

Contents

Chapters and Appendices

Chapter 1. Purpose of and Need for Action	1
Introduction.....	1
Background	2
Purpose and Need for Action	3
Proposed Land Exchange	3
Selection Criteria for Lands to Convey and Acquire	6
Changes from DEIS to FEIS	6
Land Exchange Authority and Process	6
Relationship to the Forest Plans	7
Decisions to Be Made	8
Chapter 2. Alternatives, Including the Proposed Action	9
Introduction.....	9
History of Proposed Exchange.....	9
Public Involvement	9
Public Scoping Input Summary	10
Identification of Significant Issues	11
Alternatives Considered in Detail	14
Alternatives Considered but Eliminated from Detailed Study	31
Comparison of Alternatives	32
Chapter 3. Affected Environment and Environmental Consequences	49
Introduction.....	49
Soils	49
Minerals.....	56
Hydrology, Wetlands, and Floodplains	68
Water Rights.....	93
Vegetation	105
Threatened and Endangered Vegetation Species.....	129
Noxious Weeds	136
Range.....	138
Transportation	160
Fisheries.....	170
Wildlife.....	190
Recreation	216
Fire and Fuels	241
Hazardous Materials	243
Land Use.....	246
Facilities	279
Property Boundaries.....	280
Heritage.....	281
American Indian	283
Social and Economic Environment.....	299
Commercial Timber	339
Cumulative Effects	341
Specifically Required Disclosures	363
Chapter 4. List of Preparers and Commenters	367
Literature Citations	
Index	
Acronyms	
Glossary	
Appendix A – Legal Descriptions	
Appendix B – Maps	
Appendix C – Land Exchange Process	

Appendix D – Dropped Parcels
Appendix E - Response to Comments
Appendix F – Biological Assessment

List of Tables

Table 1. Affected Acres by County.....	4
Table 2. Alternative 1- MA Acre Allocation for All Parcels to Convey and Acquire.....	4
Table 3. Summary of Open and Unclaimed Lands within Treaty Areas.....	15
Table 4. Proposed Exchange – Federal Parcels/GIS Acres.....	16
Table 5. Proposed Exchange – Private Parcels/GIS Acres.....	17
Table 6. Alternative 1- Affected Acres by County.....	18
Table 7. Alternative 1- MA Acre Allocation for All Parcels to Convey and Acquire.....	18
Table 8. Alternative 3- Parcels Proposed to be Purchased.....	20
Table 9. Alternative 3- County Allocations of Proposed Acres to be Purchased.....	20
Table 10. Alternative 3- Forest Plans MA Acre Allocation.....	21
Table 11. Alternative 4- Parcels Proposed to be Acquired.....	22
Table 12. Alternative 4- Parcels, Acres, MAs and Riparian Deed Restrictions.....	22
Table 13. Alternative 4- Affected Acres by County.....	26
Table 14. Alternative 4- MA Acre Allocation for all Parcels to Convey and Acquire.....	27
Table 15. Preferred Alternative – Federal Parcels/GIS Acres.....	28
Table 16. Preferred Alternative – Private Parcels/GIS Acres.....	29
Table 17. Alternative 5- Affected Acres by County.....	30
Table 18. Alternative 5- MA Acre Allocation for All Parcels to Convey and Acquire.....	30
Table 19. Comparison of Responsiveness to Purpose and Need by Alternative.....	33
Table 20. Comparison of Significant Issues by Alternative.....	47
Table 21. Alternative 1- Acreage and Percent of Acquired and Conveyed Commercial Forestland as a Surrogate for Detrimental Soil Conditions.....	51
Table 22. Alternative 1- Acreage and Percent of Acquired and Conveyed Rangelands in Allotments.....	52
Table 23. Alternative 1- Location of Known Feeding Sites and Corrals on Acquired Lands.....	52
Table 24. Alternative 3- Acreage and Percent of Acquired and Conveyed Commercial Forestland as Surrogate for Detrimental Soil Conditions.....	54
Table 25. Alternative 3- Acreage and Percent of Purchased Rangelands in Allotments.....	54
Table 26. Alternative 3- Location of Known Feeding Sites and Corrals on Purchased Lands.....	54
Table 27. Alternative 4- Acreage and Percent of Acquired and Conveyed Commercial Forestland as Surrogate for Detrimental Soil Conditions.....	55
Table 28. Alternative 4- Acreage and Percent of Acquired and Conveyed Rangelands in Allotments.....	55
Table 29. Non-Federal Parcels within Withdrawn Areas.....	64
Table 30. PACFISH and INFISH RHCA Widths.....	69
Table 31. Watersheds, Ownership, and Proposed Exchange Acres.....	70
Table 32. Wetlands and Floodplains Acres in the Proposed Exchange.....	73
Table 33. Alternative 1- Miles of Stream by Watershed and by Stream Category.....	74
Table 34. Summary of Forested Structure by Alternative (Acres).....	77
Table 35. Subwatersheds with 5% or More of Their Acres in the Land Exchange.....	79
Table 36. Summary of Wetlands, Floodplains, and Stream Channel by Alternative.....	80
Table 37. Watersheds with Water Quality Impaired Stream Segments.....	91
Table 38. Offered and Conveyed Parcels with Water Developments and/or Water Rights by Forest.....	94
Table 39. Alternative 1 and 5- Estimated Costs for Private and FS.....	98
Table 40. Alternative 3- Estimated Costs for FS.....	102
Table 41. Alternative 4- Estimated Costs for Private and FS.....	104
Table 42. FS Land Structure Stage Distribution by Potential Vegetation Group.....	108
Table 43. Non-Federal Land Structure Stage Distribution by Potential Vegetation Group.....	110
Table 44. Comparison of Existing and Historic Late and Old Structure (LOS).....	111

Table 45. Forest Plan Dedicated Old Growth by Acres and Watershed	112
Table 46. Alternative 1- Conveyed and Acquired Late and Old Structure (LOS)	119
Table 47. Percentage of (LOS) for Historic, Existing, and Proposed Exchange.....	121
Table 48. Alternative 1- LOS Replacement by Potential Vegetation in Watersheds	122
Table 49. Alternative 4- Gain of Late and Old Structure (LOS).....	126
Table 50. Alternative 5 Changed Late and Old Structure (LOS) acres from Alternative 1	126
Table 51. Conveyed and Acquired Late and Old Structure (LOS) for Alternative 5	127
Table 52. Alternative Comparison by Net Reduction of LOS Acres	128
Table 53. Alternative Comparison by Acres of Old growth Conveyed.....	129
Table 54. Rare/Threatened Plant Sites on Land to Acquire/purchase	131
Table 55. Acres of Noxious Weeds Present in Land Exchange Parcels	137
Table 56. Noxious Weed Management Fiscal Liability in Land Exchange Parcels	137
Table 57. Alternative 1- Distribution of Acquired and Conveyed Parcels by Allotment	140
Table 58. Parcels Outside Allotments Either Being Grazed or Intended to be Grazed	145
Table 59. Alternative 1- Management Implications to Existing Allotments	145
Table 60. Alternative 3- Distribution of Purchased Parcels by Allotment	149
Table 61. Alternative 3- Management Implications to Existing Allotments	150
Table 62. Alternative 4 Distribution of Acquired and Conveyed Parcels by Allotment.....	152
Table 63. Parcels Outside Allotments Either Being Grazed or Intended to be Grazed	155
Table 64. Alternative 4- Management Implications to Existing Allotments	156
Table 65. Roads Summary by Alternative.....	164
Table 66. Alternative 1- R/W Acquisition Costs and Acres Accessed	165
Table 67. Alternative 2- R/W Acquisition Costs and Acres Accessed	166
Table 68. Alternative 3- R/W Acquisition Costs and Acres Accessed	167
Table 69. Alternative 4- R/W Acquisition Costs and Acres Accessed	168
Table 70. Alternative 5- R/W Acquisition Costs and Acres Accessed	169
Table 71. Alternative 1 and 5- Miles of Steelhead Habitat by 5th HUC Watershed.....	175
Table 72. Alternative 1, 4 and 5- Miles of Spring Chinook Habitat by 5th HUC Watershed	181
Table 73. Alternative 3- Miles of Spring Chinook Habitat by 5th HUC Watershed	183
Table 74. Alternative 1- Miles of Bull Trout FMO and SR by 5th HUC Watershed.....	184
Table 75. Miles of Bull Trout FMO and SR by Alternative	185
Table 76. R-6 Sensitive Fish and Amphibian Species.....	186
Table 77. R-6 Sensitive Fish and Amphibian Species Effects Analysis	187
Table 78. Criteria and Ratings for the Bear Creek and Beech Creek Populations of Westslope Cutthroat Trout	189
Table 79. LAU Acres Summary by Habitat Category and Percentage of LAU Represented in Each Category.....	198
Table 80. Parcels Containing Lynx Habitat (Alternative Comparison).....	199
Table 81. Bald Eagle Roosts and Nests within a Mile of Proposed Exchange Parcels.....	201
Table 82. Species, Groups, and Families of Old Growth Associated Wildlife Species.....	205
Table 83. Old Growth Habitat Estimates from Forest Plans, Decade 2 (Acres).....	211
Table 84. Alternative Comparison by Key Indicators.....	213
Table 85. R-6 Sensitive Reptiles, Mammals and Bird Species Effects Analysis	214
Table 86. Alternative 1- ROS Class Acres for Conveyed and Acquired Parcels by	222
Table 87. Alternative 3- ROS Class for Purchased Parcels by Forest	223
Table 88. Alternative 4- ROS Class for Conveyed and Acquired Parcels by Forest	224
Table 89. Alternative 5- ROS Class for Conveyed and Acquired Parcels by Forest	224
Table 90. Comparison of Net Changes in ROS Class Acres by Alternative.....	90
Table 91. Roads to Be Acquired, Conveyed, or No Change in Each Forest by Alternative	226
Table 92. Miles of Conveyed and Acquired Open and Closed Roads by Alternative.....	227
Table 93. Alternative 1- Acquired and Conveyed Parcels in Wild and Scenic River Corridors ...	230
Table 94. Wild and Scenic River Corridor Net Acre Change by Alternative	233
Table 95. Action Alternatives- Acquired Parcels in Wilderness.....	233
Table 96. Alternative 1- Parcels Adjacent to or within Inventoried Roadless Areas	234
Table 97. Net Change in Inventoried Roadless Areas by Alternative.....	238
Table 98. HCNRA Acres Conveyed and Acquired by Alternative	239
Table 99. Federal Parcel Land Use Considerations by Alternative	247

Table 100. Non-Federal Parcel Land Use Considerations by Alternative	257
Table 101. Facilities Acquisition Summary.....	279
Table 102. Property Boundary Status and Savings by Alternative	280
Table 103. Summary of Open and Unclaimed Lands within Treaty Areas	289
Table 104. Acres of Conveyed and Acquired Lands by Treaty Area.....	289
Table 105. Changes to the Amount of Open and Unclaimed Federal Lands by Treaty Area.....	289
Table 106. Conveyed and Acquired Acres by Series and Alternative	293
Table 107. Acres of Roadless and Wilderness Areas within Ceded Lands by Treaty or Executive Order	294
Table 108. Proposed Exchanged Acres within or Adjacent to Roadless Areas by Watershed ...	108
Table 109. Total Stream Type Changes by Alternative	109
Table 110. Total Employment by Sector and County, 2001	301
Table 111. Forest Products Employment, 2002	304
Table 112. Travel Related Economic Impacts, 2002.....	307
Table 113. Summary of Agriculture by County, 1997.....	307
Table 114. Agricultural Employment by County, 2001	308
Table 115. Federal 25 Percent Fund Payments.....	308
Table 116. Annual PILT Payments by County, 1999 to 2003 (\$)	309
Table 117. Oregon Property Tax by County, Fiscal Year 2003-04.....	310
Table 118. Oregon Forest Products Harvest Tax Revenues, 1999 to 2002 (\$)	310
Table 119. Net Change by county in Federal Acres by Alternative	312
Table 120. Projected Timber Volume by County and Alternative	313
Table 121. Projected Annual Lumber and Wood Products Employment and Income by County and Alternative	314
Table 122. Estimated Property Tax Revenues by Alternative and County.....	316
Table 123. One-Time Administrative Costs and Savings by Alternative1	317
Table 124. Annual Administrative Costs and Savings by Alternative1	318
Table 125. Estimated Property Boundary Costs and Savings by Alternative	318
Table 126. Road Miles and Deferred Maintenance Costs by Alternative	320
Table 127. Road Miles and Annual Maintenance Costs by Alternative.....	321
Table 128. Commercial Timber Characteristics to Convey/Acquire/Purchase by Alternative	340
Table 129. Lands Leaving and Entering Federal Jurisdiction by County.	342
Table 130. Alternative 1- Subwatersheds Conveying Over 5% Acres with Over 5% in Merchantable Timber	345
Table 131. Alternative 1- Subwatersheds Conveying Over 5% Acres with Less Than 5% in Merchantable Timber	346
Table 132. Old Growth Habitat Acres Estimated from Forest Plans, Decade 2. (Acres).....	350
Table 133. Summary of Fisheries Habitat for Watersheds that include 1% or more of their Area in the Proposed Exchange	362

List of Figures

Figure 1. Insert Wallowa-Whitman Old Growth Map	115
Figure 2. Insert Wallowa-Whitman Old Growth Map	116
Figure 3. Insert Umatilla Old Growth Map	117
Figure 4. Insert Malheur Old Growth Map	118
Figure 5. Net Change in Lumber and Wood Products Employment, 1990 to 2000.....	305
Figure 6. Northeast Oregon Total Timber Harvests by Ownership, 1990-2003	306
Figure 7. Timber Harvest by County, 2003	306