

In Reply Refer to 6840-P

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Subject: Biological Assessment (BA) for bull trout for 1998 ongoing actions on the Prineville District, Bureau of Land Management (BLM) in the Upper John Day River subbasin.

Dear Doug:

Enclosed is the Final BA for bull trout for 1998 ongoing actions on the Prineville District, Bureau of Land Management (BLM) in the Upper John Day River subbasin. Additional information requested by your agency has been added/clarified, and the BA format is now standardized to comply with the U. S. FWS Framework document (Making ESA Determinations of Effect of Grouped Actions on bull trout).

Also enclosed is an updated Checklist for documenting Environmental Baseline and Effects of Proposed Actions(s) on Relevant Indicators, and a List of Ongoing Range Management Actions (Table 1). Assessment of Environmental Baseline and Effects of the Actions were determined using information from basin reports, 1993 and 1995 water quality monitoring studies, ocular riparian assessments, 1998 compliance monitoring work, and professional judgement.

We appreciate the time you spent in the field with us on October 13 and 14 touring the ongoing actions/projects. This was a very beneficial exercise to discuss the issues on site, to evaluate the success of our riparian management, and also to discuss possible solutions to evident problems that are limiting recovery of habitat potential. If you have any further questions or need of additional information/ clarification, please contact Gary Torretta, fisheries biologist, at (541) 416-6763, or myself at (541) 416-6731. We would appreciate a letter of concurrence/biological opinion with the level 1 team findings from the U.S. Fish and Wildlife Service at your convenience.

Sincerely,

Harry R. Cosgriffe

Area Manager, Central Oregon R.A.

Enclosures: Biological Assessment
Ongoing Project List
Environmental Baseline Checklist

Final Biological Assessment (BA) for bull trout for 1998 ongoing actions (grazing) on the Prineville District, Bureau of Land Management (BLM) in the Upper John Day subbasin.

Introduction

Within the Upper John Day River (UJDR) subbasin, the BLM Prineville District manages about 6,400 acres of scattered and moderately blocked public lands which drain into bull trout migratory habitat (primarily winter season). About 2,920 of these acres are proposed for exchange/disposal in the Northeast Oregon Assembled Land Exchange (NOALE). Refer to Table 2 and previously submitted maps depicting which parcels in specific allotments are proposed for disposal/exchange. The NOALE has already been consulted on for bull trout with your agency. About 4,750 BLM-managed acres are within sixteen permitted grazing allotments. Of these 4,750 acres, 2,548 acres are within the Dixie allotment, which is run in common with Malheur National Forest lands and is being analyzed in a separate BA prepared by the Forest Service with BLM assistance. The remaining 1,550 BLM-managed acres are unleased, with no authorized grazing use.

The BLM is requesting consultation on these ongoing permitted actions. These actions are consistent with our governing programmatic plans. Riparian habitat management concerns in these allotments have been identified and are addressed in the John Day Resource Management Plan. Two management objectives are (1) "management activities in riparian zones will be designed to maintain or, when possible, improve riparian habitat condition", and (2) "either eliminate hot season grazing...or schedule {it} on a rotational basis". These objectives should be accomplished through the adjusted grazing plans analyzed in this B.A. The BLM will provide full documentation of baseline and rationale for baseline/effects "checklist" to the lead Level 1 team for 4th field HUC B.A.'s.

Environmental Baseline Description

The bull trout analysis area for this BA includes all lands draining into the UJDR from the City of John Day (RM 247.8) to the mouth of Reynolds Creek (RM 270.5). For analysis purposes, assessment of the baseline pathways were determined primarily from field observations of BLM managed lands and less so from broad depictions of habitat conditions on private lands within the analysis area, as information is available. National Forest lands are not included in this analysis. The analysis area totals about 120,000 acres, with BLM managed lands comprising about three percent of this area (3,850 acres). Within the analysis area, bull trout occupy only the John Day River

proper (migratory habitat), and lower Reynolds Creek (spawning/rearing habitat). Except for two upland forested parcels in the Reynolds Creek drainage, all BLM managed lands drain only into migratory bull trout habitat in the John Day River. No BLM parcels contain occupied bull trout habitat. The BLM managed lands are scattered within three 5th field Hydrologic Units (#17070201-17, 18, and 20). Because BLM manages only minor land acreage within each 5th field HUC, it is not practical or meaningful to write individual BA's for each HUC. The highest human population concentrations in the John Day Basin are within the analysis area, centered in the City of John Day and Prairie City.

Salmonid habitat has decreased in both quantity and quality in the analysis area in recent history due to increased human activities and some natural events. Land uses such as timber harvesting, road construction, livestock grazing, placer mining, agriculture practices (irrigation water diversions, and encroachment on riparian zones), and stream channelization have impacted salmonid habitat in the UJDR. Natural events such as insect infestations and epidemics, large catastrophic forest fires, and basin wide and localized flooding have further contributed to the degradation of riparian and instream habitats. It is difficult to estimate how land management practices may have exacerbated the severity and intensity of natural events impacting riparian habitat conditions.

Improperly managed livestock grazing, surface water irrigation diversions, stream channelization, timber harvesting, and road building activities have impacted fish habitat by damaging or suppressing riparian vegetation, impacting water quality, reducing habitat complexity, and destabilizing streambanks and watersheds (John Day River Subbasin Report, 1990). According to the Oregon Water Resources Department (OWRD, 1986), watershed conditions may be contributing to discharge variabilities. Disturbance of soils and vegetative cover by domestic and wild animal foraging, road building, and timber harvesting have altered the watershed. Soils have been compacted and vegetative cover has been reduced. This has the effect of increasing soil erosion potential, decreasing precipitation infiltration and ground water storage, and speeding runoff.

Irrigated agriculture activities cover a significant portion of the analysis area (about 14,400 acres). These uses are concentrated along the the John Day River valley and within the Strawberry, Indian, Pine, Little Pine, Dads, and Dixie Creek drainages. Pasture grass and meadow hay production are the principal crops being grown. Flood irrigation is the dominant method for delivering water to pasture lands (OWRD, 1986).

The seasonal distribution of runoff and discharge creates water quantity limitations throughout the John Day Basin. By mid to late summer, snowpack and ground water supplies are depleted, streams are carrying less water, and generally there is insufficient flows to satisfy all the demands for out-of-stream and instream uses (OWRD, 1986).

Irrigation withdrawals in some stream segments limit production of salmonids. Fish habitat problems associated with surface water diversions (reduced available and suitable habitat, unsuitable water temperatures, and dewatering of stream channels) are compounded during drought years when stream flows fall below normal (John Day River Subbasin Report, 1990). Low streamflows mainly affect the rearing and instream movement of juvenile and resident adult salmonids.

Logging practices throughout the John Day Basin have degraded water quality in streams and caused both direct and indirect impacts to fish and aquatic resources. The following is a list of fishery related impacts that have resulted from logging activities (John Day River Subbasin Report, 1990).

1. Impaired water quality from increased sedimentation and water temperatures, and lowered dissolved oxygen levels.
2. Direct stream habitat losses resulting from instream channel changes and loss or lack of large woody materials.
3. Removal of riparian vegetation canopy resulting in reduction of instream food production and increased stream temperatures.

Timber harvesting on the private lands has been more extensive than on the BLM managed lands, and likely has impacted riparian habitats more. Forested BLM tracts in the analysis area have had limited timber management activities and still contain a good mix of large overstory trees.

Bull Trout Subpopulation Characteristics/Species Distribution

According to the Oregon Department of Fish and Wildlife (ODFW) publication, Status of Oregon's Bull Trout (1997), and ODFW biologists, migrating bull trout use the UJDR down to the City of John Day (RM 247.8) during winter season when water temperatures are suitable. Bull trout "occupied" habitat includes spawning, rearing, or resident adult, and migratory winter habitat. BLM grazing allotments in this analysis area do not contain any occupied bull trout habitat, but may affect tributary streams which drain into occupied habitat.

Current spawning and rearing habitat in the Upper John Day River subbasin includes Reynolds, Dearthoff, Rail, Roberts and Call Creeks, and the John Day River upstream from the mouth of Reynolds Creek (See Map). All spawning and rearing habitat in the UJDR is upstream of the analysis area, except for lower Reynolds Creek.

Water Quality

Water quality in the subbasin generally exhibits satisfactory chemical, physical and biological quality except during periods of extremely high or low flows. Most streams exhibit higher than normal temperatures when flows are low and higher than normal turbidities during high flows. The upper mainstem JDR reflects the problems created in the tributaries as well as some specific to the river. Cattle feedlots along Dixie Creek (RM 4.3) and the mainstem John Day River (RM 255.5) have been identified as point sources of pollution (OWRD 1986).

In 1993 and 1995, water quality data was collected at RM 250 and 274 on the UJDR. The 7-day average maximum daily temperatures for the site at RM 250 was 23.8 C starting 8/8/93 and 24.4 C starting 8/6/95. The 7-day average maximum daily temperatures for the site at RM 274 was 13.6 C starting 8/6/93 and 13.9 C starting 7/27/95. Neither of these monitoring sites are located on BLM administered lands. According to Oregon Department of Environmental Quality (Oregon's 1998 Section 303(d) List of Water Quality Limited Waterbodies), the following streams in the analysis area are water quality limited for exceeding State water temperature standards:

- John Day River (From City of John Day to headwaters)
- Grub Creek (Mouth to headwaters)
- Pine Creek (Mouth to Bear Gulch)
- Indian Creek (Mouth to RM 3.0)
- Dads Creek (Mouth to headwaters)
- Dans Creek (Mouth to headwaters)
- Strawberry Creek (Mouth to Squaw Creek)
- Reynolds Creek (Mouth to Axe Gulch)

No information is available on percent fines in spawning habitats. Lower Reynolds Creek (private land) is the only stream in the analysis area that currently supports spawning/rearing habitat.

Habitat Access

No known physical barriers to bull trout migration are within the area.

Habitat Elements

Substrate embeddedness data has been collected on Little Pine Creek in November, 1998. Generally, embeddedness was <20 percent, but was >30 percent below a road ford, where sediments have washed and gullied down the road into the stream. No other substrate embeddedness data is available on BLM managed stream segments in the area. Little Pine and Indian Creeks on BLM managed lands have good quantities of instream wood and potential future supplies of instream wood. This is assessed from informal observations, not quantified data. Stream survey data is not available to quantify pool frequencies and quality. The Indian Creek stream segment could likely serve as refugia. Although less than 0.5 miles in length, the reach has good water

quality, habitat structure/complexity, streambank stability and is adjacent to the Strawberry Mountain Wilderness. Summer rearing/spawning bull trout habitat currently exists 0.5 miles above the BLM tract within the Wilderness. Little human activity has occurred in the riparian zone except for light to moderate grazing activities.

Channel Condition/Dynamics

No data is available on Wetted Width/Maximum Depth Ratios for the UJDR or its tributaries. Based on informal observations of Pine, Little Pine and Indian Creeks on BLM lands, streambank conditions generally have 90 percent stability over 50-80 percent of any stream reach (Functioning at Risk). Off channel areas are probably infrequently hydrologically linked to main channels in Pine and Little Pine Creeks, and frequently linked in Indian Creek, based on field observations.

Flow/Hydrology

The seasonal distribution of stream discharge for the UJDR follows the general John Day Basin pattern. Water quality is impaired during high and low flow periods. The major water quality conflicts relate to impacts on fishery resources (OWRD, 1986). Watershed conditions may have contributed to discharge variability. Disturbance of soils and vegetative cover by domestic and wild animal foraging, road building, and timber harvesting have altered the watershed. Soils have been compacted and vegetative cover has been reduced. This has the effect of increasing soil erosion potential, decreasing precipitation infiltration and ground water storage, and speeding runoff (OWRD, 1986). Low to moderate increases in active channel length have probably occurred in the area due to human caused disturbances, but data to quantify this and other flow/hydrology parameters on BLM managed lands is unavailable.

Watershed Conditions

Road densities are greater than 2.4 miles/mi² on BLM managed lands with some valley bottom roads. Little Pine, Pine, and Indian Creeks on BLM lands are forested parcels. The Little Pine Creek drainage has particularly high road densities, primarily constructed for past mining activities. Past and current off road vehicle use has created an extensive web of roads and trails in this drainage as well. The Grub Creek parcel is partially forested on the north facing slope adjacent to the stream. Most forested BLM tracts have not had significant timber harvest, so past disturbance (% ECA) is considered low.

Based on ocular assessments of BLM lands, riparian conservation areas (RHCA's) provide adequate shade, large wood recruitment, and habitat connectivity to support salmonid populations and provide good water quality to downstream migratory bull

trout habitat in the JDR. Because the area is semi-arid, resiliency of habitat to recover from environmental disturbances is moderate to low.

Integration of Species and Habitat Conditions

Bull trout spawning subpopulations in the UJDR are connected within the subbasin (except upper Indian Creek) but not with other subpopulations in the John Day basin. Spawning habitats are primarily located upstream of the analysis area. Winter migratory habitat likely connects these spawning upper mainstem subpopulations with the Indian Creek subpopulation, but this connectivity is unlikely during spawning season. According to ODFW these UJDR subpopulations are in "Moderate Risk" of extinction. Cumulative disruption of habitat has resulted in a clear declining trend in the subpopulation size. ODFW survey crews in 1990-1992 found actual summer distribution for bull trout at about 25 percent of the suspected distribution (104 km out of 428 km of previously estimated distribution area).

Project Description

The action being addressed by this BA analysis area is livestock grazing on fifteen allotments shown in Table 1. Historically most BLM grazing allotments in this area were permitted for season long use (4/1-11/30). Starting in the 1998 grazing season, the permitted season of use was restricted on all BLM parcels that contain fish bearing and perennial non-fish bearing streams that drain eventually into migratory bull trout habitat in the UJDR. The new permitted season of use is 4/1-5/31, or 5/1-6/15 on higher elevation parcels. Livestock operators have been contacted and informed that they are responsible for keeping livestock off these parcels after these turn off dates, for some of these public land parcels are not fenced separately from surrounding private lands. BLM expects that operators make a reasonable effort to have a majority of the livestock (95-98%) removed by the turn off date. BLM expects operators to gather straggler animals for total removal within a week after the turn off date. Livestock found on BLM lands after this grace period would be considered unauthorized, and appropriate actions will be taken to protect public land resources. Trailing across these parcels outside of the authorized grazing season will only be allowed by a special use permit, and granted on a case by case basis.

Every 3-4 weeks after the turn off date, compliance monitoring of allotments will be done, with reports prepared and filed. Compliance monitoring efforts will be prioritized on the Canyon Mountain, Indian, Oxbow Fields, Bear Gulch and Little Indian Allotments. These allotments contain most of the BLM managed perennial stream segments, and are easily accessible. Because little or no compliance monitoring has occurred on these allotments previously, it is difficult to predict compliance rates from these livestock operators, especially since these BLM tracts are not fenced separately.

Each allotment is shown in the previously submitted maps and listed in Table 1, with allotment specific information. The BLM has focused little resources and monitoring on these allotments. Rather BLM has focused on larger blocks of public lands.

Description and Distribution of Species

Inventories and Surveys

Until recently little specific information on the status or biology of bull trout in Oregon was available. During the past decade there has been a concerted effort to find out more about the bull trout. Since 1990, ODFW, Forest Service (FS), and BLM stream survey crews have been documenting bull trout distribution and relative abundance. Bull trout distributions discussed in this analysis are referenced from the latest information from ODFW, BLM, and Forest Service fisheries biologists.

Life History of Bull Trout

Bull trout typically have more specific habitat requirements than other salmonids. Because of their specific requirements, bull trout are more sensitive to changes in habitat and less able to persist and thrive when habitat conditions are altered or degraded (Rothschild and DiNardo, 1987). Channel and hydrologic stability, substrate, cover, temperature, and the presence of migration corridors consistently appear to influence bull trout distribution or abundance (Ziller, 1992).

Adults usually spawn from August through November in the coldest headwater tributaries of a river system, and require water temperatures <10C for spawning, incubation, and rearing (Weaver and White 1985). Although migratory bull trout (fluvial or adfluvial) may use much of a river basin through their life cycle, rearing and resident fish often live only in smaller watersheds or their tributaries (second-fourth order streams) (Ziller, 1992).

Juvenile bull trout closely associate with stream channel substrates, often using interstitial spaces for cover (Fraley and Shepard 1989). A close association with channel substrates appears more important for bull trout than for other species. This specific rearing habitat requirement suggests that highly variable stream flows, bed movements, and channel instability will influence the survival of young bull trout, especially since embryos and alevins incubate in substrate during winter and spring (Reiman and McIntyre 1993).

Increases in fine sediments to streams reduce pool depths, alter substrate composition, reduce interstitial space, and cause channels to braid. These changes degrade fish habitat and reduce rearing bull trout survival and abundance (Reiman and McIntyre 1993). Bull trout usually associate with complex forms of cover and with pools.

Juveniles live close to instream wood, substrate, or undercut banks and in pocket pools formed by boulders. Young-of-the-year fish use side channels, stream margins, and other low velocity areas. Older and larger fish use pools and areas with large or complex instream wood and undercut banks (Reiman and McIntyre 1993). Instream wood correlated significantly with bull trout densities in streams sampled in the Bitterroot National Forest (Reiman and McIntyre 1993).

Migratory corridors connect safe wintering areas to summering or foraging areas. Movement is important to the persistence and interactions of local populations within the metapopulation. Open corridors among populations are required to ensure gene flow, refounding of locally extinct populations, and enhancement of locally weak populations. Migratory populations of fish are likely to stray more between streams than resident populations, increasing the potential for such dispersal (Reiman and McIntyre 1993).

Water temperature is the most critical factor that influences bull trout distributions, but critical thresholds however, are poorly defined. Water temperatures in excess of 15C are thought to limit bull trout distribution (Fraley and Shepard 1989). It is not known whether the influence of water temperature is consistent throughout the life cycle or whether a particular stage is especially sensitive. Increasing water temperatures increase the risks of habitat invasion by other species that may displace bull trout.

Bull trout have very low levels of variation within populations (John Day, Umatilla, Grande Ronde Basins, etc) but are highly differentiated between populations (Spruell and Allendorf 1997). The John Day and Grande Ronde bull trout populations tend to be similar genetically, however a unique allele frequency was found in seven of ten John Day populations which was not present in any of the 11 Grande Ronde populations (Spruell and Allendorf 1997).

Bull Trout Distribution in the Upper John Day Hydrologic Unit

Bull trout are indigenous to the John Day River Basin and historically had a wider distribution within the Basin than at present. Modern land-use practices in the John Day Basin have altered aquatic habitats where salmonid fishes live, including the bull trout. The current distribution of bull trout is clearly fragmented (Howell and Buchanan 1992). Bull trout in the John Day Basin are considered as one metapopulation, even though the sub-populations within the Upper Main Stem, North and Middle Fork subbasins probably have no genetic interchange presently (Unterwegner, personal comm. 1997).

Presently bull trout distributions in the John Day Basin are isolated to small headwater streams within the Upper Mainstem, the Middle Fork, and the North Fork. According to the Oregon Department of Fish and Wildlife (ODFW) publication, Status of Oregon's

Bull Trout (1997), and ODFW biologists, migrating bull trout use the UJDR down to the City of John Day (RM 247.8) during winter season when water temperatures are suitable. Bull trout "occupied" habitat includes spawning, rearing, or resident adult, and migratory winter habitat. Current spawning and rearing habitat in the Upper John Day River subbasin includes Reynolds, Deardorff, Rail, Indian, Roberts and Call Creeks, and the John Day River upstream from the mouth of Reynolds Creek (See Map). All spawning and rearing habitat in the UJDR is upstream of the analysis area, except for lower Reynolds Creek.

Bull trout distributions within the Basin have been affected by an array of human caused factors. These factors are the primary reasons for the decline of local populations (Claire and Gray, 1993; Ratliffe and Howell, 1992).

Habitat Degradation

- Water temperature impacts (elevated temperatures)
- Riparian habitat loss
- Loss of instream structure and complexity
- Loss of instream large wood and potential future large wood
- Increased sediment delivery to bull trout habitats
- Food supply (reduction in anadromous fish populations)

Overharvest/Poaching

-Bull trout are aggressive by nature and readily take lures or bait, making them very susceptible to angling. Private land access limits accessibility in part to summer distribution habitat. In 1993 ODFW prohibited angling harvest of bull trout in the John Day Basin

Gene Pool Isolation

-Serious problem identified with gene pool isolation resulting from lack of population interchange. Thermal, physical, and habitat barriers make mainstem population interchange with other John Day subbasin subpopulations very unlikely.

Climate Change

-Oregon is near the southern fringe of bull trout distribution. Only an isolated population in the southern edges of its range has been caused at least in part by the loss of cold water habitat following the retreat of glaciers and snowfields since the late Pleistocene (Cavender 1978). This situation has been exacerbated by human-caused habitat alterations.

Analysis of Potential Effects of the Proposed Action

Habitat for bull trout (migratory) on BLM lands will be maintained through time by restricting grazing activities along UJDR drainage perennial streams to early season use only (4/1-5/31 or 5/1-6/15). With spring use only grazing in pastures with perennial streams, livestock leave the riparian areas early when enough soil moisture remains in the riparian zone for nearly complete herbaceous vegetation regrowth. Herbaceous and woody vegetation along streams functions to protect streambanks from high flow scour, and also to catch and deposit sediments carried in high flow events. Little use occurs on riparian woody species in this season, as more palatable grasses and forbs are abundant on uplands and bottomland areas.

Perennial stream segments (2.2 total miles on BLM) in these allotments range from 0.2 to 1.2 miles in length. BLM perennial stream segments range from 1.9 to 6.0 stream miles from occupied habitat in the John Day River. Because the short duration grazing activities are not adjacent to occupied habitat, there is a negligible probability of take of bull trout or adverse modification of its habitat. The BLM has seen excellent riparian responses to spring grazing strategies on the South Fork John Day River in the past ten years.

Potential Effects to Each Habitat Pathway/Indicator

Water Quality

Water temperatures will not be significantly affected from this project because the timing of the grazing treatment is when grasses and forbs are more palatable and preferable than woody species. Regrowth of grasses also occurs after the livestock leave the parcel/pasture with stream habitats. Bull trout use habitats downstream of these allotments in the UJDR only during winter and spring seasons when water temperatures are within their optimum range. Sediment and chemical contamination/nutrient levels in the analysis area will be maintained at current levels. Fine sediment has a negligible potential for increase from livestock trampling of streambanks. Regrowth of vegetation after the short use period will recover areas affected by livestock, thus minimizing areas that could be subject to erosion during winter and spring high flows. No spawning or incubation habitat exists below grazing allotments with perennial stream connectivity, so this element would not be affected. Instream nutrient levels in the analysis area may experience minor increases in the short term from livestock wastes. Water flows are high during spring season so the dilution factor would mitigate the effects of nutrient additions. No effect is anticipated from chemical contaminants.

Habitat Access

This action will have no physical effect on the species ability to access habitats upstream and downstream of analysis area.

Habitat Elements

No rearing areas exist below the project area with perennial stream connectivity. Slight increases in sedimentation from grazing activities could affect the forage base of migrating bull trout in the UJDR, but this effect would be immeasurable, and not significant to increase cobble embeddedness. This project will maintain current and future floodplain woody debris in the area. Spring grazing activities are not likely to effect woody species that could become future woody debris. Pool frequencies and quality will not be affected measurably because of the reasons discussed about substrate embeddedness. Large pools, off channel habitat, and refugia in the JDR would not be affected significantly from actions that are 1.9 to 6 miles upstream on only 2.2 miles of BLM stream habitat.

Channel Condition & Dynamics

No measurable effect to width/depth ratio or floodplain connectivity is expected to occupied habitats downstream. Short season of grazing use minimizes impacts to these parameters. Grazing activities and animal trampling may degrade streambank conditions slightly on BLM lands within grazing allotments, but would not effect occupied habitats in UJDR downstream.

Flow/Hydrology

This action is not likely to effect changes in peak base flows or lead to increases in drainage networks within the analysis area. This indicator is primarily affected by timber harvest activities which alter snow retention and snowmelt timing. This activity covers a very small portion of the analysis area, and occurs for only two months each spring within riparian areas, thus minimizing impacts to ground cover vegetation that maintains watershed hydrological functions.

Watershed Conditions

This action will not effect road densities, or percent ECA, for no road building, or timber harvest is proposed in the analysis area. Conditions of RHCA's should be maintained, for reasons discussed under "Analysis of Potential Effects of the Proposed Action". Woody riparian species should experience near natural rates of recovery with spring grazing treatments. Disturbance related to this action are temporary (removal of streamside vegetation) with nearly full regrowth anticipated by the end of the growing season.

Integration of Species and Habitat Conditions

These ongoing grazing allotments will not effect the connectivity of occupied habitat in the UJDR basin.

Determination of Effects: Dichotomous Key for Making ESA Determination of Effects

1. Are there any proposed/listed fish species and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

YES.....Go To 2

2. Will the proposed action(s) have any effect whatsoever on the species and/or critical habitat?

YES.....Go To 3

3. Will the proposed action(s) have the potential to hinder attainment of relevant

"function"

NO.....Go To 4

4. Does the proposed action(s) have the potential to result in "take" of any proposed/listed

A. There is a negligible (extremely low) probability of take of proposed/listed fish species or destruction/adverse modification of proposed/designated critical habitat.

.....Not likely to Adversely Affect

Discussion: The environmental baseline description in the preceding matrix shows that the BLM is a minor landowner in the UJDR basin and that data concerning habitat conditions for the private and BLM lands in the analysis area generally is lacking. The matrix also shows that riparian and aquatic conditions on BLM lands will be maintained with implementation of these ongoing actions. Riparian management objectives outlined the John Day RMP should be maintained with this project as well as the pathway indicators listed in the matrix. These objectives will be met by limiting grazing activities in allotments with riparian areas to short spring treatments, followed by scheduled compliance monitoring.

The BLM's assessment is that the proposed actions for 1998 in the UJDR subbasin (grazing) may affect, but is not likely to adversely affect the bull trout or its habitat. Two allotments were determined to have no effect to downstream bull trout habitats (See Table 1). These allotments are upland, 80 acre parcels, with no perennial or intermittent streams. We would appreciate a letter of concurrence with our findings from the U.S. Fish and Wildlife Service at your convenience.

Enclosed is the Checklist for documenting Environmental Baseline and Effects of Proposed Actions(s) on Relevant Indicators, and a List of Ongoing Range Management Actions (Table 1). Assessment of Environmental Baseline and Effects of the Actions

Weaver, T. M., and R. G. White. 1985. Coal Creek fisheries monitoring study No. 3. Final Report. Montana Cooperative Fisheries Research Unit, Bozeman.

Ziller, J. S. 1992. Distribution and relative abundance of bull trout in the Sprague River subbasin, Ore

Table 1.
 RANGE MANAGEMENT PERMITTED ACTIONS: 1998 ONGOING
 UPPER JOHN DAY SUBBASIN - HUC # 17070201
 PRINEVILLE DISTRICT BLM

Allotment Name	BLM Acres	Season of Use ¹	Permitted AUM's	Critical Habitat ²	300' FB Stream ²	150' N-FB Stream ²	100' Inter. Stream ²	Effects Determination ³
Poleline #4021	160	4/1-11/30	21	0.0	0.0	0.0	1.0	NLAA
Bear Gulch #4045	74	5/1-6/15	9	0.0	0.2	0.0	0.0	NLAA
Little Indian #4047	200	4/1-5/31	25	0.0	0.2	0.0	0.8	NLAA
Axe Gulch #4051	83	5/1-6/30	10	0.0	0.0	0.0	0.0	NE
Oxbow Fields #4063	140	4/1-5/31	14	0.0	0.3	0.0	0.0	NLAA
Round Top #4071	200	4/1-5/31	20	0.0	0.3	0.0	0.0	NLAA
Indian #4099	40	5/1-6/15	5	0.0	0.0	0.3	0.0	NLAA
Bobcat #4100	160	7/1-10/31	20	0.0	0.0	0.0	1.0	NLAA
Prospector #4102	160	4/1-11/30	20	0.0	0.0	0.0	0.5	NLAA
Canyon Mountain #4115	135	5/1-6/15	17	0.0	1.2	0.2	0.0	NLAA
Pine Creek #4141	335	4/1-11/30	30	0.0	0.0	0.0	0.6	NLAA
Grub Creek #4168	80	5/1-10/31	10	0.0	0.0	0.0	0.0	NE
Eagle Rock #4173	160	4/1-11/30	16	0.0	0.0	0.0	1.0	NLAA
Reynolds Creek #4174	157	4/1-11/30	10	0.0	0.0	0.0	0.1	NLAA
Dog Creek Ridge #4181	120	6/1-9/1	8	0.0	0.0	0.0	0.3	NLAA

Footnotes:

- 1 All allotments are cattle operations
 2 Miles of Stream on Public Lands, FB = fish bearing stream, N-FB = non-fish bearing stream, Inter. Stream = intermittent stream
 3 NE = no effect to bull trout or habitat, NLAA = not likely to adversely affect bull trout or habitat

Table 2. DISTANCE TO OCCUPIED BULL TROUT HABITAT IN THE UPPER JOHN DAY RIVER AND NOALE STATUS

Allotment Name	Riverine Miles to Occupied Bull Trout Habitat	NOALE Disposal or Retention Parcels in Allotment
Poleline #4021	1.5	Disposal
Bear Gulch #4045	3.5	Disposal
Little Indian #4047	4.5	Disposal
Axe Gulch #4051	0.5	Disposal
Oxbow Fields #4063	6.0	Retention
Round Top #4071	1.9	Disposal
Indian #4099	6.0	Retention
Bobcat #4100	8.8	Disposal
Prospector #4102	1.0	Disposal
Canyon Mountain #4115	2.0	Retention
Pine Creek #4141	5.5	Disposal
Grub Creek #4168	1.0	Disposal
Eagle Rock #4173	5.8	Disposal
Reynolds Creek #4174	0.7	Disposal
Dog Creek Ridge #4181	3.4	Disposal