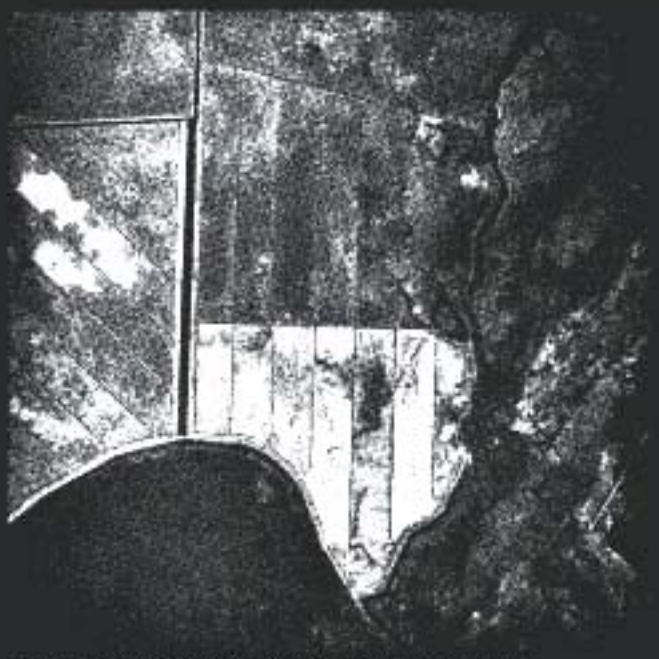
U.S. Department of the Interior
Bureau of Land Management

Klamath Falls Resource Area
2795 Anderson Avenue, Bldg. 25
Klamath Falls, OR 97603

February 1996

Klamath Falls Resource Area Upper Klamath Basin and Wood River Wetland Record of Decision and Resource Management Plan



Aerial photo of the Wood River Property.

United States
Department of the Interior
Bureau of Land Management

Klamath Falls Resource Area
Lakeview District
2795 Anderson Avenue, Bldg. 25
Klamath Falls, OR 97603

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Lakeview District Office
P.O. Box 151 (1000 Ninth Street S.)
Lakeview, Oregon 97630

IN REPLY REFER TO:

1617(014)

Dear Reader:

This is a consolidated document which includes the Record of Decision (ROD), and Upper Klamath Basin and Wood River Wetland Resource Management Plan (RMP). This plan was approved by the Oregon/Washington State Director in November 1995. The ROD approves the Bureau of Land Management's (BLM) decisions for managing 3,220 acres in Klamath County, Oregon.

The Record of Decision was prepared in conformance with 40 CFR 1505.2, which requires a concise document which links the manager's decision to the analysis presented in the Upper Klamath Basin and Wood River Wetland Final Environmental Impact Statement (FEIS), dated July 1995. The ROD shows how environmental impacts and other factors were considered in the decision-making process. The ROD documents approval and adoption of the proposed Resource Management Plan, as described in the Upper Klamath Basin and Wood River Wetland Resource Management Plan/Final Environmental Impact Statement. Minor differences from the FEIS, points of clarification and management direction have been incorporated in response to both public comment on the FEIS as well as on-going staff review.

It should be noted that there were no protests on the proposed Upper Klamath Basin and Wood River Wetland RMP/FEIS. In addition, the Governor of Oregon was provided a formal opportunity to review the proposed plan for conformance with officially approved or adopted natural resource-related plans, programs, or policies of the state or local governments. There were no objections from the Governor.

This document has been sent to all those individuals and groups who were on the mailing list for the proposed Upper Klamath Basin and Wood River Wetland Resource Management Plan/Final Environmental Impact Statement. The full supporting record for the approved Upper Klamath Basin and Wood River Wetland RMP is also available for inspection in the BLM's Klamath Falls Resource Area office at 2795 Anderson Avenue, Building #25, Klamath Falls, Oregon 97603. Copies of the draft and final EIS are also available for inspection in the public room at the BLM Oregon/Washington State Office, 1515 SW Fifth Street, Portland, Oregon; and the Klamath County Library, 126 South 3rd, Klamath Falls, Oregon 97601 during regular office hours. Due to the cost of publication and the expected long term use of these documents, we urge you to retain your personal copies of these documents for future reference.

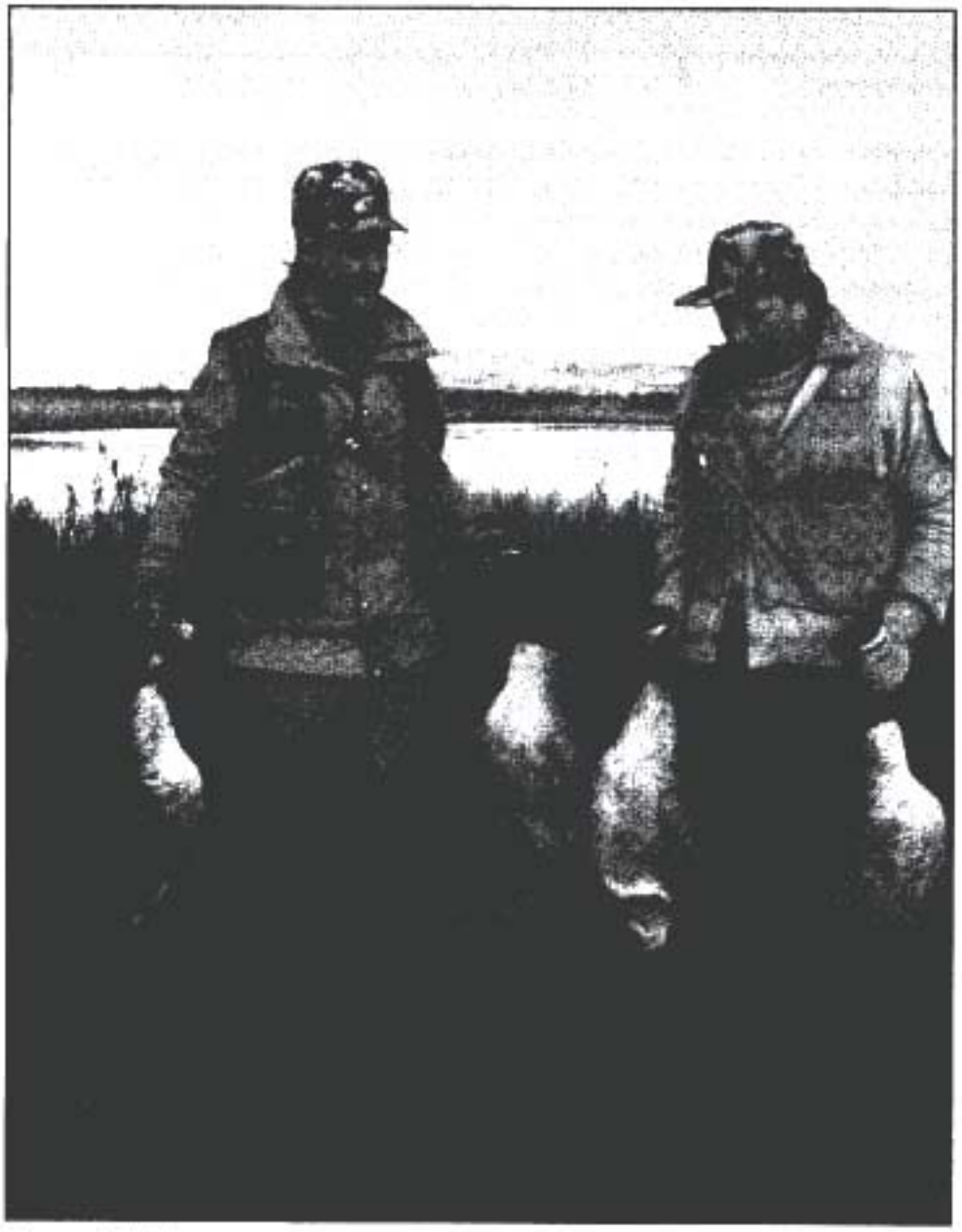
Although this document contains maps with critical information, these maps may require periodic updating as we implement the approved plan, collect and analyze additional information, and practice adaptive management.

We are pleased to provide this copy for your reference and we extend our appreciation for your interest, cooperation, and assistance during this planning process. We encourage you to stay informed and involved as we implement, monitor, and evaluate the plan.

Sincerely,

Edwin J. Singleton
District Manager

A. Barron Bail, Area Manager
Klamath Falls Resource Area



Hunters on Wood River property.

Wildlife Species Checklist

Herptiles

- 1. Long-toed Salamander
- 2. Rough-skinned Newt
- 3. Pacific Chorus Frog
- 4. Bullfrog
- 5. Spotted Frog
- 6. Western Toad
- 7. Western Pond Turtle
- 8. Short-horned Lizard
- 9. Sagebrush Lizard
- 10. Western Fence Lizard
- 11. Western Skink
- 12. Ringneck Snake
- 13. Yellow-bellied Racer
- 14. Gopher Snake
- 15. Common Garter Snake
- 16. Western Terrestrial Garter Snake
- 17. Western Rattlesnake
- 18. Rubber Boa

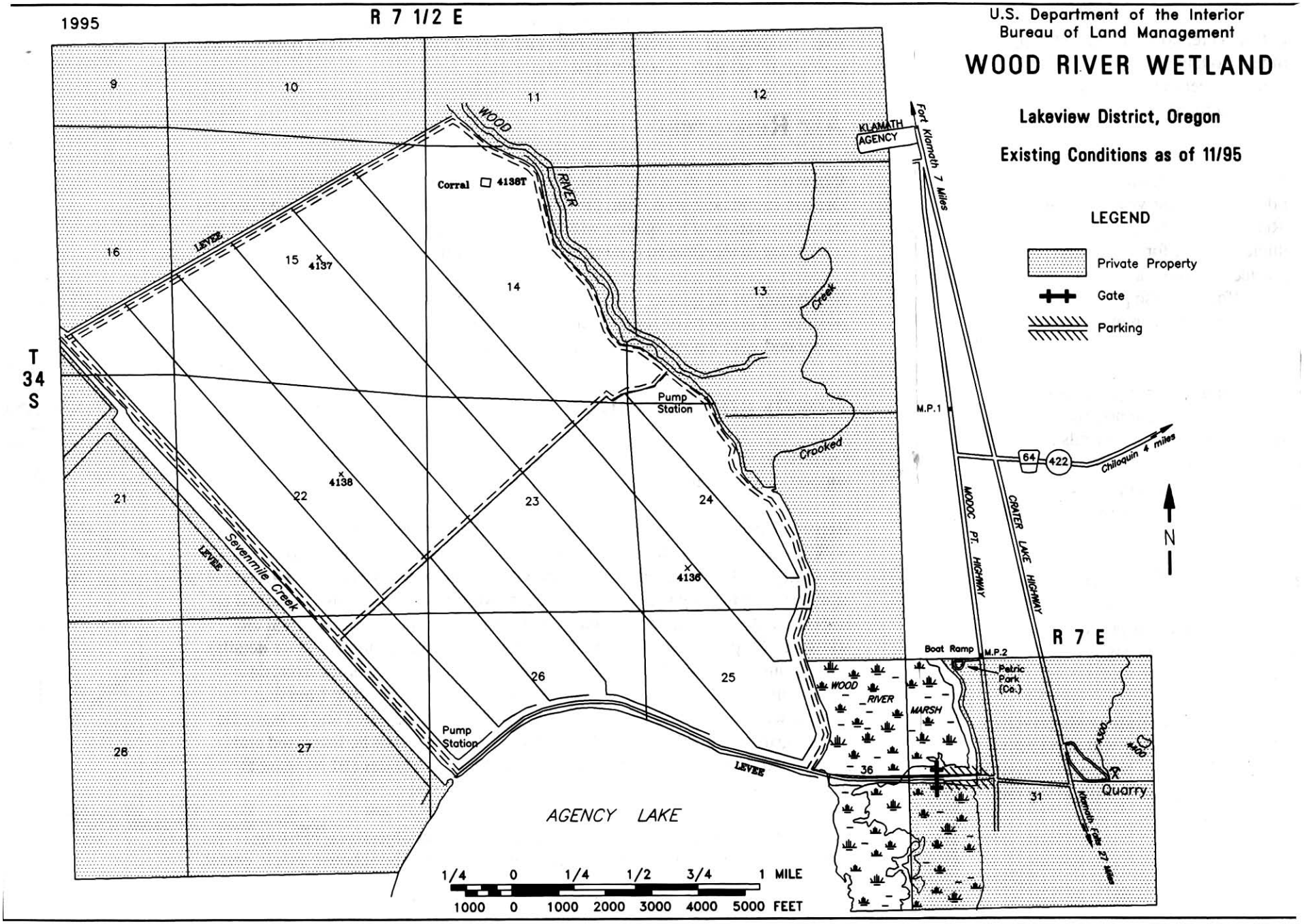
Mammals

- 19. Vagrant Shrew
- 20. Trowbridge Shrew
- 21. Northern Water Shrew
- 22. Water Shrew
- 23. Merriam Shrew
- 24. Broad-footed Mole
- 25. Yuma Myotis
- 26. Fringed Myotis
- 27. California Myotis
- 28. Little Brown Myotis
- 29. Hoary Bat
- 30. Pallid Bat
- 31. Townsend's Big-eared Bat
- 32. Big Brown Bat
- 33. Snowshoe Hare
- 34. White-tailed Jackrabbit
- 35. Black-tailed Jackrabbit
- 36. Nuttall's Cottontail
- 37. Least Chipmunk
- 38. Yellow Pine Chipmunk
- 39. Belding Ground Squirrel
- 40. California Ground Squirrel
- 41. Western Gray Squirrel
- 42. Yellow-bellied Marmot
- 43. Northern Pocket Gopher
- 44. Mazama Pocket Gopher
- 45. Western Harvest Mouse
- 46. Deer Mouse
- 47. Bushy-tailed Woodrat
- 48. Dusky-footed Woodrat
- 49. Heather Vole
- 50. Mountain Vole
- 51. California Vole
- 52. Long-tailed Vole
- 53. Townsend's Vole
- 54. Muskrat
- 55. Beaver
- 56. House Mouse
- 57. Western Jumping Mouse
- 58. Porcupine
- 59. Coyote
- 60. Black Bear
- 61. Ringtail
- 62. Raccoon
- 63. Mink
- 64. Long-tailed Weasel
- 65. Short-tailed Weasel
- 66. Norway Rat
- 67. Spotted Skunk
- 68. Striped Skunk
- 69. River Otter
- 70. Badger
- 71. Mountain Lion
- 72. Bobcat
- 73. Grey Fox
- 74. Red Fox
- 75. Elk
- 76. Mule Deer

Birds

- 77. Eared Grebe
- 78. Pied-billed Grebe
- 79. Horned Grebe
- 80. Clark's Grebe
- 81. Western Grebe
- 82. American White Pelican
- 83. Double-crested Cormorant
- 84. American Bittern
- 85. Least Bittern
- 86. Black-crowned Night Heron
- 87. Great Egret
- 88. Snowy Egret
- 89. Great Blue Heron
- 90. White-faced Ibis
- 91. Sandhill Crane
- 92. Tundra Swan
- 93. Greater White-fronted Goose
- 94. Snow Goose
- 95. Ross' Goose
- 96. Canada Goose
- 97. Common Loon
- 98. Mallard
- 99. Green-winged Teal
- 100. American Wigeon
- 101. Northern Pintail
- 102. Northern Shoveler
- 103. Blue-winged Teal
- 104. Cinnamon Teal
- 105. Ruddy Duck
- 106. Wood duck
- 107. Canvasback
- 108. Redhead
- 109. Ring-necked Duck
- 110. Lesser Scaup
- 111. Barrow's Goldeneye
- 112. Common Goldeneye
- 113. Bufflehead
- 114. Common Merganser
- 115. Hooded Merganser
- 116. Gadwall
- 117. Virginia Rail
- 118. Yellow Rail
- 119. Sora Rail
- 120. American Avocet
- 121. Black-necked Stilt
- 122. Long-billed Dowitcher
- 123. Killdeer
- 124. Willet
- 125. Greater Yellowlegs
- 126. Lesser Yellowlegs
- 127. Long-billed Curlew
- 128. Spotted Sandpiper
- 129. Least Sandpiper
- 130. Wilson's Phalarope
- 131. Common Snipe
- 132. Dunlin
- 133. American Coot
- 134. Ring-billed Gull
- 135. California Gull
- 136. Bobaparte's Gull
- 137. Forster's Tern
- 138. Black Tern
- 139. Caspian Tern
- 140. Golden Eagle
- 141. Bald Eagle
- 142. Northern Harrier
- 143. Sharp-shinned Hawk
- 144. Cooper's Hawk
- 145. Red-tailed Hawk
- 146. Rough-legged Hawk
- 147. Osprey
- 148. American Kestrel
- 149. Prairie Falcon
- 150. Peregrine Falcon
- 151. Turkey Vulture
- 152. California Quail
- 153. Ring-necked Pheasant
- 154. Rock Dove
- 155. Mourning Dove
- 156. Short-eared Owl
- 157. Long-eared Owl
- 158. Great-horned Owl
- 159. Western Screech Owl
- 160. Northern Saw-whet Owl
- 161. Common Barn Owl
- 162. Vaux's Swift
- 163. Common Nighthawk
- 164. Anna's Hummingbird
- 165. Calliope Hummingbird
- 166. Rufous Hummingbird
- 167. Northern Flicker
- 168. Red-naped Sapsucker
- 169. Red-breasted Sapsucker
- 170. Downy Woodpecker
- 171. Hairy Woodpecker
- 172. Western Kingbird
- 173. Ash-throated Flycatcher
- 174. Olive-sided Flycatcher
- 175. Western Wood-pewee
- 176. Say's Phoebe
- 177. Cordilleran Flycatcher
- 178. Willow Flycatcher
- 179. Horned Lark
- 180. Tree Swallow
- 181. Violet-green Swallow
- 182. Cliff Swallow
- 183. Bank Swallow
- 184. Northern Rough-winged Swallow
- 185. Barn Swallow
- 186. Belted Kingfisher
- 187. Scrub Jay
- 188. Black-billed Magpie
- 189. Common Raven
- 190. American Crow
- 191. Black-capped Chickadee
- 192. Mountain Chickadee
- 193. Bushtit
- 194. House Wren
- 195. Marsh Wren
- 196. Bewick's Wren
- 197. Winter Wren
- 198. Ruby-crowned Kinglet
- 199. Golden-crowned Kinglet
- 200. Blue-gray Gnatcatcher
- 201. American Robin
- 202. Varied Thrush
- 203. Western Bluebird
- 204. Loggerhead Shrike
- 205. Northern Shrike
- 206. Cedar Waxwing
- 207. Solitary Vireo
- 208. European Starling
- 209. Warbling Vireo
- 210. Orange-crowned Warbler
- 211. Nashville Warbler
- 212. Yellow-rumped Warbler
- 213. Yellow Warbler
- 214. MacGillivray's Warbler
- 215. Wilson's Warbler
- 216. Common Yellowthroat
- 217. Black-headed Grosbeak
- 218. Lazuli Bunting
- 219. Green-tailed Towhee
- 220. Rufous-sided Towhee
- 221. California Towhee
- 222. Vesper Sparrow
- 223. Brewer's Sparrow
- 224. Savannah Sparrow
- 225. Song Sparrow
- 226. Chipping Sparrow
- 227. White-crowned Sparrow
- 228. Golden-crowned Sparrow
- 229. Fox Sparrow
- 230. Dark-eyed Junco
- 231. Lincoln's Sparrow
- 232. Lark Sparrow
- 233. Western Meadowlark
- 234. Yellow-headed Blackbird
- 235. Brewer's Blackbird
- 236. Red-winged Blackbird
- 237. Tri-colored Blackbird
- 238. Brown-headed Cowbird
- 239. Northern Oriole
- 240. Western Tanager
- 241. House Sparrow
- 242. Pine Siskin
- 243. American Goldfinch
- 244. Lesser Goldfinch
- 245. Purple Finch
- 246. Cassin's Finch
- 247. House Finch
- 248. Evening Grosbeak
- 249. New _____
- 250. New _____

Help us keep an accurate list of species on the Wood River property. For any new species identified, please note the place, time, and location on the property and report the siting to the BLM office in Klamath Falls at (503) 883-6916. Thank You.


1995
R 7 1/2 E
U.S. Department of the Interior
Bureau of Land Management
WOOD RIVER WETLAND
Lakeview District, Oregon
Existing Conditions as of 11/95
LEGEND
Private Property
Gate
Parking
T 34 S
R 7 E
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21
22
23
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36
31
WOOD RIVER
Corral 4136T
4137
4138
4136
LEVEE
Sevenmile Creek
Pump Station
Pump Station
Crooked Creek
KLAMATH AGENCY
Fort Klamath 7 Miles
M.P.1
64
422
Chiloquin 4 miles
MODOC PT. HIGHWAY
CRATER LAKE HIGHWAY
Boat Ramp
M.P.2
Petric Park (Co.)
WOOD RIVER MARSH
Quarry
AGENCY LAKE
N
1/4 0 1/4 1/2 3/4 1 MILE
1000 0 1000 2000 3000 4000 5000 FEET

Record of Decision for the Upper Klamath Basin and Wood River Wetland Resource Management Plan

Prepared by the Bureau of Land Management, Klamath Falls Resource Area, Lakeview District, Oregon

Introduction

In this Record of Decision we adopt and approve for immediate implementation the following Upper Klamath Basin and Wood River Wetland Resource Management Plan, based on the combination of this office's March 1994 draft environmental impact statement and the July 1995 final environmental impact statement. The resource management plan addresses resource management on approximately 3,220 acres of federal land administered by the Bureau of Land Management (BLM) located within Klamath County, Oregon.

The approved resource management plan responds to the need for a healthy aquatic ecosystem associated with the Upper Klamath Basin, that will contribute toward improved water quality and support stable populations of native species, particularly those associated with wetland and riparian communities. It also responds to the need for monitoring the results of implementing the plan and the use of adaptive management based on those monitoring results.

Alternatives Considered

Four alternatives for management of the BLM-administered lands and resources on the Wood River property were analyzed in the final environmental impact statement. A brief description of each alternative analyzed in the final environmental impact statement follow below.

Alternative A (No Action). This alternative would emphasize a continuation of the management direction in place at the time of the BLM's purchase of the Wood River property. The management objective would be to maintain irrigated pasture land for livestock grazing.

Alternative B. This alternative would emphasize restoring the property to a functioning wetland with diverse and healthy plant communities. This would be accomplished by restoring historic stream channel meanders on the property. Few water control structures, minimal hydrologic control, long-term low maintenance, and no livestock grazing are features of this alternative.

Alternative C. This alternative would emphasize the restoration of a functioning wetland through the use of highly engineered techniques, complex designs, and /or numerous research pilot projects to meet the long-term goal of improving water quality entering Agency Lake from the property. Research would be emphasized in this alternative. Vegetation management could be done through the use of water level and flow manipulations, livestock grazing, prescribed fire, mechanical and chemical treatments. Recreation use would be maximized, with an emphasis on outdoor education and interpretation.

Alternative D (Proposed Action). This alternative would restore the property to its previous function as a wetland community. Emphasis would be given to long-term improvement in the quality of water entering Agency Lake from the property. In addition, improving and increasing the wetland and riparian habitat for federally listed fish and other wildlife species would be emphasized. Vegetation management could be accomplished through the use of water level and flow fluctuations, livestock grazing, fire, chemical and mechanical treatments. A combination of new structures to improve hydrologic control, and utilization of natural processes would be emphasized in this alternative. Adaptive management, the process of changing land management as a result of monitoring or research, would be used. Recreation resources would be managed for low to moderate use levels, with non-motorized access being featured.

Rationale for Decision

The Congressionally directed purposes for managing the Bureau of Land Management-administered lands include both conserving the ecosystems upon which plant and wildlife species depend, and at the same time providing raw materials and other resources that are needed to sustain the health and economic well-being of the people of this country. The Proposed Resource Management Plan alternative best meets these criteria.

We have reviewed the alternatives discussed in the Proposed Resource Management Plan/Final Environmental Impact Statement and their predicted environmental, economic, and social consequences, and the risks and safeguards inherent in them. The **Proposed Resource Management Plan alternative in the Proposed Resource Management Plan/Final Environmental Impact Statement** is the best alternative for providing a sustainable level of human use of the aquatic/wetland resource while still meeting the need to restore and maintain the wetland ecosystem. We therefore select the Proposed Management Plan alternative as the management direction that best responds to the purpose and need for the proposed action as expressed in the Proposed Resource Management Plan/Final Environmental Impact Statement.

We base our conclusion on a number of factors. Management under Alternative A (No Action), would provide the least amount of water quality, water retention, and endangered species habitat improvements. Management under Alternative B would provide the least amount of hydrologic control, and the lowest long-term maintenance costs. It would likely provide the least improvement in water quality of the action alternatives, the fewest acres of emergent marsh habitat, and the most water retention capability. Management under Alternative C would provide the most hydrologic control, the most potential for improved water quality, the greatest construction and long-term maintenance costs. It would provide greater capability for water storage than Alternative A, but less than Alternative B. Management under Alternative D (the

Proposed Resource Management Plan) would provide more hydrologic control and potential water quality improvements than Alternatives A and B, but less than C. This alternative would provide more potential water retention than alternatives A and C but less than B. This alternative would require more initial and long term maintenance costs than alternatives A and B, but less than C. Alternatives B, C, and D (the Proposed Resource Management Plan) would all have beneficial effects on Lost River and shortnose sucker habitat. The Proposed Resource Management Plan alternative has the greatest potential to provide improved habitat for these species. The Proposed Resource Management Plan alternative would have a beneficial impact on more Special Status Animal Species than any other alternative. See Proposed Resource Management Plan/Final Environmental Impact Statement.

All alternatives follow current BLM policies, initiatives, and emphasis on restoration and maintenance of wetland resource conditions, including riparian and aquatic conditions, that perpetuate fully functioning ecosystems while still providing for societal needs. The primary goals of water quality improvement, increased water retention and improved habitat for the Lost River and shortnose suckers were used to develop all action alternatives. Alternatives A (No Action), and B would make achieving these objectives more difficult. Alternatives C and D (the Proposed Resource Management Plan) make it easier to accomplish.

The No Action alternative is based on the previous use of this property for irrigated pasture land that existed prior to acquisition. In addition, it does not emphasize the primary goals stated for the management of this property.

The impacts to many species, and groups of species, of fish, wildlife, and plants are complex and difficult to summarize in this Record of Decision. They are described in detail in the Proposed Resource Management Plan/ Final Environmental Impact Statement. Based upon the Proposed Resource Management Plan/Final Environmental Impact Statement and all of the information in the record, we have determined that Proposed Resource Management Plan alternative will continue to meet the needs of species influenced by federal land management activities. We find it meets the requirements of the Endangered Species Act for the conservation of listed species. Moreover, it meets the requirements of acts that protect elements of the environment, and requirements for coordinated planning and consultation.

Environmental Preferability of the Alternatives

Environmental preferability is judged using the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by the Council on Environmental Quality (CEQ). The CEQ has stated that "The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Generally this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources." (Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations (40 CFR 1500-1598), Federal Register Vol. 46, No. 55, 18026-18038, March 23, 1981: Question 6a.)

NEPA's Section 101 establishes the following goals:

- Fulfills the responsibility of this generation as trustee of the environment for succeeding generations (NEPA 101(b)(1)),
- Assures for all Americans productive and aesthetically and culturally pleasing surroundings (NEPA 101(b)(2)),
- Attains the widest range of beneficial uses of the environment without degradation or other undesirable and unintended consequences (NEPA 101(b)(3)),
- Preserves important natural aspects of our national heritage and maintains an environment which supports diversity and variety of individual choice (NEPA 101(b)(4)),
- Achieves a balance between population and resource use, which permits high standards of living and a wide sharing of life's amenities (NEPA 101(b)(5)), and
- Enhances the quality of renewable resources and approach the maximum attainable recycling of depletable resources (NEPA 101(b)(6)).

The Proposed Resource Management Plan alternative allows for the hydrologic control necessary to restore the property to a fully functioning wetland ecosystem. Hydrologic control will also allow for recovery of the site from subsidence at an accelerated rate.

Recovery from subsidence is necessary before a wetland driven by natural processes and requiring little maintenance is possible. This alternative would also allow more acres of woody riparian habitat and flood plain to be restored along the Wood River. Because of this, the Proposed Resource Management Plan alternative affords the most potential for improved habitat conditions for the Lost River and shortnose suckers. Based on these factors, we conclude that the Proposed Resource Management Plan alternative is the "environmentally preferable alternative."

Implementation

Decisions in this plan will be implemented over a period of years. The rate of implementation is tied to the BLM's budgeting process. General priorities for overall management will be developed through long-term budgeting processes and in consultation with other agencies, tribes, and government units. Those priorities will be reviewed annually to help develop work plan commitments for the coming years. Although the Resource Management Plan implementing actions are described by individual resources, most activities will be consolidated and considered in an interdisciplinary, multi-resource process.

Valid Existing Rights

This plan will not repeal valid existing rights on public lands. Valid existing rights are those rights or claims to rights that take precedence over the actions contained in this plan. Valid existing rights may be held by other federal, state or local government agencies or by private individuals or companies. Valid existing rights may pertain to reserved mineral rights mining claims; mineral or energy leases; and easements or rights-of-way; reciprocal rights-of-way and water rights.

Administrative Actions

Various types of administrative actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimum use of the resources. These actions are in conformance with the plan. They include, but are not limited to; permits or sales for traditional or special forest products; competitive and commercial recreation activities; lands and realty actions, including issuance of grants, leases, and permits and resolution of trespass; facility maintenance; law enforcement and hazardous material removal or mitigation; enforcement and monitoring of permit stipulations; cadastral surveys to determine legal land or mineral estate ownership; and engineering support to assist in mapping, designing, and implementing projects. These and other administrative actions will be conducted at the resource area, district or state level, sometimes in partnership with other landowner or agencies or entities. The degree to which these actions are carried out will depend upon BLM policies, available personnel, funding levels, and further environmental analysis and decision making, as appropriate.

Mitigation and Monitoring

All protective measures and other management direction identified in the plan will be taken to avoid or mitigate adverse impacts. These measures will be taken throughout implementation. All practical means to avoid or reduce environmental harm will be adopted, monitored, and evaluated, as appropriate.

Monitoring will be conducted, as identified in the approved plan. Monitoring and evaluations will be utilized to ensure that decisions and priorities conveyed by the plan are being implemented, that progress toward identified resource objectives is occurring, that mitigating measures and other management direction are effective in avoiding or reducing adverse environmental impacts, and that the plan is maintained and consistent with the ongoing development of BLM state office, regional, and national guidance.

Public Involvement

Scoping of the Upper Klamath Basin and Wood River Wetland Resource Management Plan/Environmental Impact Statement began in January 1993, with a public meeting and the formation of the Wood River Wetland Team. Anyone who participated in the development of the plan was considered a team member. Active public involvement has been stressed throughout the plan development process. Public involvement has included information mailers, public meetings, field trips, distribution of planning documents, document review, comment periods, informal contacts, and group presentations to share information. The Wood River Wetland Team had 18 meetings open to the public between January 1993 and May 1995. The team reviewed all portions of the draft and final Resource Management Plan /EIS, and provided comments that were considered throughout the development of these documents. The Bureau of Land Management has been careful to inform this group that all management decisions for this property will be made by the Bureau. The team will continue to meet and provide comments on project implementation and monitoring.

On March 11, 1994, a Notice of Availability of the Draft Resource Management Plan/Environmental Impact Statement was published in the Federal Register by the BLM, in addition to a Notice of Availability by the Environmental Protection Agency. Newspaper and other media were also notified of the document availability, the length of the comment period, and the dates, times, and locations of public meetings. The Draft Resource Management Plan/Environmental Impact Statement was sent to a list of approximately 250 individuals, organizations, and agencies.

On July 28, 1995, the Environmental Protection Agency published a Notice of Availability in the Federal Register, which initiated the official protest and public comment period for the Upper Klamath Basin Proposed Resource Management Plan/Final Environmental Impact Statement. In addition, on July 18, 1995, a Notice of Availability was also published in the Federal Register by the BLM. Newspaper and other media were also notified of the document availability, the length of the protest period, and the date, time, and location of public meetings. The Proposed Resource Management Plan/Final Environmental Impact Statement or summary were sent to a list of approximately 300 individuals, organizations, and agencies. Approximately 20 people attended meetings. The district manager received no comment letters. There were no objections or recommendations by the Governor on behalf of any state or local government entity. There are no known inconsistencies with officially approved or adopted natural resource related plans, policies, or programs of applicable state or local governments or Indian tribes.

The official period to protest the proposed plan closed on September 18, 1995. No valid protests were received. A few non-substantive changes have been made in the text of the approved plan to reflect typographical corrections, improve clarity, or demonstrate consistency with various regulatory procedures or policies.

Recommendation

With full knowledge of the commitment to resource and ecosystem management represented by the plan, I recommend the adoption of the Upper Klamath Basin and Wood River Wetland Resource Management Plan.

Edwin J. Singleton 10-25-95

Edwin J. Singleton Date
District Manager, Lakeview District, Lakeview, Oregon

State Director Approval

I approve the Upper Klamath Basin and Wood River Wetland Resource Management Plan as recommended.

This document meets the requirements for a Record of Decision as provided in 40 Code of Federal Regulations 1505.2.

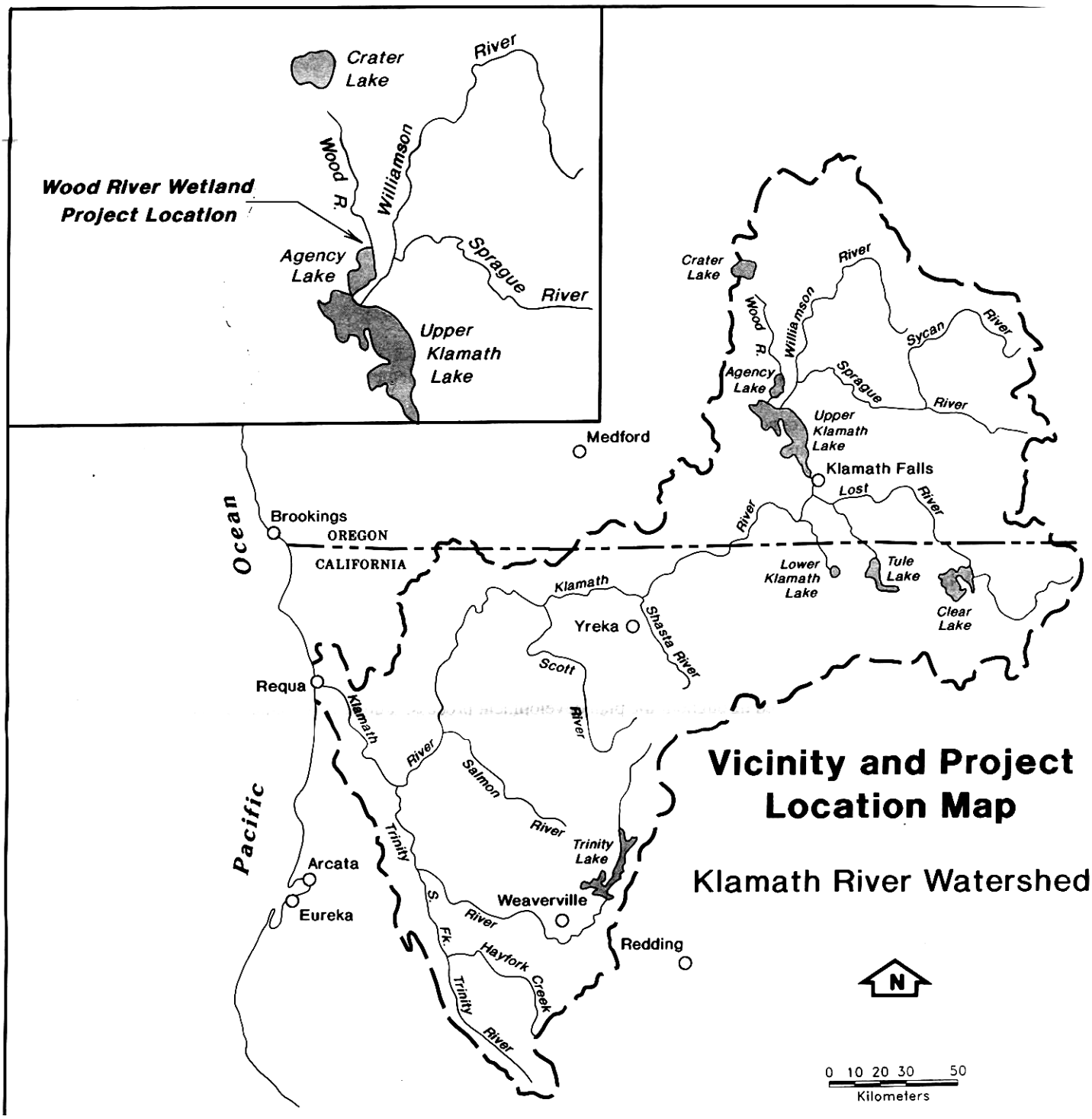
for William L. Bradley 11-21-95

Elaine Zielinski Date
State Director, Oregon/Washington
Bureau of Land Management

Summary of Effects Table - Comparison of Alternatives.

Resource	Alternative A	Alternative B	Alternative C	RMP (Alt. D)
Air Quality	No significant long-term effects.	Same as A.	Same as A.	Same as A.
Effects on Water Resources	Water quality would continue to deteriorate from sediment input and nutrient loading.	Modest improvement in water quality.	Greatest improvement in water quality. more than B.	Slightly less water quality improvement than under C, but
	Sedimentation and fecal pollution from livestock would continue to degrade water quality.	Significant decrease in livestock-related impacts on water quality compared to A.	Same as B.	Same as B.
	Insignificant effects (sedimentation) from recreation activities.	Minor effects from recreation activities.	Greatest effects from recreation activities.	Effects would be greater than B and ess than C.
	Increase in water storage would not be realized.	Greatest increase in water storage and net decrease in water use from creation of wetlands is possible.	Moderate increase in water storage and net decrease in water use is possible.	Same as C.
Steam Channel Restoration	Wood River and Sevenmile Creek would remain channeled and sedimentation would continue. Continued dredging would negatively affect channel and riparian function.	Short-term sedimentation and nutrient impacts from stream channel restoration options.	Same as B, except less severe impact because less area would be disturbed.	Same as C.
	Groundwater recharge and flood flow retention would remain the same.	Groundwater recharge and flood flow retention would improve.	Same as B, except to a lesser extent.	Same as B.
Wetland Restoration	Benefits from wetland restoration would not be realized.	Short-term nutrient reduction would occur.	Same as B.	Same as B.
	Amount of shallow water wetland habitat would remain constant.	Moderate increase in shallow water wetland habitat (compared to A).	Greatest increase in shallow water wetland habitat.	Moderate increase in shallow water wetland habitat (more than B, less than C).
Effects on Wetland Vegetation	Proportion of wetland and upland vegetation would remain constant. Main property's interior would remain dominated by pasture grasses, annual forbs, and weedy species.	There would be an increase in the abundance and diversity of native wetland species, and a decrease in the levels of introduced and native upland species.	Greatest diversity in wetland vegetation.	Greater diversity in wetland vegetation than under A and B, but less than under C.
Effects on Soils	Soil would continue to subside and leach organics and nutrients into Agency Lake causing long-term decrease in soil prductivity.	Soil productivity would increase compared to A.	Same as B.	Same as B.
	Grazing would continue to cause minor sedimentation and compaction effects.	There would be short-term compaction, displacement, and sedimentation from construction activities.	Same as B, except more severe effects.	Same as B.
Effects on Fish and Wildlife Habitat (Including Special Status Species)	Continued periodic dredging on the Wood River would continue to degrade fish habitat components, such as for spawning.	Restoration of natural stream channels would result in a significant increase in quantity and quality of habitat.	Restoration of natural stream channels would result in a moderate increase in quantity and quality of habitat.	Same as B.
	Habitat diversity would be the lowest under this alternative.	Habitat diversity would be greater than A.	The greatest level of habitat diversity would result.	Level of habitat diversity would be more han B, l ess than C.
	Meadow communities with short and tall vegetation would continue to dominate the area favoring wildlife species that prefer these types of habitat.	Species that prefer meadow communities, and their predators, would be adversely affected by a decrease in percentage of this type of habitat.	Effects on wildlife species would be moderated due to the variety of habitats.	Same as B.
	Habitat diversity would remain the same as wetland habitat would not be created.	Establishment of deep water marsh habitat would have a positive effect on species that prefer this type of habitat.	Same as B.	Same as B.

	The amount of neotropical migrant bird habitat would remain the same as planting of shrubs and trees on dikes would not occur.	Planting of shrubs and trees on dikes would benefit neotropical migrant birds.	Same as B. A great number and variety of habitat developments are proposed resulting in greater benefits than Alternative B.	The widened riparian zones/floodplains along with the creation of new levees, provide the greatest increase in neotropical migrant bird habitat.
	Increased recreation would have the greatest adverse mpact on neotropical birds.	Increased recreation use and motorized vehicle traffic would have some impact to wildlife through disturbance.	The greatest recreation use is anticipated under this alternative, causing the most impact to wildlife through disturbance.	Wildlife disturbances from recreation use would be greater than B, but less than C.
	Habitat diversity would remain the same as prescribed fire would not be used.	Use of prescribed fire could benefit wildlife species by providing more natural ecosystem processes and habitat diversity.	Same as B, except fire would be used more intensely.	Same as B.
Effects on Recreation Resources	Small increase in number of visitors due to public ownership.	More visitors than under A due to the development of facilities and opening the property to vehicle use.	Greatest amount of visitors due to the level of facilities development and improved roads.	Similar to A. Amount and type of facilities provided will be limited.
	Area restricted to non-motorized recreation would benefit those people seeking more primitive opportunities, but would adversely affect those people seeking motorized opportunities. Conflicts between hunters with easements and those without are occurring.	Some motorized access would have a negative effect on those people seeking primitive opportunities, but would benefit those people seeking motorized opportunities.	Motorized vehicle opportunities would be the greatest under this alternative and would benefit those people seeking motorized opportunities. Greatest adverse effect on those seeking primitive opportunities.	Similar to A. Amount of access and effect on users will depend on the results of use levels.
	No speed restrictions would be sought for boats, so the least adverse effects on boaters would occur under this alternative.	Creation of meanders in Wood River would affect boaters by decreasing their speed and increasing the length of river to boats. Speed and wake limits could be imposed.	Same as B. Speed and wake limits would not be imposed.	Same as B.
Effects on Visual Resources	Visual resources would remain highly modified, and would not improve.	Greatest level of long-term improvement to visual resources. Moderate levels of short-term adverse effects on visual resources from restoration activities.	Moderate level of long-term improvement to visual resources. Greatest level of short-term adverse effects from restoration activities.	Higher level of long term improvement than C, but less than B. Short-term adverse effects would be less significant than B or C.
Effects on Cultural Resources	Least potential negative effect on cultural resources.	Moderate potential negative effect on cultural resources resulting from proposed projects.	Highest potential negative effect on cultural resources resulting from proposed projects.	Low potential negative effects resulting from
		Discovery of new sites would enhance knowledge base of regional cultural resources.	Same as B, but potential for discovery would be greater.	Same as B.
Effects on Livestock Grazing	Continuation of livestock grazing would have a positive effect on revenues to the government and livestock producers. Grazing use at a maximum of 3,600 AUMs per year.	There would be a decrease in revenue to the government and livestock producers from the elimination of livestock grazing.	There would be a decrease in revenues to the government and to livestock producers from using livestock grazing as a vegetation management tool and restricting grazing use to a maximum of 750 AUMs in any year that grazing is allowed.	There would be a decrease in revenues to the government and to livestock producers from using livestock grazing as a vegetation management tool and restricting grazing use to a maximum of 1,500 AUMs in any year that grazing is allowed.
Effects on Socioeconomics	Grazing use would be a maximum of 6,500 AUMs per year. The level of grazing use would generate approximately $94,000 of gross agricultural personal income.	No livestock grazing would occur on the property consequently there would be no economic contribution from livestock grazing. sales, 1.5 jobs, and $19,250 of	The level of grazing use could generate up to approximately $19,000 of gross agricultural sales and $4,000 of personal income.	The level of grazing use could generate up to approximately $38,000 of gross agricultural sales and $8,000 of personal income.
	Recreations contribution to the local economy would be the lowest under this alternative.	Recreations contribution to the local economy would be higher than Alternative A, but lower than Alternative C.	The economic contribution from recreational activities would be the greatest under this alternative.	Recreation's contribution to local economy would be about the same as Alternative B.
		The need for 1 to 2 additional full time employees to manage the property would be created under this alternative. Annual salaries would be approximately $35,000 each.	Additional employment and wetland restoration expenditures are the same as Alternative B.	Additional employment and wetland restoration expenditures are the same as Alternative B.
		Approximately $750,000 would be spent to accomplish identified stream and wetland restoration activities.		



Vicinity and Project Location Map

Klamath River Watershed

The Resource Management Plan

Introduction

This document contains the basic information needed to implement the Upper Klamath Basin and Wood River Wetland Approved Resource Management Plan. The text included in this Approved Resource Management Plan replaces the text of Alternative D of the Upper Klamath Basin and Wood River Wetland Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS). However, this document should be used in conjunction with that PRMP/FEIS for topics such as a discussion of the Planning Area; Purpose and Need for the Action; Relationship of the RMP to BLM Policies, Programs, and Other Plans; Coordination and Consultation; Use of the Completed Plan; Adaptive Management; Requirement for Further Environmental Analysis; The Budget Link; and Research. The appendices of that PRMP/FEIS have not been reprinted here and also apply to this plan.
There were no changes made between the proposed plan and the approval of this plan as a result of protests since no protests were received. Some minor changes were made as a result of on-going internal review to adjust the language of the plan to fit its approved status.

The appendices contained in the PRMP/FEIS contain detail that was deemed non-essential for the purposes of this document. Based on the lack of changes needed it was felt that a portable approved plan usable by the pubic while actually on the property would be better than reprinting all of the details. This is particularly true for the appendices covering wetland and stream restoration options and the monitoring plan. Those appendices contain details that will be considered during implementation of this plan. This plan is expected to be implemented over a period of years. Readers should keep both this document and the Proposed Resource Management Plan/Final Environmental Impact Statement for future reference.

The text and maps included with this document are sufficient to give the average reader a good idea of what will happen on the property. For those readers interested in more details, using this document in conjunction with the Upper Klamath Basin and Wood River Wetland Proposed Resource Management Plan/Final Environmental Impact Statement will give a complete picture of what is expected to occur on the property.

Plan Objectives

Restore the Wood River property to its previous function as a wetland community, within unalterable constraints (such as water rights, land ownership patterns, and available funding). Long-term improvements in water quality entering Agency Lake is a goal; however, localized decreases in water quality could occur in the short term. Emphasize improving and increasing wetland and riparian habitats for federally listed fish and other wildlife. Allow labor-intensive, highly engineered wetland restoration methods using complex designs; however, the preference would be to use wetland restoration systems and methods that were designed with less labor-intensive practices using the existing landscape features (such as topography) and natural energies (such as stream flows) of the property. Use vegetation management (including water level and flow fluctuations, livestock grazing, fire, chemical and mechanical manipulation) to develop desired plant communities. Allow pilot studies for research purposes. Use adaptive management, the process of changing land management as a result of monitoring or research. Manage recreation resources for low to moderate use levels.

Water Resources

Objective: Improve the quality and quantity of water entering Agency Lake from this property. Restore the majority of the property to a wetland community dominated by native species to the extent that it would not adversely impact adjacent landowners. Improvement in water quality entering Agency and Klamath Lakes would occur through changes in current management practices and passive filtration. The current drainage/irrigation system could be used or modified to manipulate water levels and/or soil moisture conditions to maintain a wetland in properly functioning condition. The BLM will cooperate in studies to determine the effectiveness of the wetland system(s) in improving water quality and storage. The BLM will comply with all applicable Oregon State water laws and cooperate with the Meadows Drainage District in its operation and use of the Wood River property's irrigation system.

The techniques used for wetland restoration will be a combination of existing and constructed water control structures (berms, ditches, screwgates, and flashboard dams), and the encouragement of natural processes (plant succession, channel meandering). Several likely restoration scenarios are summarized in Table 6 of the Proposed Resource Managment Plan/Final Environmental Impact Statement (PRMP/FEIS, see also Appendix F of the PRMP/FEIS for a more detailed description). Actual wetland restoration methods would not vary significantly from methods described in the PRMP/FEIS. A site specific engineering design will be completed prior to construction. The BLM will coordinate with the Oregon Department of Environmental Quality, US Fish and Wildlife Service, and the Army Corps of Engineers (among others) to obtainin any permits necessary prior to constructing stream channel or wetland restoration projects.

Stream Channel Restoration Options

Objective: Provide a wider riparian area and floodplain along Wood River and Sevenmile Creek to allow meandering flow patterns to develop. Encourage vegetation diversity, channel sinuosity, and complexity. This restoration will only occur within BLM-administered lands, will be consistent with Oregon State water laws, and will be designed to not adversely affect water use or rights of other landowners.

Stream channel restoration will be accomplished initially as described in the Summary of Channel and Wetland Restoration Actions Table (see also Table 6 of the PRMP/FEIS). New levees will be constructed 50 to 400 meters toward the interior of the property from the current locations. New channel meanders could be constructed between the new levee and the old levee along the west side of the Wood River. Restoration of meandering flow patterns would then be accomplished by removing portions of the existing levees along the streams. Other portions of the existing levees could be left in place or used to encourage meanders in the existing dredged channels. A wider riparian area and floodplain will be created along these streams. Natural processes would then be relied on to establish overflow channels, backwater areas, and to increase the sinuosity and complexity of the Wood River and Sevenmile Creek. This approach will allow the streams to establish their own courses across the floodplains over time. The long-term goal is to have narrower, deeper, and more sinuous channels within wider riparian areas. Because the Wood River channel has been less altered, and has the greatest potential to respond to restoration activities in the shortest period of time, restoration of the Wood River channel will be a higher priority than Sevenmile Creek. Therefore, restoration activities will be implemented first along the Wood River.

Wetland Restoration

Objective: Restore the majority of the Wood River property to a wetland in properly functioning condition dominated by a native plant community. Vegetation management could occur using several methods, including but not limited to water level fluctuations, livestock grazing, haying, planting and seeding, prescribed fire, and mechanical or chemical methods. Vegetation manipulation will be designed to develop species diversity and to maintain healthy and productive communities of native riparian and wetland vegetation. One or two small-scale, reversible pilot projects could be constructed to provide additional information on effects on water quality, effects on wetland habitat, or for other research purposes; however these projects will only take up a very small portion (less than 5 acres) of the property.

Wetland restoration will be accomplished as described in the Summary of Channel and Wetland Restoration Actions Table (see also Table 6 of the PRMP/FEIS). Option 1 will be applied to the restoration of the entire property. Internal wetland cells will be designed in such a way that Option 2 could be incorporated on a portion of the south half of the property.

Wetland restoration through the use of a system of 4 to 8 cells, water control structures, and pumps will allow hydrologic control to be maintained on the property. This hydrologic control will allow for greater biological diversity to develop. This system of cells and structures will facilitate a wide array of management options (for example maintaining different water levels in different cells), including periodic aeration of the soil surface. Intermixing of waters from the wetland with those of Agency Lake could still be incorporated using this approach on a portion of the wetland.

Special Status Species Habitat

Objective: Manage for a diversity of habitats for special status species (see Table 3 of the PRMP/FEIS). Maintain a viable population of spotted frogs on the property. Protect habitats of federally listed or proposed threatened or endangered species; to avoid contributing to the need to list category 1 and 2 federal candidate, state listed, and Bureau sensitive species.

Management of special status species habitats will also be consistent with the Klamath Falls Resource Area's Approved RMP. If any special status species (federally or state listed as threatened or endangered, federally proposed as threatened or endangered, category 1 and 2 federal candidate, and Bureau sensitive) are suspected in an area proposed for a management activity, field surveys would focus on those species. If populations of these species are found, then the plants or animals and their habitats will be protected through modification or abandonment of management actions as appropriate to eliminate impacts to federally listed or proposed species and to not contribute to the need to list category 1 and 2 federal candidate, state listed, or Bureau sensitive species.

If a project could not be altered or abandoned to eliminate a potential effect on a federally listed or proposed threatened or endangered species, then consultation with the U.S. Fish and Wildlife Service would be initiated under section 7 of the Endangered Species Act.

For state listed and state proposed species, the BLM will coordinate with the appropriate state agency to develop policies that would assist the state in achieving its management objectives for those species.

Fish and Wildlife. Management actions for special status fish species will include removal and movement of portions of existing levees and dikes. Encourage natural processes to form a more sinuous channel with greater habitat complexity in the Wood River and in portions of Sevenmile Creek. The placement of natural structures such as logs and boulders will be considered to achieve desired channel conditions and increase the amount of cover for fish.

Plants. Inventories will be conducted if appropriate habitat is identified. Coordinate and cooperate with the Oregon Department of Agriculture regarding management activities with potentially adverse effects on a state listed or proposed plant species.

Fish and Wildlife Habitat

Objective: Improve habitat conditions for suckers and salmonids; improve habitat for raptors and neotropical migratory birds; and optimize waterfowl habitat within the constraints of other resource objectives.

Native tree species will be planted in clumps along major dikes for cover and future nest and perch sites, as well as to mitigate dike erosion. Portions of levees will be planted with native shrubs to provide nesting and roosting areas for neotropical migrant birds. Vegetation management (using water fluctuations, livestock grazing, prescribed fires, mechanical or chemical manipulation, or other methods) could be used to maintain, enhance, or create diverse habitats within the wetland. Riparian habitat along the Wood River and Sevenmile Creek will be restored and maintained by planting riparian vegetation and protection from grazing. River meanders will be encouraged to improve fisheries habitat. Channel morphology and substrate will be studied as they relate to factors limiting fish production, and will be modified as necessary to encourage natural sinuosity and narrow, deep channels.

Nest islands, upland areas, and other structures could be developed to provide wildlife habitat.

Vegetation

Fire Management

Objective: Suppress all wildfires, and reintroduce fire as an ecosystem process by using prescribed burning as a management tool to support the primary goal of wetland restoration.
An initial attack agreement for suppression of wildfires will be established with the Winema National Forest, U.S. Fish and Wildlife Service, and/or the Oregon Department of Forestry. Parameters will be developed under which fire could be introduced as an ecosystem process to achieve resource management objectives. Prescribed burning could be implemented through planned ignition, as determined by wetland restoration methods; by meeting the other objectives of improving water quality and quantity, and restoring wetland habitat for endangered suckers and waterfowl; and to further research objectives. To mitigate air quality problems, all burning will be conducted during unstable atmospheric conditions and with favorable transport winds.

Noxious Weed Management

Objective: Manage noxious weed species to facilitate restoration and maintenance of desirable plant communities and healthy ecosystems; prevent introduction, reproduction, and spread of noxious weeds into and within the property; and manage existing populations of noxious weeds to levels that minimize the negative impacts of noxious weed invasions.

Federal agencies are directed to control noxious weeds on federal lands by the Carlson-Foley Act (Public Law [PL] 90-583) and the Federal Noxious Weed Act of 1974 (PL 93-629). Noxious weed management on the Wood River property will be part of an integrated noxious weed management program as described in the Integrated Weed Control Plan and Environmental Assessment (EA) for the Klamath Falls Resource Area (OR-014-93-09). An appropriate combination of manual, mechanical, chemical, and biological methods, and water level manipulation will be used to control noxious weed species. Seasonal timing will be considered in any control program. Herbicide use will be in accordance with the program design features outlined in the KFRA Integrated Weed Control Plan and EA.

All chemical and some mechanical treatments for noxious weeds will be accomplished through a contract with Klamath County or other appropriate contractors, if populations of these species are identified for control. Appropriate herbicides will be used for treatment of noxious weeds in or adjacent to wetlands. Biological control organisms are supplied and/or distributed by the Oregon Department of Agriculture (ODA) through a memorandum of understanding between the ODA and the BLM's Oregon State Office.

Livestock Grazing

Objective: If and where appropriate, use livestock grazing as a vegetation management tool to support the primary goal of wetland restoration.

Use livestock grazing mainly as a management tool to support the primary goal of wetland restoration. Livestock grazing could be allowed if needed to create or maintain wildlife habitat. No long term grazing lease will be issued. Levels and duration of grazing, as well as maintenance and construction of range improvement projects, will be dependent on the need to meet management objectives. It is expected that the amount of grazing will be significantly less than that allowed under Alternative A of the PRMP/FEIS, and it is possible that no grazing will occur. It is estimated that grazing use will not exceed 1,500 animal unit months in any given year. Any livestock use could be authorized and allowed via a competitive bid contract for the purposes of vegetative management and evaluated on a year by year basis. In lieu of or in addition to livestock grazing, haying of portions of the property will be considered as an alternative if vegetative removal was necessary to meet the wetland restoration goals. The allotment is initially categorized as an "M", or maintain, category allotment. The same planning (RMP/EIS) constraints and direction listed under Alternative A of the PRMP/FEIS would also apply to this alternative.

Cultural Resources

Objective: Protect known cultural resources (including both historic and prehistoric resources).
A class 1 inventory will be conducted on the property. A class 1 inventory is a comprehensive literature search to determine the existence of cultural remains within the project area. A class 3 survey, which is an intensive survey of the ground to identify and record all cultural resource sites within a specific location, will be completed prior to commencing any surface-disturbing activities. An archaeologist (from the BLM and/or Klamath Tribes) will be on-site during these activities to monitor the site. Testing for artifacts could be done, based on surface or stream bank indicators.

Consultation with the Klamath Tribes will occur during the regular monthly BLM\Klamath Tribes meetings on cultural resources, or at other times, if deemed necessary. This consultation will include updates on existing projects and discussion on new projects anticipated on the Wood River property. Consensus will be sought on all projects.

Recreation

Objectives: Provide opportunities for roaded natural and semi-primitive recreation experiences (opportunities to have a high degree of interaction with the natural environment, to have moderate challenge and risk and to use outdoor skills). Manage the area for low (6 to 10 parties per day) to moderate (10 to 50 parties per day) recreation use levels (moderate near developed sites and roads, and low to moderate in other areas). Manage for day use only.

Recreation use and facilities will be secondary to the overall objective of wetland restoration and water quality improvement. Based on informal recreation use monitoring during calendar year 1994, some trends in recreation use levels have been identified (See Chapter 2, Recreation section of the PRMP/FEIS). The property has been designated closed to off-highway vehicles, except for desingated roads and trails and for administrative use. An improved parking area (graveled or paved) at or near the entrance to the Wood River property, sufficient to hold 20 to 25 vehicles (for peak use periods) will be provided. The facilities provided will meet the roaded natural and semi-primitive recreation opportunity objectives.

In addition to use levels, the BLM will consider user convenience, safety, and resource protection when determining what recreation facilities to provide. Such facilities could include, but are not limited to, improved (graveled or paved) parking areas and roads, toilets, interpretive signing, nature trails (canoe, foot, mountain bike, horseback, and/or ski trails), and a boat ramp to access Wood River (see Map 7 of the PRMP/FEIS). The BLM will coordinate construction activities with the Oregon Department of Environmental Quality, US Fish and Wildlife Service, and the Army Corps of Engineers (among others) when designing and constructing recreation facilities.

Maintain current recreation use levels during waterfowl hunting season and allow for greater motorized access and increased use levels during the rest of the year. A likely development scenario includes the previously mentioned improved parking area at or near the entrance to the Wood River property, sufficient to hold 20 to 25 cars. A toilet, 1 to 2 picnic tables, garbage cans, and interpretive signs could also be provided at the parking area.

During the non-hunting season, better access to the property could be permitted. An improved (graveled) parking area (approximately one quarter acre in size) near the Wood River bridge, along with a primitive boat ramp (suitable for launching a small boat or canoe) and toilet could be provided. Nature trails could be provided in the vicinity of the Wood River bridge (including canoe trails, interpretive trails along the dikes and newly constructed trails using construction techniques similar to dikes).

The area is closed to overnight use. No campfires, fireworks, or smoking will be permitted. Off-highway vehicles will be limited to designated, signed roads (this will also include seasonal closures), as determined by use levels and needs.

The location and type of facilities, as well as which roads will be open or closed to motorized vehicles, will be determined as recreation use levels are established and the design and location of stream and wetland restoration projects are defined. Because of the increased recreation management and investment, the area is identified as a special recreation management area, as required in BLM Manual 1623. Hunting, fishing, sightseeing, and wildlife viewing will be supported by providing facilities. Hunting regulations on motorized vehicles, such as motorboats, and fishing use will be monitored and coordinated with the Oregon Department of Fish and Wildlife (ODFW); hunting and fishing policies could be developed and/or adjusted based on results of the monitoring data. Safety zones will be established if needed for user safety and wildlife viewing, and shooting will be prohibited in these zones. Jet boats and air boats will be prohibited in the existing Wood River Marsh and in other wetland areas as they are

Wood River Channel.

constructed. Limits on speed and wakes will be coordinated with the Oregon State Marine Board and could be recommended to mitigate environmental degradation. Small motorized boats could be allowed to enter the wetland areas, during times when waterfowl nesting is not occurring. The area will be identified as a Watchable Wildlife site in cooperation with the ODFW.

Visual Resources

Objective: Ensure management actions meet VRM Class II objectives.
The property will be managed to meet Visual Resource Management (VRM) Class II objectives, which is to retain the natural character of the landscape, which is a wetland. Changes in any of the basic elements (form, line, color, texture) caused by a management activity should be low. Contrasts are seen, but must not attract attention of the casual observer. Changes must repeat the basic elements found in the predominant natural features of the characteristic landscape. Projects or management actions will be evaluated using the BLM's contrast rating system to measure the degree of contrast between the proposed activity and the natural features of the landscape, and will meet or exceed VRM Class II objectives (BLM Manual Handbook H-8431-1).

Special Areas

Objective: Manage the property as an area of critical environmental concern (ACEC); and protect and restore the area's relevant and important values, which are cultural, fish and wildlife values, and natural processes and systems.

The Wood River property has been designated an ACEC (through this plan process). The Wood River property was evaluated for designation as an ACEC and found to meet the relevance and importance criteria and evaluation process as described in Appendix G in the PRMP/FEIS. This approved Upper Klamath Basin Resource Management Plan/Record of Decision serves as the management plan for the area.

Mineral and Energy Resources

Objective: Ensure mineral and other activities do not conflict with other management goals, the lands will be withdrawn from (closed to) settlement, sale, location, and entry under the general land laws, including the United States Mining Laws (30 USC Ch. 2 [1988]), but not the mineral leasing laws, subject to valid existing rights. Energy and mineral leases will be subject to a "no surface occupancy" stipulation. The "no surface occupancy" stipulation could be waived if it was demonstrated that the mineral activity was consistent with other management goals. Mineral or energy activity also would be subject to other federal and state regulations, such as the Clean Water Act, Endangered Species Act, etc.

Soil Resources

Objective: Ensure that undue degradation of soils does not occur. Encourage and/or allow the natural accumulation of peat.

Management activities will be designed and monitored to meet the soils objective. Studies that determine the potential of peat and peaty soils as pollutant and nutrient filters will be encouraged.

Air Resources

Objective: Meet the goals of the Federal Clean Air Act, as amended; the Oregon Implementation Plan; the Oregon Smoke Management Plan; and prevent the deterioration of air quality within the Klamath Falls Special Protection Zone (described in the Oregon Smoke Management Plan).

Monitoring of air quality will be conducted as required by regulation and peer practice. Emissions of fugitive dust and smoke will be limited to operations associated with maintenance and restoration activities.

Roads and Facilities

Objective: Provide adequate roads and facilities (quality and quantity) to support management objectives.

Existing easements with adjacent property owners are recognized and the BLM will follow the terms and conditions of those easements. Roads could be improved (graveled or paved), consistent with overall objectives of this alternative and as determined by use levels and needs. Motorized vehicle use is limited to improved, designated, and signed roads (this could also include seasonal closures; see Map 7 of the PRMP/FEIS and the recreation section for more details). Exceptions to this will be for people with administrative access or existing easements. Dike maintenance (such as rip-rapping, and planting trees and shrubs) will be accomplished to provide safety to vehicle users and to maintain the integrity of the dikes. The bridge over Wood River will be inspected and maintained according to BLM bridge maintenance schedules (BLM Manual 9112.4).

If necessary to be consistent with overall management objectives, existing facilities, including cattle guards, fences, gates, ditches, bunkhouse shack, corral,

and livestock handling facilities could be removed and disposed of in accordance with BLM property procedures (BLM Manual 1527.2 and 1533.2). The pumps and pump house will be maintained, and improved if necessary (see Map 7 of the PRMP/FEIS).

Plan Monitoring

The BLM planning regulations (43 CFR 1610.4-9) call for monitoring and evaluating resource management plans at appropriate intervals. The purposes of monitoring and evaluating the Upper Klamath Basin and Wood River Wetland Resource Management Plan/Environmental Impact Statement (RMP/EIS) are to:

- Track progress of RMP implementation and assure that activities are occurring in conformance with the plan (implementation monitoring);
- Determine if activities are producing the expected results and meeting stated objectives (effectiveness monitoring); and
- Determine if activities are causing the effects identified in the EIS (validation).
- **Insure that research results are well documented and shared with the community.**

Implementation of the RMP will be monitored to ensure that management actions are being implemented and are meeting their intended purposes. Specific management actions will be compared with RMP objectives to ensure consistency with the intent of the plan.

Monitoring will be conducted as specified in the following sections, and the results will be reported in an Annual Program Summary, along with monitoring results from the RMP for the rest of the Klamath Falls Resource Area. This annual summary will be published starting the second year following initial implementation of the RMP. The Annual Program Summary will serve as a report to the public, track and assess the progress of plan implementation, and state the findings made through monitoring. For the Upper Klamath Basin portion of the program summary, the BLM will determine if:

- management actions are resulting in satisfactory progress toward achieving RMP objectives;

- management actions are consistent with current policy;

•original assumptions are valid and impacts are within the range predicted, given the reliability of the predictions;

•mitigation and corrective measures are satisfactory and serving their purposes;

•the RMP is still consistent with the plans and policies of state or local government, other federal agencies, and the Klamath Tribes;

•new data are available that could result in alteration or amendment of the plan;

•requirements of the National Environmental Policy Act are being met; and

•compliance is being achieved on actions authorized by the BLM.

Monitoring will occur for the following resources:

•Air Quality

•Cultural Resources, Including American Indian Values

•Water Resources

•Vegetation

•Riparian Areas

•Wildlife Habitat

•Fish Habitat

•Special Status Species

•Areas of Critical Environmental Concern

•Visual Resources

•Recreation

•Grazing Management

The Upper Klamath Basin and Wood River Wetland Proposed Resource Management Plan/Final Environmental Impact Statement contains the complete details on when and how monitoring will take place.

Summary of Stream Channel and Wetland Restoration Actions Table*

Stream Channel Restoration:

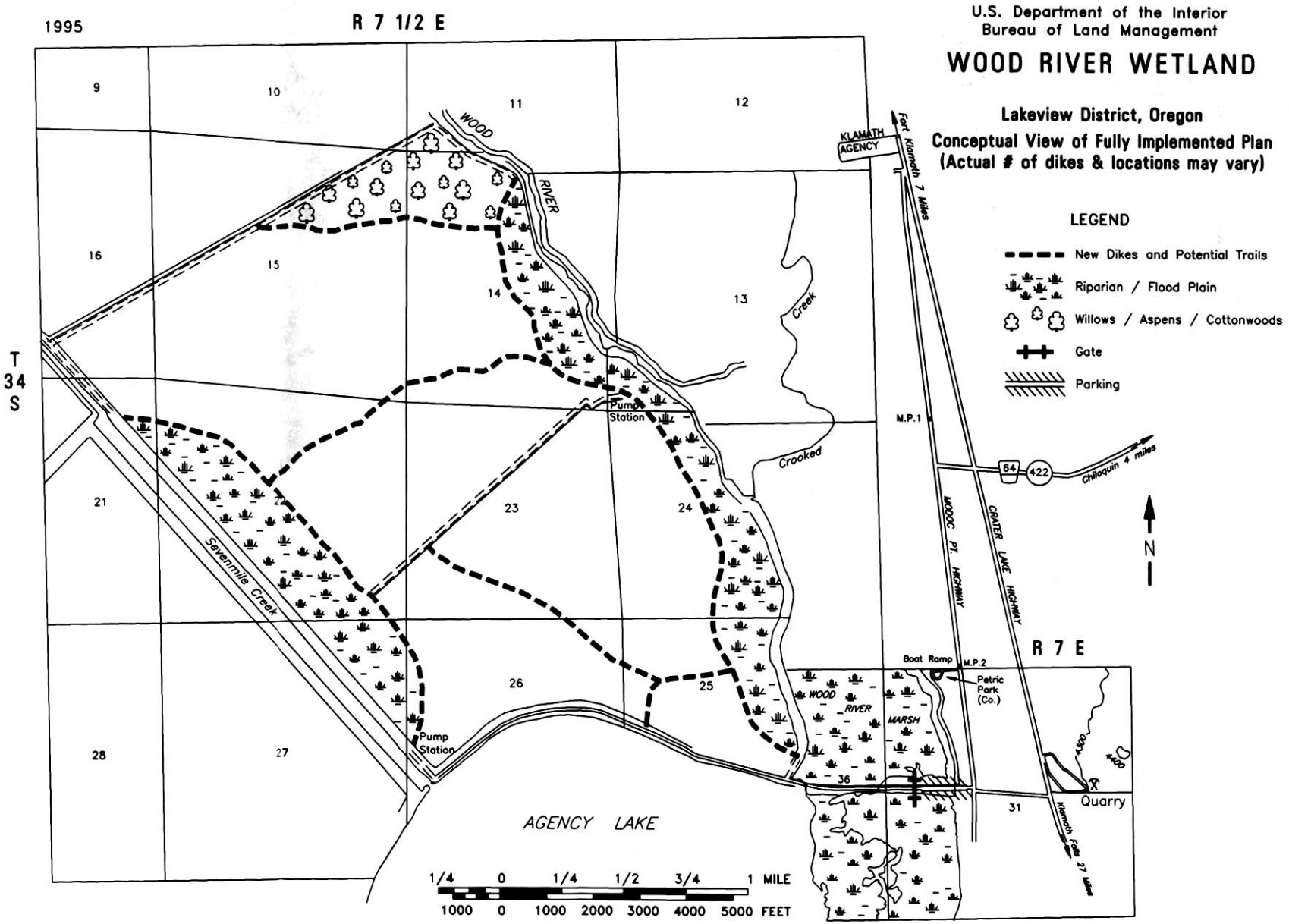
Restore meandering flow patterns for the Wood River and Sevenmile Creek by relocating portions of the exisiting levees along these streams. Prior to relocating the existing levees, new channel meanders could be constructed along the west bank of the Wood River. New levees would be constructed 50 to 400 meters interior to the existing levees. Portions of the existing levees could be left in place as islands or used to construct point bars. Natural hydrologic processes would then be allowed to establish wider riparian areas, and to enhance channel sinuosity.

Wetland Restoration:

Restore wetland by operating the existing canal and pump system. The wetland would be restored and maintained by manipulating water levels within a system of berms and water control structures. Water levels would be manipulated to manage wetland vegetation within 4 to 8 created cells. This system would be designed so that option 2 could be incorporated at some point in the future.

Restore wetland by re-establishing the lake-wetland interface (opening the property's interior to prevailing water levels in Agency Lake). This could be accomplished by installing pipes or culverts through the dike along the north shore of Agency Lake, allowing lake water passage between the lake and the south half of the property. Culverts or other water-control structures could also be installed in the east and west dikes, and in the interior containment dike separating the north and south halves of the property. This would allow for movement of fish, wildlife, and plant species between Agency Lake, Wood River, Sevenmile Creek, and the main property, as well as restoring wetland habitat to the majority of the Wood River parcel.

*See Table 6 of the PRMP/FEIS for a comparison of these actions against the other alternatives analyzed in that EIS. See also Appendix F of the PRMP/FEIS for a more complete description of these options.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U.S. Department of the Interior
Bureau of Land Management
WOOD RIVER WETLAND
Lakeview District, Oregon
Conceptual View of Fully Implemented Plan
(Actual # of dikes & locations may vary)
LEGEND
New Dikes and Potential Trails
Riparian / Flood Plain
Willows / Aspens / Cottonwoods
Gate
Parking
T 34 S
R 7 E
WOOD RIVER
Fort Klamath 7 Miles
KLAMATH AGENCY
M.P.1
64
422
Chiloquin 4 miles
MODOC PT. HIGHWAY
CRATER LAKE HIGHWAY
Crooked Creek
Sevenmile Creek
Pump Station
Pump Station
Boat Ramp
M.P.2
Petric Park (Co.)
WOOD RIVER MARSH
Quarry
Klamath Falls 27 Miles
AGENCY LAKE
1/4 0 1/4 1/2 3/4 1 MILE
1000 0 1000 2000 3000 4000 5000 FEET
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