decade. These sales are so small that they are not expected to have any significant effect on local government revenues. Any change that does occur is probably a small increase in property tax collections as these lands are added to the tax rolls.

B. ALTERNATIVE A

1. SPECIAL STATUS SPECIES

Cumulative impacts for Alternative A are similar to those identified in the proposed action, except for *Cimicifuga elata*, a Bureau sensitive plant species that is managed according to the guidelines set forth in the Conservation Strategy for *Cimicifuga elata*, 1996. If Tract C were transferred to private ownership, its population of *Cimicifuga elata* (considered to be significant under the Conservation Plan for this species) may not be afforded the long-term protection it would have if retained in Federal ownership and may thus not contribute to the long-term viability of the species.

2. ALLOWABLE SALE QUANTITY (ASQ)

Cumulative impacts for Alternative A are similar to those identified for the proposed action.

3. POTENTIAL CHANGE IN LAND USES

Cumulative impacts for Alternative A are similar to those identified in the proposed action.

4. POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY

Cumulative impacts for Alternative A are similar to those identified in the proposed action.

C. NO ACTION ALTERNATIVE

1. SPECIAL STATUS SPECIES

Under the No Action Alternative (i.e., management under the unamended RMP/ROD), a general recovery of fish habitat in the District is expected to occur over the next century as the number of conifers in riparian areas increases and the trees grow to such a size that they will remain in the stream channel when they fall (RMP/EIS, page 4-67). Large down woody material within the stream channel provides for the accumulations of spawning gravel and valuable rearing habitat for salmonid and steelhead. Whittaker Creek, however, may not recover as much or as quickly if the Hancock Exchange is not completed, due to private timber management actions within the riparian zone, because the Oregon Forest Practices Act "...requires less retention of riparian vegetation and downed logs than is proposed under most alternatives on BLM administered lands, particularly in smaller streams. As is the situation on public lands, large trees and large woody debris are largely absent from streams and may not be replaced in the future. Therefore, a major cumulative effect of timber management in individual watersheds, especially those with large private holdings, may be an overall reduced level of large woody debris and habitat for priority fish species over the long-term." (RMP/EIS, page 4-67).

2. ALLOWABLE SALE QUANTITY (ASQ)

There would be no change in the Allowable Sale Quantity.

3. POTENTIAL CHANGE IN LAND USES

There would be no land use changes resulting from the proposed land exchange. There would be no land use changes resulting from the proposed plan amendments.

4. POTENTIAL IMPACT TO LOCAL GOVERNMENT REVENUE AND THE ECONOMY

There would be no change in local or State revenues resulting from a no action alternative.

VI. CONSULTATION AND COORDINATION

A. FEDERAL AGENCIES

U.S. Fish and Wildlife Service
National Marine Fisheries Service

B. STATE AND LOCAL AGENCIES

The following State agencies were notified and their comments requested:

Department of Geology and Mineral Industries
Department of Environmental Quality
Department of Fish & Wildlife
Department of Forestry
Department of Land Conservation & Development
Division of State Lands
State Historic Preservation Office
Water Resources Department
State Parks Division

No comments were received.

The following local government agencies were also notified and their comments requested:

Douglas County Board of Commissioners
Douglas County Planning Division
Lane County Planning Division
Lane County Board of Commissioners

Comments were received from the Douglas County Planning Division.

C. PUBLIC CONTACT AND NOTIFICATION

A Notice of Intent, Plan Amendment, including supplemental information, was published in the Federal Register on September 18, 1997, as well as in the local newspaper. The notice offered a 30-day public review and comment period with written comments due postmarked by October 20, 1997. The notice was also mailed directly to the appropriate members of the United States Senate and House of Representatives, the Governor of Oregon, appropriate County Boards of Commissioners and County Planning Departments, and all parties owning land adjoining any of the tracts being considered for exchange.

The following comments were received:

1. Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians - request that all tracts be surveyed for cultural material prior to transfer.
2. Institute for Policy Research, Northwestern University - request to be placed on mailing list for the Environmental Assessment.
3. Association of O & C Counties - request for copy of Federal Register Notice and Environmental Assessment. Comment opposes transfer of O & C land base from public ownership. Asks for additional information regarding any O & C Lands being transferred. Also asks that a 5-acre limit be placed upon future survey errors subject to the plan amendment criteria.

4. USFWS, Ray Bosch - request to be placed on mailing list for the Environmental Assessment.

A Notice of Exchange Proposal, dated July 1, 1996, was published in the local newspapers for 4 consecutive weeks beginning on July 10, 1996. The notice offered a 45-day public comment period with written comments due postmarked by August 23, 1996. The notice was also mailed directly to the appropriate members of the United States Senate and House of Representatives, the Governor of Oregon, appropriate County Boards of Commissioners and County Planning Departments, and all parties owning land adjoining any of the tracts being considered for exchange.

No comments were received.

An Amendment to Notice of Exchange Proposal, dated June 20, 1997, was published in the local newspapers for 2 consecutive weeks beginning on June 25, 1997. The notice offered a 45-day public comment period with written comments due postmarked by August 8, 1997. The notice was also mailed to the appropriate members of the United States Senate and House of Representatives, the Governor of Oregon, appropriate County Boards of Commissioners and County Planning Departments, and all parties owning land adjoining any of the tracts being considered for exchange.

No comments were received.

D. LIST OF PREPARERS

The following BLM resource specialists have examined the proposed action and provided either written or verbal input utilized in this assessment:

<u>Participant</u>	<u>Title</u>	<u>Resource Values Assigned</u>
Neil Armantrout	Fishery Biologist	Fisheries
Dan Crannell	Wildlife Biologist	RTE Wildlife
Larry Larson	Forestry Technician	Timber Volumes
Steve Madsen	Realty Specialist	Timber
Eric Meyers	Forest Engineer	Access
Saundra Miles	Recreation Planner	Recreation
Raul Morales	Wildlife Biologist	Wildlife
Kathy Pendergrass	Botanist	RTE Plants
John Rehm	Consulting Geologist	Mineral Resources
Mike Southard	Archaeologist	Cultural Resources
Gary Wilkinson	Forester	Timber
Nancy Wogen	Botanist	RTE Plants

DRAFT

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for
Eugene District
RESOURCE MANAGEMENT PLAN AMENDMENT
with
ENVIRONMENTAL ASSESSMENT
for
PROPOSED HANCOCK EXCHANGE

An interdisciplinary team of the Eugene District, Bureau of Land Management, has analyzed a proposal to amend the Eugene District Resource Management Plan to allow a land exchange between the Bureau of Land Management and John Hancock Mutual Life Insurance Company, a Massachusetts corporation. The proposed exchange involves 410 acres of private land and 299.84 acres of public land. The amendment would also allow the sale of three parcels of land containing approximately 21 acres.

The proposed plan amendment would change the existing Eugene District Resource Management Plan Land Tenure Zone designations to enable completion of the proposed action. The proposed action identifies 113.7 acres of Land Tenure Zone 1 lands in Douglas County that would become Land Tenure Zone 2 in order to facilitate the land exchange proposal. The lands acquired by BLM would be managed under the appropriate land use allocations and prescriptions from the approved Eugene RMP. Any associated management activities, except for potential stream enhancement projects and new recreational facilities, have already been analyzed in the RMP/EIS documents. Any potential stream enhancement projects and new recreational facilities on the lands acquired would be subject to further environmental analysis before they could be implemented.

The plan amendment would also change the Land Tenure Zone for 2 small tracts containing approximately 4 acres. The Amy Road occupancy trespass would change from Zone 1 to Zone 3. The Caroline Creek hiatus would change from unzoned to Zone 3. Land Tenure Zone 3 lands are eligible for disposal through direct sale. Sale of these parcels to resolve occupancy trespass issues could be conducted following completion of mineral potential reports and inventories and clearances for special status species, cultural and historical resources and hazardous substances, provided that no resources or conditions were found that would require their retention in federal ownership.

The plan amendment would change the Land Tenure Zone of the Low Pass Transfer Site, containing approximately 17 acres, from Zone 2 to Zone 3. This would allow the sale or exchange of this solid waste transfer site and former landfill to Lane County. Sale of this parcel could be conducted following completion of a mineral potential report and inventories and clearances for special status species, cultural and historical resources and hazardous substances, provided that no resources or conditions were found that would require its retention in federal ownership. Any proposal to transfer this parcel by exchange would be subject to the findings of an Environmental Assessment specifically analyzing the impacts associated with such an exchange at some time in the future.

The plan amendment would add language to the Eugene District Resource Management Plan to allow for the placement of survey hiatuses and unintentional encroachments on public land into Land Tenure Zone 3 as they are discovered in the future. This would affect an estimated one acre per year. Any proposed disposal actions would be required to meet the Resource Management Plan criteria for disposal and to undergo NEPA analysis. Lands affected by this amendment may be retained if the consultations, clearances, reports, or Environmental Assessment show any resource values worthy of permanent Federal retention.

Legal descriptions and general information of the lands proposed for exchange or Land Tenure Zone change are shown in the attached Environmental Assessment (EA) #OR-090-97-42.

Authority for the proposed exchange is Section 206 of the Federal Land Policy Management Act of 1976 (43 U.S.C. 1716). The exchange values shall be fair market value as determined by appraisal. In the event appraised values are not equal, exchange values shall be equalized by a cash payment not to exceed twenty-five percent (25%) of the value of the federal lands, by deleting parcels or by reserving timber.

Authority for the proposed land sales is Sec. 203 and Sec. 209 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716). Sales would be conducted under the procedures of 43 CFR Parts 2710 and 2720. The sale price shall be fair market value as determined by appraisal.

A summary of the environmental effects (as discussed in the EA) follows. The tests of significance identified in 43 CFR 1508.27(b) have also been considered.

- Analysis indicated no significant impacts on society as a whole, the affected region, the affected interest, or the locality.
- There were no identified impacts or issues related to public health or safety. Hazardous materials clearances would be verified prior to exchange or sale (reference EA, Exhibit A, Table 1).
- There are no prime or unique farmlands, or potential, nominated, or designated wild and scenic rivers within the potential exchange or sale parcels (reference EA, Exhibit A, Table 1).
- Cultural and wetland resources occurring on the offered tracts would be protected with the completion of the exchange. There would be a net increase of 21 acres of publicly owned riparian/wetland resulting from the exchange. There would be an increase of 2½ miles of publicly owned anadromous fisheries streams and associated riparian vegetation (Reference EA, Exhibit A, Table 1).
- There would be no significant impact, either direct or indirect, to minority or low-income populations or communities. Completion of the Hancock Exchange and land sales involves a small acreage located generally distant from populations centers and would not result in any significant changes of land use.
- Anticipated impacts on the quality of the human environment are not anticipated to be highly controversial. The proposed Plan Amendment, Notice of Exchange Proposal, and Amendment to Notice of Exchange Proposal have been advertised in local newspapers. The proposed Plan Amendment was also advertised via Federal Register notice. Adjacent landowners, interested third parties, and elected officials were also briefed on the proposed action through direct mailings. Public notification procedures have generated 4 responses. There was a request for ensuring cultural clearance of all public lands prior to exchange. There were 2 requests to be placed on the mailing list for a copy of the EA. There was a request for additional information concerning the disposal of O & C Land Grant lands and a recommendation to place a 5-acre limit on future survey errors subject to the plan amendment criteria. Since disposal actions, including any lands resulting from future survey error discoveries, are subject to an Environmental Assessment and may be retained if the parcel is found to have significant resource values, the suggested recommendation of a 5-acre limit was not adopted.
- There are no highly uncertain or unique unknown risks involved.
- Future activities on federal land transferred to private ownership would be governed by State statutes (EA section IV.A.3). In non-federal ownership, these lands would be subject to county land use planning requirements, including county comprehensive planning and zoning.

- The Hancock Exchange would result in a decrease of 12.8 thousand board feet (-0.036 per cent) to the annual timber harvest for the Eugene District (EA Appendix 3); this is not considered to be a significant decrease in annual sale quantity.
- A cultural resource survey was conducted for the selected lands in the proposed exchange and no known Native American Religious Concerns or Cultural Resources were found (EA, Exhibit A, Table 1).
- The Eugene RMP was found to be in conformance with state and local plans, programs and policies within the state program under the Coastal Zone Management Act. As a result of the consistency of this amendment with the RMP/ROD direction, no additional coastal zone consistency determination is required or will be prepared under 15 CFR 930.
- The decision for the proposed action will be subject to the findings of the Biological Opinion provided by the U. S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act and 50 CFR 402.14. The proposed action is expected to have impacts to species either listed or proposed for listing as threatened or endangered under the endangered species act. These impacts are summarized as follows:

Special Status Plants - A botanical survey of the selected lands, Tracts D, F, H and I, was conducted and no threatened or endangered species were found. There is a population of a Bureau Sensitive species, 12 plants, located on Tract I of the selected lands. This species, *Cimicifuga elata*, is managed in accordance with the Conservation Strategy for *Cimicifuga elata*, 1996. Transfer of this population into private ownership is not optimal from a population viability standpoint, but has been determined to be not in conflict with the Conservation Strategy. There are no known special status plants located on offered Tracts A, B, and G (EA, IV.A.1.a)

Anadromous fish - "Likely to Affect, Not Likely to Adversely Affect". BLM would control all of the primary channel and riparian zone of Whittaker Creek drainage. The Whittaker Creek system is considered by BLM to be an extremely valuable anadromous fisheries basin, containing rearing habitat for coho salmon and steelhead. Completion of the exchange would increase the opportunities for additional stream habitat enhancement projects that would complement those improvements provided under Hancock management (EA, IV.A.1.b)

Northern Spotted Owl - "May Affect, and is likely to Adversely Affect". This is based upon disposal of 27 acres of suitable habitat for owls (Tract I-D and Tract D); however, there would be a net increase of 11 acres of suitable spotted owl habitat resulting from the exchange (EA, IV.A.1.c)

Critical Habitat for Northern Spotted Owl - "May Affect, but is Not Likely to Adversely Modify". This is based upon the disposal of 114 acres of critical habitat (Tract H); however, there would be a potential net increase of 296 acres of critical habitat resulting from the exchange (EA, IV.A.1.c)

Marbled Murrelet - "May Affect, and is likely to Adversely Affect". This is based upon the loss of 3 acres of suitable habitat (Tract D) for marbled murrelet; however, there would be a net increase of 28 acres of suitable murrelet habitat as a result of the exchange (EA, IV.A.1.d).

Critical Habitat for Marbled Murrelet - "May Affect, but is not Likely to Adversely Modify". This is based upon the disposal of 260 acres of critical habitat (Tract F, Tract H, and Tract I); however, there would be a potential net increase of 150 acres of critical habitat resulting from the exchange (EA, IV.A.1.d).

- The proposed action does not violate Federal, State, and local law requirements imposed for protection of the environment.

FONSI DETERMINATION

On the basis of the information contained in this Environmental Assessment and other information available to me as summarized above, it is my determination that the proposed action or any of the alternatives does not constitute a major federal action significantly affecting the quality of the human environment. An Environmental Impact Statement is, therefore, unnecessary and will not be prepared. The proposed action and alternative A are not consistent with the existing Eugene District Resource Management Plan; this plan would be modified through this plan amendment.

Recommended: _____
_____ Eugene District Manager Date

Approved: _____
_____ BLM Oregon State Director Date

APPENDIX 1

Biological Assessment

NOTE: The acreage shown in the following Amendment to the Biological Assessment has been updated from the submission that was sent to the U. S. Fish and Wildlife Service to reflect more accurate information regarding Tract I of the selected lands and Tract B of the offered land. For consistency the acreage for Tract I has been updated to 108.3 acres (rounded to 108 acres) from 120 acres, and the acreage for Tract B has been updated to 170 acres from 145 acres. Tract D was shown as Late-Successional Reserve in the original assessment - the land use has been corrected and is shown as General Forest Management Area.

BACKGROUND AND PURPOSE

The Eugene District's February 5, 1996, amendment to the BLM/John Hancock Land Exchange analyzes potential impacts of a proposed land exchange on Federally listed threatened and endangered species and Critical Habitat for those species pursuant to the Endangered Species Act of 1973, as amended (ESA). The Eugene District of the U.S. Bureau of Land Management prepared this amendment in accordance with U.S. Fish and Wildlife Service regulations covering implementation of the ESA, BLM Manual 6840, and other directives.

This amendment describes impacts of a modified land exchange between the Bureau and John Hancock Company as they relate to the northern spotted owl (*Strix occidentalis caurina*), the marbled murrelet (*Brachyramphus marmoratus*), and Critical Habitat for those species. This proposed action would have "No Affect" on the bald eagle (*Haliaeetus leucocephalus*) and the American peregrine falcon (*Falco peregrinus anatum*).

The proposed action complies with the requirements of the Record of Decision and the Standards and Guidelines for the Northwest Forest Plan (U.S. Forest Service and U.S. Bureau of Land Management 1994a), and the Eugene District's Record of Decision and Resource Management Plan.

As amended, this proposed land exchange "May Affect, and is Likely to Adversely Affect" the northern spotted owl due to the proposed relinquishment of some suitable habitat within provincial home ranges of spotted owls. This action would also "Affect, and May Adversely Affect" the marbled murrelet due to the proposed loss of 3 acres of habitat suitable for this bird. Additionally, this proposal "May Affect, but is Not Likely to Adversely Modify" designated Critical Habitat for both of the above mentioned species.

AMENDMENT TO BIOLOGICAL ASSESSMENT FOR THE HANCOCK EXCHANGE

February 5, 1996

This document amends the February 5, 1996, Biological Assessment (BA) to include 3 new parcels (2 Bureau tracts and a private tract), and to delete 2 Federal parcels.

To avoid duplication of data, the original BA is included as an attachment to this document. To review the Biological Opinion that resulted, please refer to your files under 1-7-96-F-137. What will be described in this amendment are the differences that have arisen as a result of the changes in exchanged tracts.

The original BA described and analyzed the impacts of the action to Federally listed or proposed species. In the original exchange, approximately 198 acres of Bureau lands were to be exchanged for about 305 acres of Hancock lands. As modified, the exchange now would result in the exchange of approximately 300 acres of Federal lands for approximately 410 acres of Hancock property.

In the former exchange, 120 acres were designated Late-Successional Reserve (LSR), 40 acres were classified as General Forest Management (GFMA), and 40 acres as Marbled Murrelet Reserve (MMR - unmapped LSR). Lands to be obtained through this trade would have been designated LSR.

As modified, 260 acres of Bureau lands are designated LSR while 40 acres are classified as GFMA. Again, all lands (410 acres) to be obtained by the Bureau would be classified as LSR.

The original exchange would have resulted in the Bureau obtaining 107 more acres than it would have relinquished, while the current difference in acreage would be 110 acres. Originally the Bureau would have lost 10 acres of both spotted owl and marbled murrelet suitable habitat while gaining 38 acres of suitable spotted owl habitat and 31 acres of marbled murrelet habitat, resulting in a gain of 28 acres of suitable owl habitat and 21 acres of habitat suitable for the murrelet. As modified, the Bureau would relinquish 27 acres of owl habitat and 3 acres of murrelet habitat, while gaining 38 acres of owl and 31 acres of murrelet habitat. This would result in a net gain of 11 acres of suitable owl habitat and 27 acres of murrelet habitat.

Critical Habitat (CH) for both species does not exist on the private parcels, but does on some of the Federal tracts. The former exchange would have involved the relinquishment of 80 acres of CH for the owl and 158 acres for the murrelet. Currently the proposal would result in the loss of 114 acres of CH for the owl and 260 acres of the same for the murrelet.

It is assumed that lands gained through this endeavor would be all, or in part, designated as Critical Habitat for both species. Please refer to Tables 1 - 4 for a summary of acreage involved.

In the previous exchange proposal, no suitable habitat for the spotted owl was to be relinquished within the 1.5 mile provincial home range of any known owls. As modified, Tract I (a Federal parcel marked for exchange) is partly comprised of 24 acres of a 55-year old conifer/hardwood mix. Although marginal, this 24 acres qualifies as suitable roosting/foraging habitat for this species.

Past surveys have not documented any use by owls in this 24-acre stand.

Federal Tracts F and H also fall within the home range of a spotted owl center; however, suitable habitat within these stands is lacking. Three acres of suitable habitat for both owls and murrelets is present in Tract D, but is not within the home range of any known owls.

No Federal tracts in this proposal contain sites with documented murrelet presence or occupancy as described by the Pacific Seabird Group.

Each of 2 of the 3 private tracts proposed for trade fall within the home ranges of 2 historic spotted owl home ranges. Thirty-eight acres within these 2 Tracts (A and B) qualify as suitable habitat for the spotted owl, while 31 of those acres is approaching habitat suitable for the murrelet.

The third private tract, parcel G, falls within the home range of an historic owl center, but does not qualify as suitable habitat for this species.

Considering the above information, it is the conclusion of this Amendment that this proposed action "May Affect, and is Likely to Adversely Affect" the northern spotted owl and the marbled murrelet. This determination is based on the proposed Federal relinquishment of 3 acres of habitat suitable for both the owl and murrelet, and 27 acres suitable for the owl.

Additionally, this proposal "May Affect, but is Not Likely to Adversely Modify" Critical Habitat for each species based on the forfeiture of 260 acres of CH for the marbled murrelet and 114 acres of CH for the

northern spotted owl. The basis for this determination is the fact that these parcels are scattered tracts and, in some cases, disjunct and isolated from other Federal ownership.

TABLE 1 - Status of Exchange Parcels as Modified (Federal)*						
Parcel & Location	Total Acres	LUA	SPOW SH	MAMU SH	SPOW CH	MAMU CH
Tract D T18S,R11W , Sec. 7	40	GFMA	3	3	No	No
Tract F T18S, R8W, Sec. 6	38	LSR	0	0	No	Yes
Tract H T19S, R8W, Sec. 7	114	LSR	0	0	Yes	Yes
Tract I T17S, R8W, Sec. 33	108	LSR	24	0	No	Yes

Table 2 - Status of Exchange Parcels as Modified (Private)*					
Parcel & Location	Total Acres	SPOW SH	MAMU SH	SPOW CH	MAMU CH
Tract A T18S, R8W, Sec. 28	160	31	31	No	No
Tract B T18S, R8W, Sec. 32	170	7	0	No	No
Tract G T18S, R8W, Sec. 29	80	0	0	No	No

Table 3 - Status of Former Exchange Parcels (Federal)*						
Parcel & Location	Total Acres	LUA	SPOW SH	MAMU S	SPOW CH	MAMU CH
Tract C T18S, R8W, Sec. 29	80	LSR	0	0	Yes	Yes
Tract D T18S, R11W, Sec. 7	40	GFMA	3	3	No	No
Tract E T18S, R10W, Sec. 3	40	MMR	7	7	No	Yes
Tract F T18S, R8W, Sec. 6	38	LSR	0	0	No	Yes

Table 4 - Status of Former Exchange Parcels (Private)*					
Parcel & Location	Total Acres	SPOW SH	MAMU SH	SPOW CH	MAMU CH
Tract A T18S, R8W, Sec. 28	160	31	31	No	No
Tract B, T18S, R8W, Sec 32	170	7	0	No	No

- * SPOW = Northern Spotted Owl
MAMU = Marbled Murrelet
SH = Suitable Habitat
CH = Critical Habitat

BIOLOGICAL ASSESSMENT
of Fiscal Year 1996 Third Quarter Projects
(The Hancock Exchange)
Eugene District
Bureau of Land Management

I. INTRODUCTION

A. PURPOSE OF THE CONSULTATION

This assessment analyzes potential impacts of proposed land management actions to federally listed, threatened, and endangered species, species proposed for federal listing, federally designated critical habitats, and habitats proposed for federal designation, pursuant to the Endangered Species Act of 1973, as amended (ESA). The Eugene District of the U. S. Bureau of Land Management (BLM) prepared this assessment in accordance with U. S. Fish and Wildlife Service regulations covering implementation of the ESA, BLM Manual 6840 and other directives.

B. SPECIES AND CRITICAL HABITATS ASSESSED

This assessment describes potential impacts of proposed land management actions (described below) to the northern spotted owl (*Stix occidentalis caurina*), the marbled murrelet (*Brachyramphus marmoratus*) and coho salmon (*Oncorhynchus kisutch*). During preparation of the assessment the District also evaluated potential impacts to the American peregrine falcon (*Falco peregrinus anatum*) and bald eagle (*Haliaeetus leucocephalus*). However, although peregrine falcons and bald eagles occur within the District, the District determined that they would not be affected by the proposed actions. Critical habitat for the spotted owl and marbled murrelet would be impacted.

C. COMPLIANCE WITH APPROVED PLANS

The proposed action complies with the requirements of the Record of Decision and the Standards and Guidelines for the Northwest Forest Plan (U.S. Forest Service & U.S. Bureau of Land Management 1994a) and the Eugene District Record of Decision and Resource Management Plan (U. S. Bureau of Land Management 1995). Hereafter these documents are referred to in this assessment as the Northwest Forest Plan and the Resource Management Plan.

D. SUMMARY OF THE PROPOSED ACTION

All the land management actions described and evaluated in this assessment fall within the Coast Range Resource Area of the Eugene District and, consequently, western Oregon's Coast Range Province. This project includes a land exchange. This project would affect approximately 10 acres of habitat suitable for the marbled murrelet. The likely affect of this project would be:

The Hancock land exchange "May Affect, but is Not likely to Adversely Affect" the coho salmon as well as Critical Habitat for the owl and marbled murrelet; and "May Affect and is Likely to Adversely Affect" the murrelet.

II. DESCRIPTION OF THE PROPOSED ACTION

A. HANCOCK LAND EXCHANGE - The intent of this proposed exchange is to attain a more contiguous ownership for the Bureau and to obtain an important segment of Whittaker Creek. This would improve the Bureau's ability to manage the entire stream for salmonoids and other riparian dependent species. A total of 200 acres is proposed for relinquishment while approximately 305 acres (corrected acreage is 330 acres) are proposed for BLM ownership. Any imbalance of land values could be equalized by monies from a BLM fund designated for that purpose.

B. PARCELS FOR RELINQUISHMENT (All designated LSR, except Parcel 3 as corrected)

Parcel 1 (Tract C) - This 80-acre tract is located in T. 18 S., R. 08 W., Sec. 29, NENW & NESW. This stand is a 20-30 year old Douglas-fir with approximately 10 trees over 150 years old.

This stand is not considered suitable habitat for any federally listed species. It does contain approximately 0.2 mile of stream that may serve as habitat for the coho salmon, but this area has yet to be surveyed by fisheries biologists. It is a designated Critical Habitat Unit (CHU) for the spotted owl. No known owl sites are within 0.25 mile.

Parcel 2 (Tract F) - This is a 40-acre parcel in T. 18 S., R. 08 W., Sec. 6, SWSW. It is composed of a 30-35 year old plantation of Douglas-fir with scattered remnant conifer seed trees and larger deciduous trees.

This stand may be considered dispersal habitat for the spotted owl, but the quality would be low. It is not considered suitable habitat for any federally listed species known to occur in the vicinity. It does contain approximately 0.3 mile of stream that may serve as habitat for the coho salmon, but has yet to be surveyed by fisheries biologists. It is a designated CHU for the marbled murrelet. No known owl sites exist within 0.25 mile.

Parcel 3 (Tract D) - This is located in T. 18 S., R. 11 W., Sec. 7, NWNE. It is composed of 37 acres of clear cut with approximately 3 acres of 50-year old trees.

This stand is not considered suitable habitat for any Federally listed species known to occur in the area. Although a small stream runs through this parcel, it is unlikely it serves as habitat for the coho salmon. This area has yet to be surveyed by fisheries biologists. It is designated CHU for the marbled murrelet. No known owl sites exist within 0.25 mile of the tract.

Parcel 4 (Tract E) - This parcel is located in T. 18 S., R. 10 W., Sec. 3, NWNW. It is composed of 33 acres of 20-year old Douglas-fir and 7 acres of 150-year old conifers. The entire parcel is surrounded by young Douglas-fir.

Seven acres of the older timber could serve as suitable habitat for the marbled murrelet. No murrelet surveys have been performed here. Because of the small size and the isolation of this grove, it would not be adequate for spotted owls or bald eagles. Salmonoid habitat has not been identified, but no fisheries surveys have been performed here. It is designated CHU for the murrelet. No known owl sites are located within 0.25 mile.

C. PARCELS PROPOSED FOR BLM OWNERSHIP AND PROPOSED FOR LSR DESIGNATION

This 305-acre parcel (**Tracts A and B, corrected acreage is 330 acres**) includes about 2 contiguous miles of Whittaker Creek containing habitat suitable for the coho salmon. The location is T. 18 S., R. 08 W., Sec. 28, W½W½ and Sec. 32 NENE, NESW, NESE, SWNW and SWNE. In general this area is cut over, but contains scattered patches of mature and old growth Douglas-fir. Mature timber approximately totals 31 acres.

The value for the Bureau would mainly be management control of almost the entire stretch of Whittaker Creek. Although coho habitat quality is low in this area, future potential for salmonoids would be exceptional given BLM's goals for riparian enhancement. The Bureau has been improving fish habitat on adjoining stretches of this stream.

Eugene District's RMP (pgs. 92-94 of ROD) has identified tracts of land that are acceptable for exchange in order to improve management abilities. All parcels fall within this category except parcel 1 (Tract C). If this parcel is to be included, an amendment to the RMP will be approved prior to the exchange.

Additionally, page C-7 of the Northwest Forest Plan ROD states "Land exchanges involving Late-Successional Reserves will be considered if they provide benefits equal or better than current conditions. Consider land exchanges especially to improve area, distribution and quality . . . of Late-successional Reserves, especially where public and private lands are intermingled (e.g., checkerboard ownership)".

Although no watershed analyses have been completed for the relinquishment parcels, they are not presently required since they have been identified as tracts to be exchanged in the Eugene District's RMP. LSR Assessments are also not complete for these parcels, but will be completed by late March 1996. We are presently looking into what is needed at this time and will report our findings to the Fish and Wildlife Service.

D. STATEMENT OF ACTIONS PROPOSED IN CRITICAL HABITATS AND RESERVES

1. **Designated and Proposed Critical Habitat** - There would be 160 acres of CHU for the marbled murrelet and 40 acres of CHU for the spotted owl relinquished by the Hancock Exchange. In return BLM would acquire 305 acres (corrected acreage is 330 acres) of CHU for both species. No other CHUs would be affected by this project.

2. **Late-Successional and Riparian Reserves**

Again, there would be 200 acres (corrected acreage is 160 acres) of scattered LSR relinquished by the Hancock Exchange, but the Bureau would gain 305 acres (corrected acreage is 330 acres) in a more contiguous block. An LSR Assessment for this area is due to be completed by March 1996.

Although parcels proposed for relinquishment do contain some 1st and 2nd order streams (approximately 1.5 miles), they presently have limited riparian values due to past management practices. The stretch of Whittaker Creek that would be obtained by the Bureau has immense management potential for salmonids. Overall, the Bureau would gain an additional 0.5 mile of Riparian Reserve over what it would have had prior to the exchange.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. NORTHERN SPOTTED OWL

1. **Range Wide**

An account of the taxonomy, ecology, and reproductive characteristics of the spotted owl is found in the 1987 and 1990 Fish and Wildlife Service Status Reviews (U.S. Fish and Wildlife Service 1987, 1990a); the 1989 Status Review Supplement (U.S. Fish and Wildlife Service 1989); the ISC Report (Thomas et al.1990); and the final rule designating the spotted owl as a threatened species (U.S. Fish and Wildlife Service 1990b).

There are approximately 5,608 pairs of spotted owls and resident singles (activity centers) across the range of the species (U.S. Fish and Wildlife Service 1995). Recent demographic studies (Burnham et al. 1994) indicate that the population is declining. While this decline is expected to continue as spotted owl sites with degraded habitat conditions become inactive, implementation of the Northwest Forest Plan is expected to abate the decline by protecting spotted owl sites within Late-Successional Reserves. Implementation of the Northwest Forest Plan should provide for conservation of the species by allowing nonsuitable but capable habitat to regenerate within LSRs and allow the population to increase and stabilize across its range.

There currently are an estimated 8.1 million acres of suitable habitat across the range of the species (U.S. Fish and Wildlife Service 1995). U.S. Fish and Wildlife Service (1994b:16) defined suitable habitat for spotted owls as habitat that supports nesting, roosting, and foraging activities. U.S. Fish and Wildlife Service (1994b:16) defined dispersal habitat as habitat that minimally satisfies an individual owl's needs for foraging, roosting, and protection from predators during dispersal. Forested habitats with stands 40 years of age and older generally qualify as dispersal habitats.

To evaluate habitat suitability, the District used existing timber type maps and aerial photos to develop a GIS theme of suitable owl habitat on Bureau administered lands. The process used to develop this map was described in the fiscal year 1993 Timber Sale Consultation Overview document presented to the Fish and Wildlife Service in a separate memorandum.

2. Action Area

The Eugene District administers 318,039 acres of which 314,000 acres are forest-capable and approximately 111,130 acres provide suitable habitat. Forested lands on the Eugene District that are protected or reserved under the Northwest Forest Plan and Resource Management Plan cover 244,600 acres (78% of forest-capable acres) are suitable spotted owl habitat. There are 136 viable spotted owl sites on the Eugene District.

In that portion of the District within the Coast Range Province, the District defined suitable habitat as forested stands (mainly Douglas-fir) 80 years of age and older, with a canopy closure of 70 percent or greater. Dispersal habitat generally is coniferous or mixed coniferous and deciduous stands at least 40 years old with an average dbh of 11 inches and a canopy closure of 40 percent over 50 percent of the stand. These are guidelines. Exceptions occur due to local environmental conditions such as the presence of large residual seed trees or other structures suitable for nesting structure. Final determinations of habitat quality are made by local biologists.

In the Coast Range Province of the action area, spotted owls are protected in 2 LSRs. These LSRs encompass 544,000 acres of which 509,000 (94%) are Federally owned and protected. These Federal lands support approximately 230,000 acres of suitable spotted owl habitat. These 2 LSRs, however, are fragmented. All owl sites currently are limited to 4 to 50 percent suitable habitat on Federal lands within the provincial home range, with most containing around 20 percent (U.S. Wildlife Service unpublished tables provided to the District on March 6, 1995).

Approximately 152 spotted owl sites occur within this protected area of which roughly 37 sites have over 40 percent suitable habitat within their respective home range radii. Owl sites in these LSRs contain an average of 20 percent of suitable habitat on Federal lands within their provincial home range radii and,

although they continue to reproduce, the adult owl population within the LSRs has an average survival rate of 85 percent and is declining (Thraillkill 1994).

As stated previously, no known spotted owl activity centers are located within 0.25 mile of the project covered under this assessment.

No suitable habitat for this species will be affected. The scattered older trees and the isolated 7-acre grove in parcel 4 of the Hancock Exchange do not qualify as suitable habitat.

B. MARBLED MURRELET

1. Region

An account of the taxonomy, ecology, and reproductive characteristics of the murrelet is found in the 1988 Status Review (Marshall 1988), the final rule designating the species as threatened (U.S. Fish and Wildlife Service 1992), the proposed rule designating critical habitat for the species (U.S. Fish and Wildlife Service 1994a), and the Service's biological opinion for Alternative 9 (U.S. Fish and Wildlife Service 1994b) of the *Final Supplemental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (U.S. Forest Service & U.S. Bureau of Land Management 1994b) (FSEIS). The Forest Service published the *Ecology and Conservation of the Marbled Murrelet*, an up-to-date summary of the status of the species (Ralph et al. 1995). This document is the most thorough and comprehensive summary of the status of the species.

There continues to be a substantial variation in murrelet population estimates in Oregon and Washington (Varoujean & Williams 1995; Strong et al. 1995; Beissinger 1995; Spiech & Wahl 1995). Ralph et al. (1995) summarized some of the reasons for variability in population estimates among researchers, including differences in methodology, assumptions, spatial coverage, and survey and model errors. Nevertheless, both Ralph et al. (1995) and the Marbled Murrelet Recovery Team (1994) concluded that the listed population appears to be in a long-term downward trend. The Recovery Team believes that possible reasons for the decline include the species' low reproductive rate, its dependence on older forests for nesting that are now scarce and heavily fragmented, and adult mortality due to capture in gill nets and encounters with oil spills.

There are approximately 1,077 known occupied murrelet sites within Washington, Oregon, and California (Steve Holzman, pers. comm. 1995). The number of acres of suitable habitat in these 3 States is unknown. Currently, suitable habitat for the murrelet is estimated at 2,561,500 acres on Federal lands in the listed range of this species (Ralph et al. 1995).

2. Action Area

According to *Ecology and Conservation of the Murrelet*, the entire Coast Range Province in the State of Oregon supports approximately 41,000 acres of suitable murrelet habitat, of which 36,000 acres (88%) are Federally owned and protected (Ralph et al. 1995). Approximately 250 known murrelet sites occur within this protected area (Holzman per comm.).

Currently, there are approximately 29,300 acres of suitable murrelet habitat on the Eugene District. The amount of forest lands on the Eugene District protected or reserved under the Northwest Forest Plan and Resource Management Plan is 244,600 acres. Of these, 27,514 acres are suitable murrelet habitat. Therefore,

94 percent of the suitable murrelet habitat in the Eugene District is protected or reserved. There are 20 known murrelet occupied sites on the Eugene District, all of which are protected.

As mentioned, no known murrelet sites (occupied or sites with presence) will be affected by this proposal.

Unsurveyed suitable habitat, of approximately 7 acres (parcel 4 - Tract E), would be relinquished by the Hancock Exchange. However, the Bureau would obtain about 31 acres of murrelet habitat in the exchange. Although more acreage would be gained than lost in the exchange, the 7 acres of habitat to be relinquished still may result in an adverse affect on this species.

C. COHO SALMON

1. Region

An account of the taxonomy, ecology, and reproductive characteristics of coho salmon is described by Brown et al. in *Management of Wildlife and Fish Habitats in Forest of Western Oregon and Washington*, 1985, USDA Forest Service.

Three wild coastal coho salmon populations that occur from California's San Lorenzo River to the Columbia River are proposed for listing as "threatened" under the Endangered Species Act.

2. Action Area

In the Eugene District, coho are found in the mainstream and tributaries of the Siuslaw River basin. The State of Oregon in the past attempted to establish coho in the upper Willamette River basin, but no coho have been found by the BLM in that basin in over 14 years. Coho salmon use lower gradient streams, spawning in gravel riffles and deeper pools for maintaining rearing coho, particularly during periods of flood or drought. Runs of coho have been declining in the Siuslaw River. This is part of a decline throughout their range due to a variety of factors such as past habitat changes, changes in genetic adaptability, fishing pressure, and changing estuary and ocean conditions.

The Eugene District administers approximately 134 miles of stream that have potential to support populations of coho salmon. Seven of these miles occur in the Smith River while 127 miles occur in the Siuslaw River. Of this habitat approximately 50 miles are in good condition, 66 miles are fair and 18 miles are considered poor. Current and proposed District management of coho habitat is designated to restore and maintain existing habitat. The District has restored 13 miles of coho habitat. Monitoring by the District has shown that the restoration has slowed population declines compared to changes in other locations. In addition, the District created passage over Lake Creek Falls, opening an additional 100 miles of stream and lake habitat.

The expected results of the Hancock Exchange would be to gain almost total control of Whittaker Creek and the option of improving salmonid habitat along this stream. The 0.5 mile of stream (unsurveyed at this point) proposed for relinquishment is cut-over with minimum stream buffers. In turn, the Bureau would gain about 2 miles of the same type of habitat that has been surveyed and contains coho salmon.

D. CRITICAL HABITAT AND PROPOSED CRITICAL HABITAT

Northern Spotted Owl Critical Habitat - Critical habitat identifies areas essential for the conservation (i.e., delisting) of species that may need special management consideration. Critical habitat has been designated for northern spotted owls in a configuration that would support clusters of owls and facilitate dispersal. Within the Eugene District there are 10 Critical Habitat Units encompassing 139,490 acres; of these, approximately 33,900 acres are not included within LSRs.

Spotted owl Critical Habitat (but not suitable because of age) totalling 80 acres is proposed for relinquishment in the Hancock Exchange (Parcel 1 - Tract C). However, the Bureau would get ownership of about 305 acres (corrected acreage is 330 acres) of Critical Habitat for this species.

Marbled Murrelet Critical Habitat - Critical Habitat identifies areas essential for the conservation (i.e., delisting) of species that may need special management consideration. Critical habitat has been proposed for marbled murrelets. Proposed critical habitat for murrelets on the Eugene District corresponds largely with the LSRs.

Parcels 2, 3, and 4 of the Hancock Exchange are designated as Critical Habitat for the murrelet. Total amount is 120 acres. In return, the Bureau would receive 305 acres (corrected acreage is 330 acres) determined to be Critical Habitat for this species.

Coho Salmon Critical Habitat - No Critical Habitat Units have been proposed for this species at this time.

E. CUMULATIVE EFFECTS

Approximately 482,600 acres of State and privately-owned land, which could support forest habitats, occur within the Eugene District boundary. These acres do not include agricultural and urban lands in the Willamette Valley. Because of rotation schemes commonly employed on these lands that harvest timber at 60 years of age, the District assumed for purposes of this assessment that stand ages on State and privately-owned lands would not exceed 60 years.

However, the actions listed in this assessment do not involve timber harvest. Instead this action mostly involves altering of habitat for species other than those Federally listed.

Cumulative affects of the Hancock Exchange would be to lessen fragmentation of Federal ownership in the Coast Range Resource Area and to acquire almost total contiguous ownership of Whittaker Creek. This would add to the cumulative ownership of Federal management that has been the goal in past land exchanges.

IV. ANALYSIS OF THE EFFECTS OF THE PROPOSED ACTION

Direct and Indirect Effects

A. INCIDENTAL TAKE

No incidental take for any Federally listed species is anticipated.

The Hancock Exchange "May Affect and is Likely to Adversely Affect" the marbled murrelet because approximately 7 acres of suitable habitat would be relinquished (Parcel 4 - Tract E). This project would also "May Affect, but is Not Likely to Adversely Affect" the coho salmon due to improved management control of Whittaker Creek by the Bureau.

B. CUMULATIVE IMPACTS

The Hancock Exchange would add approximately 305 contiguous acres (corrected acreage is 330 acres) to Bureau holdings that include 2 miles of Whittaker Creek while relinquishing 200 acres of fragmented lands in a young seral stage.

V. CONCLUSIONS FOR THE PROPOSED ACTION

In the Coast Range Province, the BLM concludes that the proposed action may affect the marbled murrelet and coho salmon.

The Hancock Exchange "May Affect and is Likely to Adversely Affect" the marbled murrelet due to the relinquishment of approximately 7 acres of suitable habitat for that species (Parcel 4 - Tract E). Because of the small size and isolation of this stand, it would not serve as adequate habitat for the spotted owl or bald eagle.

This exchange also "May Affect, and is Not Likely to Adversely Affect" the coho salmon due to the expected benefits of adding 2 miles of stream ownership resulting in management control over most of Whittaker Creek.

VI. LITERATURE CITED

- Bessinger, S. B. 1995. Population trends of the marbled murrelet projected from demographic analysis. In Ralph et al. (eds.). Ecology and Conservation of the Marbled Murrelet. Gen. Tech. Rep. PSW-GTR-152:385-394.
- Burnham, K. P., D. R. Anderson, and G. C. White. 1994. Estimation of vital rates of the northern spotted owl. 44 pp in Appendix J, Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. U.S.D.A. For. Serv. and U.S.D.I. Bur. Land Manage., Washington, D.C.
- Holzman, S. 1995. Personal communication. U.S. Fish and Wildlife Service, Portland.
- Isaacs, F. B. and B. Anthony. 1994. 1994 annual nest survey results. Oregon Coop. Wildl. Res. Unit.
- Marbled Murrelet Recovery Team. 1994. Letter plus attachments (4 pages) to U.S. Fish and Wildlife Service Regional Director (April 14, 1994).
- Marshall, D. B. 1988. Status of the Marbled Murrelet in North America; with special emphasis on populations in California, Oregon and Washington. Biological Report 88(30), U.S.D.I. Fish Wildl. Serv.
- Miller, G. et al. 1991. The Status of the Spotted Owl on the McKenzie Resource Area, Eugene District, Bureau of Land Management--A Progress Report
- Ralph, C. J., G. L., Jr., Hunt, M. G. Raphael, and J. F. Piatt (technical editors). 1995. Ecology and Conservation of the Marbled Murrelet. Gen. Tech. Rep. PSW-GTR-152. 420 pp.
- Spiech, S. M. and T. R. Wahl, 1995. Marbled Murrelet populations of Washington, marine habitat preferences and variability of occurrence. In Ralph et al. (eds.), Ecology and Conservation of the Marbled Murrelet. Gen. Tech. Rep. PSW-GTR-152:313-326.
- Strong, C. S., B. K. Keitt, W. R. McIver, C. J. Palmer and I. Gaffney. 1995. Distribution and population estimates of marbled murrelets areas in Oregon during the summers of 1992 and 1993. In Ralph et al. (eds.), Ecology and Conservation of the Marbled Murrelet. Gen. Tech. Rep. PSW-GTR-152:339-352.
- Thomas, J. W., E. D. Forsman, J. B. Lint, E. C. Meslow, B. R. Noon, and J. Verner. 1990. A

conservation strategy for the northern spotted owl (report of the Interagency Scientific Committee). U.S.D.A. For. Serv. and U.S.D.I. Bur. Land Manage., Fish Wildl. Serv., Nat Park Serv., Portland. 530 pp.

Thraill, J. 1994. Annual Research Report. Oregon St. Univ.

U. S. Bureau of Land Management. 1990. Analysis of the management situation. U.S.D.I. Bur. Land Manage., Eugene Dist.

U.S.D.I. _____ . 1995. Eugene District Record of Decision and Resource Management Plan. Bur. Land Manage., Eugene Dist.

U. S. Forest Service & U. S. Bureau of Land Management. 1994a. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl, and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. U.S.D.A. For. Serv. & U.S.D.I. Bur. Land Manage., Washington, D.C., 74 pp.

_____. 1994b. Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. U.S.D.A. For. Serv. & U.S.D.I. Bur. Land Manage., Vol I, Washington, D.C.

U.S. Fish and Wildlife Service. 1986. Pacific Bald Eagle Recovery Plan. U.S. Fish Wildl. Serv., Portland. 163 pp.

_____. 1987. The Northern Spotted Owl Status Review. U.S. Fish Wildl. Serv., Portland. 47 pp.

_____. 1989. The Northern Spotted Owl; a Status Review Supplement. U.S. Fish Wildl. Serv., Portland. 113 pp.

_____. 1990b. 1990 status review; Northern Spotted Owl, *Strix occidentalis caurina*. U.S. Fish/Wildl. Serv., Portland. 95 pp.

_____. 1990b. Endangered and Threatened Wildlife and Plants, Determination of Threatened Status for the Northern Spotted Owl, Final Rule. 50 CFR Part 17, Fed. Regis., June 26, 1990. pp. 26114-26194.

VII. APPENDIX TO BIOLOGICAL ASSESSMENT

Table 1 - Hancock Exchange LUAs and Spotted Owl/ Murrelet Status						
Parcel & Tract #	LUA	Owl Sites	Owl CHU	Murrelet Sites	Murrelet CHU	Murrelet/ Owl Surveys
Parcel 1 - Tract C	LSR	0	Yes	0	No	No
Parcel 2 - Tract F	LSR	0	No	0	Yes	No
Parcel 3 - Tract D	LSR	0	No	0	Yes	No
Parcel 4 - Tract E	LSR*	0	No	0	Yes	No

* The corrected Land Use Allocation is General Forest Management Area (GFMA) instead of Late-Successional Reserve (LSR).

APPENDIX 2

Initial Appraisal Report

The Healy Company, 3800 SW Cedar Hills Blvd., Suite 280A, Beaverton, Oregon 97005 prepared a fair market value appraisal for the proposed exchange. The following is a brief summary of the salient facts and findings of the appraisal that have been approved for use by the BLM. A copy of the appraisal document and timber cruise is included in exchange case file, OR 45978. Since some of the appraisal information is confidential, public access to the appraisal is subject to guidelines of the Freedom of Information Act.

Summary of Salient Facts and Findings						
Tract	Acres	Land Value	Highest and Best Use	Timber Reprod Plantation	Timber Reprod Plantation Values	Total Value
Hancock Lands						
Tract A	160.00	\$48,000	Commercial Timber Lands	1396.4 MBF Plantation	\$296,158 \$3,842	\$348,000
Tract B	170.00	\$51,000		1084.7 MBF Reprod	\$305,415 \$7,585	\$364,000
Tract G	80.00	\$24,000		420.2 MBF Reprod Plantation	\$161,399 \$14,953 \$7,648	\$208,000
						<u>\$920,000</u>
BLM Lands						
Tract D	40.00	\$12,000	Commercial Timber Lands	122.8 MBF Plantation	\$57,870 \$11,130	\$81,000
Tract F	37.84	\$11,400		803.3 MBF	\$271,600	\$283,000
Tract H	113.7	\$34,100		Reprod clear cut	\$54,900 \$0	\$89,000
Tract I	108.3	\$36,000		822.5 MBF Reprod Plantation	\$388,154 \$132,716 \$11,130	\$568,000
						<u>\$1,021,000</u>

For purposes of providing options for equalizing values for the completion of the proposed action the values for Tract I of the Selected lands was broken out into 4 subparcels. Values for these subparcels are shown as follows:

I-A NE¼NE¼	\$78,000
I-B SE¼NE¼	\$60,000
I-C NE¼SE¼	\$19,000
N of road	
I-D NE¼SE¼	\$406,000
S of road	
	<u>\$563,000</u>

APPENDIX 3

Technical ASQ Analysis

The exchange would result in net acreage loss from the allowable cut base acreage as follows:

<u>Base Allotment for ASQ</u>	<u>Net Change (acres)</u>
Allowable cut land base (GFMA)	- 15

According to the data provided on page 8 of the Eugene District Record of Decision and Resource Management Plan, dated June 1995, General Forest Management Lands (GFMA) yield approximately 857 board feet per acre per year. There are approximately 42,000 acres of GFMA land allocated to commercial forest use. Approximately 15 acres of GFMA lands suitable for timber management and forest products production will be transferred to private ownership from the selected lands. There will be no additional lands added to the GFMA classification from the offered lands. The calculated loss in ASQ is 12.8 thousand board feet per year. The GFMA land base would be reduced by $15/42,000$ or 0.036 per cent, which is insignificant.

All offered lands will become Late-Successional Reserve upon transfer. Lands classified as Late-Successional Reserve do not contribute to the base lands for the Allowable Sale Quantity calculations.