

APPENDIX 5 - 5

WILDLIFE RESOURCES

WILDLIFE HABITAT (Big Game): 3C
 Location - Quantity - Quality

Major big game species are mule and white-tailed deer, Rocky Mountain elk, Rocky Mountain goats, Rocky Mountain bighorn sheep, black bear, and cougar. Optimum habitat requirements for these species include adequate water, forage, and a variety of vegetation cover for thermal protection, hiding, and fawning purposes. In Wallowa County most of the big game habitat occurs in areas zoned for resource management.

A wildlife inventory map has been submitted by the Oregon Department of Fish and Wildlife and is included in the Comprehensive Land Use Plan by reference. The Wildlife Habitat Inventory Map includes: Big Game Winter Range Outline, Critical Wildlife Habitat (hunting units), Deer Winter Range, Deer/Elk Winter Range, Heron Rookeries, Bighorned Sheep Winter Range, Marshes, Mountain Goat Winter Range, Bighorned Sheep Release Sites, (1996 from ODF&W map inventory of 1980), and Bald Eagle and Osprey nest sites and was adopted by the Wallowa County Board of Commissioners on January 21, 2003 along with the Columbian Sharp Tailed Grouse Conservation Priority Area Map.

Rocky Mountain elk and mule deer are the most abundant and provide the greatest amount of hunting. The following table indicates the abundance of big game in Wallowa County.

BIG GAME POPULATION ESTIMATES HUNTERS AND HARVEST
 WALLOWA COUNTY

SPECIES	1985 POPULATION ESTIMATE	1983 NUMBER HUNTERS	1983 HARVEST
ROCKY MOUNTAIN ELK	15,050	18,600	2,700
MULE DEER	19,550	11,700	2,850
WHITE-TAILED DEER	700	300	40
ROCKY MOUNTAIN GOAT	30	0	0
ROCKY MOUNTAIN BIGHORN SHEEP	225	61	6
COUGAR	330	1,251	33
BLACK BEAR	1,000	3,180	110

1984 Hunter and Harvest Data

CONFLICTING USES: Conflicting uses are uses which, if allowed, could negatively impact big game habitat. Most big game habitat is zoned for resource use. Primary conflicting uses permitted within the resource zones include activities that destroy the habitat itself; for example, removal of vegetative cover or depletion of water. The environmental and economical consequences of allowing conflicting uses would be a decrease in the number of big game and a corresponding decrease in recreational hunting with its negative economical effect.

On the other hand, big game damage to agricultural operations is a serious problem. Deer and elk damage to cropland, grazing land, and timber regeneration has been a problem of serious economic importance throughout the County. Haystacks that are not protected can suffer severe damage during the winter from deer and elk. Haystack damage is generally resolved by placement of stockyard fences or by diversion feeding. Potential conflicts also exist where Bighorn Sheep supplant traditional domestic sheep grazing.

The Oregon Department of Fish and Wildlife has attempted to alleviate damage with a nine-mile long elk fence that separates good elk habitat from highly productive farmland. Other damage control methods have included special hunts, emergency hunts, kill permits to take offending animals, trapping, transplanting, and hazing.

CONCLUSIONS: Much of the big game habitat occurs on Federal land. On much of the private land, big game habitat is already zoned for resource uses. The only conflicting use that has been identified is placement of dwellings. The Oregon Department of Fish and Wildlife has recommended that permanent residences be sited at a density not to exceed one per 320 acres or one recreational residence per 160 acres on critical winter range. As an implementing measure to facilitate the Oregon Department of Fish and Wildlife's recommendation, the following standards will be implemented as guidelines:

01. A minimum setback of 1866 feet from the nearest existing dwellings for new dwellings,
OR
02. A requirement of a minimum 320 acres and placement of the proposed dwelling in a cluster fashion, with dwellings on adjacent parcels.

WILDLIFE HABITAT (Game birds, Furbearers): 3A & 3C
 Location, Quality, Quantity

Upland game birds in Wallowa County include ring-necked pheasants, valley and mountain quail, chukker and Hungarian partridge, blue ruffed and Franklin's grouse, white-tailed ptarmigan, Merriam turkeys, and mourning doves.

Ring-necked pheasants and valley quail (to some extent) are farmland birds. Cattail marshes, brushy fence rows, and stream-side vegetation are key components of their habitat. Marshland drainage and brush clearing has reduced the pheasant population in the population in the Wallowa Valley. Recent cooperative stream-side management programs and no-till farming will probably aid populations by increasing riparian habitat along major streams and providing increased cover. While habitat requirements vary considerably, the resource zoning generally will favor upland game birds.

UPLAND GAME POPULATION ESTIMATES

HUNTERS AND HARVEST - WALLOWA COUNTY, 1980

<u>SPECIES</u>	<u>POPULATION</u>	<u>ESTIMATE</u>
Harvest 1/Chukker Partridge ...	150,000	11,100
Hungarian Partridge	25,000	2,500
Valley Quail	10,000	2,100
Mountain Quail	2,000	100
Turkey	75	
	0	
Blue Grouse	37,500	5,600
Ruffed Grouse	44,000	2,100
Franklin's Grouse	800	NOS*
White-tailed Ptarmigan	50	NOS*
Ring-necked Pheasant	1,500	1,250
Mourning Dove	14,500	

*No Open Season

Wetland areas are needed for nesting, resting, and feeding of waterfowl. Breeding areas are valley streams and stock ponds. Several natural marshes - such as Clear Lake Marsh - also provide habitat.

HUNTERS AND HARVEST, 1976 SEASON ESTIMATES: Waterfowl habitat where little or none existed before. Streams, such as: Prairie Creek and the Wallowa River are heavily used by waterfowl especially during periods of extreme cold when ponds and Wallowa Lake freezes over. Wallowa Lake is an important resting area during the fall and early winter. Birds use Wallowa Lake for rafting and then feed in valley grain fields.

Furbearers include aquatic mammals, such as: beaver, muskrat, mink, and otter and others, such as: marten, fisher, coyote, red fox, bobcat, wolverine, raccoon, skunk, badger, and weasel. They have a wide variety of habitat needs, including: streams, marshes, lakes, forested areas, alpine areas, and grassland.

1980 FURBEARER POPULATION ESTIMATES NUMBER
AND
CATCH, 1983-1984 - WALLOWA COUNTY NUMBER

SPECIES	POPULATION ESTIMATE	HARVEST	PRICE	AVERAGE TOTAL
BEAVER	1,800	17	\$ 14.22	\$ 241.74
OTTER	100	4	22.50	90.00
MINK	1,000	138	17.27	2,383.26
MUSKRAT	1,000	1,574	3.41	5,367.34
RACCOON	1,000	77	14.49	1,115.73
MARTEN	1,200	0	0.00	0.00
SKUNK	2,000	14	1.91	26.77
WEASEL	3,000	9	0.50	4.50
BADGER	500	31	0.26	806.00
BOBCAT	300	55	244.69	13,457.95
COYOTE	3,500	220	33.82	7,440.40
TOTAL				\$30,933.69

CONFLICTS: Marsh drainage, channeling of streams, loss of riparian vegetation (including nesting trees), and construction of buildings in close proximity to habitat areas are the greatest conflicts to waterfowl. Conflicts between furbearers and land uses in the resource zones occur only occasionally. The biggest problems are coyote predation on calves and lambs. The economic impact of allowing conflicting uses would be the loss of input into the local economy by hunters and trappers and the social impacts - neither would be significant. The environmental and energy consequences of allowing conflicting uses is not clear.

CONCLUSIONS: The habitat of game birds and furbearers occurs along brushy streambanks, wet areas, and generally areas providing food and cover. The retention of riparian habitat is partly insured through the County's setback requirements and the Department of Environmental Quality requirements.

WILDLIFE HABITAT (Non-game Wildlife): 1B 3C

ANALYSIS: Wallowa County has a number of non-game species considered unique in Oregon and attract viewers. Barred and great gray owls, bobolinks, and Wallowa rosy-crowned finches are a few that draw visitors. A checklist of the birds of Union and Wallowa County is available from the Oregon Department of Fish and Wildlife offices. The diversity in habitat requirements of non-game wildlife species is as varied as the elevations and habitat types found in the County. Habitat requirements outlined for the other wildlife groups listed generally apply to non-game wildlife.

A comprehensive inventory for the various species of non-game wildlife is not available due to a lack of data and numbers involved. However, two Great Blue Heron rookeries have been identified on the Wallowa River (Section 12, Township 2S, Range 44 E, and Section 32; Township 1N, Range 43 E). No other important nesting sites have been identified for any other species.

Conflicting uses would be structures in close proximity to nesting sites and/or removal of nesting trees. The economic, social, and energy impacts of allowing conflicting uses are unknown. The environmental impact of allowing conflicting uses may be the elimination of some herons from the area. Because the Oregon Department of Fish and Wildlife is trying to preserve the existing heron rookeries, they are not willing to reveal specific locations.

CONCLUSION: The habitat of non-game birds is for practical purposes, the whole County, and not site specific. The resource zoning affords adequate protection for non-game habitat. The Oregon Department of Fish and Wildlife will be notified of any proposed changes in land use in the vicinity of the two identified heron rookeries.

WILDLIFE HABITAT (Fish): 3C
 Location - Quality - Quantity:

Angling for salmon takes place in the spring and fall on the larger streams with the Grande Ronde River producing the most fish. Most salmon caught are Chinook, but some Coho are taken from the Grande Ronde and Wallowa Rivers in the fall.

Steelhead are caught throughout the fishing season (June through March) in the Grande Ronde, Imnaha, and Wallowa Rivers but early spring and early fall are best. The Minam River and Joseph Creek also produce steelhead.

The Grande Ronde Basin supports a large resident trout fishery - brook and rainbow trout are most commonly caught. The Oregon Department of Fish & Wildlife releases hatchery juvenile and catchable fish to help supplement natural reproduction. Juvenile Kokanee, a land-locked sockeye salmon, has been released in Wallowa Lake to provide a sport fishery for adults. Dolly Varden trout angling is best in areas with access since this species is easily over-fished. Lake trout are occasionally caught in Wallowa Lake. Golden trout are available in two high lakes and in Hurricane Creek. Over 35 percent of the basin's angling pressure occurs on Wallowa Lake which has five species of game fish. Drift boat angling for trout takes place on the Grande Ronde and Wallowa Rivers between Minam and Troy in March through October. Low water in August and September impedes boating. Fishing from rubber rafts has developed on the Lower Imnaha River.

Whitefish are incidentally taken by anglers while fishing for trout. Good fishing areas include the upper and lower Grande Ronde River, Lower Wenaha River, and Imnaha River below Imnaha. A small number of anglers fish specifically for whitefish on the Wallowa River in December through March. This species is presently under utilized by sportsmen.

FISH SPECIES, LOCATION, AND ABUNDANCE

GAME FISH SPECIES	LOCATION	ABUNDANCE
BLACK CRAPPIE	SNAKE RIVER	COMMON

BROOK TROUT	HIGH LAKES, HEADWATER STREAMS	ABUNDANT
BROWN BULLHEAD CATFISH	KINNEY LAKE, PONDS	ABUNDANT
CHANNEL CATFISH	SNAKE RIVER	COMMON
COHO SALMON	GRANDE RONDE RIVER WALLOWA RIVER	PRESENT
DOLLY VARDEN	WALLOWA LAKE, KINNEY LAKE, MOST STREAMS	COMMON
GOLDEN TROUT	WOOD LAKE	RARE

GAME FISH SPECIES	LOCATION	ABUNDANCE
KOKANEE	WALLOWA LAKE	ABUNDANT
SMALLMOUTH BASS	SNAKE, IMNAHA AND GRANDE RONDE RIVERS	ABUNDANT
STEELHEAD TROUT	MOST ALL STREAMS	COMMON
WHITE FISH	WALLOWA LAKE AND MOST ALL STREAMS	ABUNDANT
WHITE STURGEON	SNAKE RIVER	RARE
BRIDGELIP SUCKER	MOST ALL STREAMS	ABUNDANT
CHISELMOUTH	SNAKE AND GRANDE RONDE RIVERS	COMMON
COTTID	WALLOWA LAKE AND MOST ALL STREAMS	ABUNDANT
COARSESCALE SUCKER	WALLOWA LAKE AND MOST ALL STREAMS	ABUNDANT
DACE	MOST ALL STREAMS	ABUNDANT
LAMPREY	MOST ALL STREAMS	ABUNDANT
REDSIDE SHINER	SNAKE AND GRANDE RONDE RIVERS	COMMON
SQUAW FISH	MOST ALL STREAMS	ABUNDANT

Species of fish differ in their requirements or preferences for habitat. Generally, there needs to be availability of water with good quality without barriers to migration. Most streams and lakes in Wallowa County meet these general requirements.

CONFLICTING USES: Conflicting uses would be those uses that divert water below optimum flows, degrade water quality, or alter water temperatures. The most common conflicting uses are diversions for irrigation and land mining of aggregate in or near fish habitat. Mining results in increased sediment. Diversions for irrigation results in decreased water flow in streams with accompanying higher water temperature. Removal of vegetation will also raise water temperature. The economic consequences of allowing conflicting uses would be a decrease in the dollars contributed to the local economy by fisherman. The social and energy impact is unknown. The environmental impact would be decreases in the number of fish available.

CONCLUSIONS: Most streams and lakes in Wallowa County are important fish habitat. It would be impractical to prohibit any land or water use that may have a short-term detrimental impact. However, aggregate mining which may have a significant, yet short-term, impact on fish habitat will be subject to the conditional use provisions. As part of the review of proposed aggregate mining the Oregon Department of Fish and Wildlife will be contacted for comment.

WILDLIFE HABITAT (Wetland Areas): 3C

The basic habitat for waterfowl, furbearers, and much of the non-game wildlife is wetlands. The Oregon Department of Fish and Wildlife has identified the location of important wetlands on the wildlife map. Conflicting uses would be uses which, if allowed, could permanently alter vegetation; for example, construction of buildings. The economic, social, and energy consequences of allowing conflicting uses is unknown. The environmental consequences of allowing the conflicting uses would be the elimination of the wetland areas as habitat.

CONCLUSIONS: The Wallowa County Zoning regulations require a 100 foot setback from the high watermark of ponds, streams, and other bodies of water, therefore, the identified wetland areas have been accorded a designation of 3C.