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4.0 Literature update on water temperature criteria for the protection of salmonid resources

Temperature change beyond the range of thermal regimes observed in natural waters in British Columbia is expected to have the most serious impact on salmonid fisheries in freshwater environments in comparison to other water uses. To this end, an updated review of the available scientific literature on temperature criteria for individual life history stages of native species is provided to establish acceptable limits. Minimum and maximum endpoint values are tabulated for embryo/alevin, juvenile and adult stages with temperature criteria provided for incubation, rearing, migration and spawning activities. The summary borrows heavily from an extensive literature review and synthesis of freshwater temperature alterations on salmonid life history stages after McCullough (1999) and incorporates effects of rate of change (*i.e.*, increase or decrease) where data are currently available for individual species.

4.1 Incubation

The rate of embryo and alevin development is strongly influenced by water temperature and the time to emergence is governed by changes in ambient conditions. In general terms, the higher the temperature within acceptable limits, the faster the rate of embryogenesis (Bjornn and Reiser 1991). Salmonids have evolved to complete certain life history functions within the range of ambient temperatures provided in nature. In this regard, the eggs of fall spawners experience a slower rate of development through the winter while the eggs of spring spawners experience a faster rate of development during late spring-early summer. A critical requirement of embryo development, however, involves a stable temperature regime immediately following spawning since eggs are highly temperature-sensitive soon after fertilization (Peterson *et al.* 1977). For example, cutthroat trout eggs initially fertilized at a temperature of 7 degrees C and cooled at a rate of 1 degrees C/h had a significantly lower survival in less than or equal to 11 d than control eggs reared at 7 degrees C (Hubert and Gern 1995). More importantly, the same experiment repeated 13 d after fertilization (*i.e.*, a stage in development following the period of neural tube closure) revealed no difference in survival between control and treatment groups. Notwithstanding, the rate of temperature decrease does not seem to be as important as the endpoint temperature value. In a related study on temperature reduction during early cutthroat, rainbow and brown trout egg incubation, a thermal shock applied at a rate of 0.25, 1, 5 and 20 degrees C/h, that lowered the initial incubation temperature from 7 to 2 degrees C, showed little difference in embryo survival among the experimental rates of adjustment tested (Stonecypher *et al.* 1994). The final endpoint of 2 degrees C caused the highest mortality observed as late as the eyed stage of development. Heat shock of +6.8 degrees C to incubating coho eggs acclimated to 1.5, 3.5, 4.0, 6.1 and 10.2 degrees C, over an 8 h period, only caused a reduction in survival to 50% hatching by egg batches cultured at 10.2 degrees C (Tang *et al.* 1987). The thermal shock applied to egg batches incubated at 10.2 degrees C was the only test case where eggs were exposed to temperatures well above their threshold (*i.e.*, 17 degrees C versus a threshold of 13 degrees C). Despite returning individual egg batches to their original incubation temperature after the 8 h exposure, the highest endpoint was implicated as the causative factor in reduced survival irrespective of developmental stage. Optimum, maximum and minimum incubation temperatures for native salmonids (and eastern brook trout) are provided in Table 1.

4.2 Juvenile rearing

Juvenile salmonid rearing environments are highly variable throughout their early life history stages and individual species have adapted a variety of life history strategies to facilitate survival that include lotic, lentic and estuarine habitats. Individual species occupy aquatic environments with thermal regimes that vary daily, seasonally, annually and spatially, and each species has demonstrated well-defined temperature preferences and tolerances (Bjornn and Reiser 1991). The majority of juvenile salmonids display an optimum growth zone between 10 and 15 degrees C while positive growth is maintained from about 4-19 degrees C (Armour 1991). Optimal growth temperatures of 19 degrees C with continued feeding up to 23 degrees C have been demonstrated for some species in response to an unlimited food supply but food conversion efficiencies were maximized at ~19.6 degrees C (e.g., chinook salmon, Brett *et al.* 1982). When food is limited however, the optimum growth zone is reduced to lower temperatures to compensate for elevated respiration/growth ratios (Elliott 1981 cited in McCullough 1999). Temperature extremes as high as 22-24 degrees C and as low as 0 degrees C are considered life-threatening for salmon species (Walthers and Nener 1997) or have been shown to alter growth in other salmonid species due to differences in metabolic efficiencies at high or low temperatures (McCullough 1999). A rise in the metabolic rate of cold-blooded aquatic organisms occurs when optimum temperatures are exceeded, which in turn, increases their energy requirements. A higher food requirement for juvenile salmonids may increase the risk of predation due to increased foraging.

Behavioural changes have been most notable in response to annual temperature variation: salmonids have demonstrated an avoidance reaction to high temperatures by seeking a variety of thermal refugia (deep pools (Matthews and Berg 1997), areas of ground water intrusion (Bisson *et al.* 1988; Nielsen *et al.* 1994), cooler tributaries (Mabbot 1982), or cooler headwater reaches (Rahel and Hubert 1991). It is important to note, however, that salmonids cannot always avoid elevated temperature conditions in the wild which places individuals at higher risk to multiple stressors that can reduce the performance capacity of the fish; metabolic energy is diverted from investment activities such as growth and reproduction and directed toward activities that restore homeostasis (*i.e.* respiration, locomotion, hydromineral regulation and tissue repair; Wendelaar Bonga 1997). Alternatively, fish that move from coldwater refugia to warm water feeding areas may experience a temperature shock during the transition between holding and feeding stations (and vice-versa) that could increase the risk of predation during recovery (Coutant 1973).

For juvenile salmonids in stream environments however, temperature avoidance may require certain life stages to occupy sub-optimal habitat. Under high temperature extremes, juvenile salmonids become lethargic (McCullough 1999) or may display

Table 1. Optimum water temperatures and threshold levels for eggs/alevins of salmonids species in British Columbia. (summaries after Bjornn and Reiser 1991 and McCullough 1999).

Species	Optimum water temperature range (C)	Upper or lower limit of water temperature (C) allowing >50% egg survival	Maximum or minimum tolerance temperature (<25% survival)	Reference
Chinook	5-14.4 8-10 5.8-14.2 5-14.4	3 14.4 12.8-14.2 11 and 5	16 and 1 15 15.8-16.1	Reiser and Bjornn 1979 Heming 1982 Slater 1983 Bell 1986 Beacham and Murray 1990 Bell 1991 CDWR 1988 Murray and McPhail 1988 Garling and Masterson 1985 Healy 1979
Coho	5-11; optimum 8 4.4-13.3		13.5 and 1 12.4 and 1.3	Murray and McPhail 1988 Bell 1986 Tang et al. 1987
Sockeye	2-14; optimum 8 4.4-12.8 4.4-13.3	15.5 and 1	15.8 15.8 15.8	Murray and McPhail 1988 Combs 1965 Bell 1986 Andrew and Green 1960 Mead and Woodall 1968 Withler and Morley 1970
Chum	optimum 8 4-12 4.4-13.3	>18 and 2.5		Murray and McPhail 1988 Beacham and Murray 1985 Bell 1986
Pink odd year even year	4.4-13.3 optimum 8 optimum 8	15.5 and 4.5 >15 and 3.5		Bell 1986 Murray and McPhail 1988 Murray and McPhail 1988
Brown trout	1-10		15 (0% survival) and <1	Humpesch 1985
Cutthroat trout	<10; oogenesis and ovulation 12-14 (hatchery) 10.0		>10; 40% survival tolerance=6-12	Smith et al. 1983 P. Brown (pers. comm.) Ford et al. 1995
Rainbow trout	10-12 11		18.5 and 3; 0% survival	Humpesch 1985 Ford et al. 1995
Arctic char	1.5-5		12.5 (0% survival) and <1	Humpesch 1985
Brook trout	6-8 1.5-9 6		15 (0% survival) and <1 tolerance=0-12	Hokanson et al. 1973 Humpesch 1985 Ford et al. 1995
Bull trout	2-6; optimum 2-4 4.8		8-10	McPhail and Murray 1979 Weaver and White 1985
Lake trout	5		tolerance=0.3-10	Ford et al. 1995
Arctic grayling	7-11 10-7 9 10 6-10		3 tolerance=2-16	Humpesch 1985 Stuart and Chislett 1979 McPhail and Lindsay 1970 Beauchamp 1981 cited in Northcote 1993 Ford et al. 1995
Lake whitefish	4.8		tolerance=0-12	Ford et al. 1995
Mountain whitefish	upper limit=6		tolerance=0-12	Ford et al. 1995
Other species				
Burbot	4-7		tolerance=1-7	Ford et al. 1995
White sturgeon	14-17		tolerance up to 20	Ford et al. 1995

erratic behaviour prior to loss of equilibrium (Elliott and Elliott 1995), are unable to defend individual territories (McCullough 1999) and become more vulnerable to predation (Coutant 1973).

Due to lower metabolic activity at extremely low temperatures, salmonids also exhibit reduced activity.

Under low temperature extremes, stream-rearing juvenile salmonids seek out cover in

IDFG

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Screening and Habitat Improvement Prioritization for the Upper Salmon Subbasin (SHIPUSS)

**Prepared for the
Upper Salmon Basin Watershed Project
and
Custer and Lemhi Soil and Water Conservation
Districts
by the
Upper Salmon Basin Watershed Project
Technical Team**

August 2005

August 11, 2005



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LIST OF ACRONYMS AND AGENCY RESPONSIBILITIES

BLM	Bureau of Land Management. The BLM sustains the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. The BLM manages a large portion of the land in the Upper Salmon River Basin.
BPA	Bonneville Power Administration. The Bonneville Power Administration markets power generated by 31 federally owned dams, one nuclear plant and a large wind energy program to hundreds of utility customers. Among other responsibilities, the BPA funds projects to improve conditions for fish and wildlife in the Columbia River Basin.
CSWCD	Custer Soil and Water Conservation District. Among other responsibilities, the CSWCD has partnered with the Upper Salmon Basin Watershed Project to assist local landowners with conservation on the ground. From riparian fencing and streambank restoration to improve fish habitat, to the installation of fish friendly structures and sprinkler irrigation systems to improve fish passage, the Custer SWCD has contracted with over 40 landowners since 1992. The CSWCD is the project manager and administers the funds for USBWP projects within its geographic area.
ESA	Endangered Species Act
IDFG	Idaho Department of Fish and Game. The Department of Fish and Game establishes regulations and other needed controls on fishing, hunting, trapping and management of nongame wildlife that are in line with the state's wildlife policy. Other management responsibilities include assisting the development and implementation of conservation measures in the Upper Salmon basin. The IDFG also operates an Anadromous Fish Screen Shop in Salmon, Idaho that installs and maintains screens on irrigation ditches to protect anadromous fish.
IDWR	Idaho Department of Water Resources. Ensures Idaho's water and energy natural resources are properly managed and conserved to sustain the quality of life for Idahoans today and in the future. The IDWR administers water rights decreed by a court or developed through an administrative process, which allocate a quantity of water to irrigators.
LSWCD	Lemhi Soil and Water Conservation District. Develops local natural resource conservation programs with established goals and objectives. In addition to its primary tasks, the LSWCD has partnered with the USBWP to accomplish numerous conservation projects, and administers the funds for USBWP projects within its geographic area.
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service. NMFS is dedicated to protecting and preserving our nation's living marine resources through scientific research, fisheries management, enforcement, and habitat conservation. In the Upper Salmon River Basin, NMFS is responsible for the protection of anadromous chinook salmon, sockeye salmon, and steelhead.
NRCS	Natural Resources Conservation Service. The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment. In the Upper Salmon River Basin, the NRCS assists landowners by providing technical assistance in the design of on-farm improvements such as sprinkler systems.
OSC	Idaho Office of Species Conservation. The OSC coordinates ESA programs with state agencies; solicits, provides, and delegates funding for ESA programs; creates de-listing advisory teams; serves as the state's "one voice" on ESA policy; provides a mechanism for Idaho citizens to voice ESA concerns; and facilitates collaboration between State, Federal, and private stakeholders.
RECLAMATION	Bureau of Reclamation. Reclamation's mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. In the Lemhi and Upper Salmon River Basins, Reclamation provides technical assistance on projects that enhance instream flow, improve fish passage, and prevent entrainment in irrigation systems.
SALMON RIVER COALITION	The Salmon River Coalition was organized for the defense of private property rights and to raise funds for legal defense against environmental suits. The Salmon River Coalition also works with private property owners, federal, and state agencies to develop plans to bring private property owners into compliance with local, state, and federal environmental laws.

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SHIPUSS	Screening and Habitat Improvement Prioritization for the Upper Salmon Subbasin
USBWP	Upper Salmon Basin Watershed Project. The USBWP strives to protect, enhance, and restore anadromous and resident fish habitat and achieve and maintain a balance between resource protection and resource use on a holistic watershed basis
USFS	United States Forest Service The USFS sustains the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations The USFS manages a large portion of the land in the Upper Salmon River Basin
USFWS	U.S. Fish and Wildlife Service The USFWS' mission is to work with others to conserve, protect, and enhance fish, wildlife, and plants, and their habitats for continuing benefit of the American people In the Upper Salmon River Basin, the USFWS is responsible for the protection of bull trout, which are included in SHIPUSS, and several wildlife species which are not included.
USRB	Upper Salmon River Basin

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INTRODUCTION AND PURPOSE

Background

The Upper Salmon River Basin (USRB) in central Idaho contains unique public lands, fish, wildlife, plants, scenic and cultural resources that are important to the nation. Threatened and endangered species listed under the Endangered Species Act (ESA) are of particular importance to the American people because they indicate a fragile ecosystem, and conservation needs of ESA-listed fish species are receiving increasing attention.

Native anadromous and resident fish species, including those listed under the ESA, may be affected by irrigation water diversions, livestock grazing, and associated agricultural activities. Fish species may be affected in several ways, including disconnection of tributaries from larger streams and rivers, insufficient flows at key periods to allow passage, increased water temperatures, smothering of eggs due to excessive sedimentation, and loss of vegetation along streambanks. Water users and landowners in the Upper salmon River Basin (USRB) are interested in ensuring their land and water management actions may continue in a manner that is consistent with the purposes of the ESA for protection and recovery of listed fish species.

Purpose

The Screening and Habitat Improvement Prioritization for the Upper Salmon Subbasin (SHIPUSS) is intended to address fish conservation needs on or adjacent to irrigated agricultural and livestock ranching lands. Therefore, conservation activities are targeted primarily towards privately owned lands, although irrigation diversions and other activities on public lands are also considered. Conservation needs may include, but are not limited to, assessment of flow adequacy for fish migration and life histories, screening of ditches, assessment of entrainment risk, consolidation or improvement of diversions, habitat improvement, evaluation of irrigation efficiency, and evaluation of barriers. SHIPUSS is a prioritized list of streams within watersheds (defined under "Geographic Area") to guide fish screening and habitat improvement efforts on privately owned lands throughout the USRB. SHIPUSS was developed by the Upper Salmon Basin Watershed Project (USBWP) Technical Team (Tech Team), which is comprised of professional technical experts and fisheries biologists from regional state, federal, and tribal agencies, and other groups (Appendix A). SHIPUSS was developed to assist the Tech Team and USBWP Advisory Board in prioritizing the funding of conservation efforts across the USRB, and is intended to be used by these groups in conjunction with existing project-level prioritization methods.

A prioritization process such as SHIPUSS is necessary because the current demand for conservation funding assistance to landowners is much greater than the available resources. An overwhelming number of USRB water users have approached local agencies (primarily the Idaho Department of Fish and Game (IDFG) Screen Shop, Natural Resources Conservation Service (NRCS), USBWP, Bureau of Reclamation

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(Reclamation), and the Lemhi and Custer Soil and Water Conservation Districts) requesting assistance in screening of irrigation ditches or implementing of fisheries conservation or restoration measures on their property. The ability of these organizations to help the landowners has been limited by the lack of available personnel, the lack of a central representative for the irrigators, the inability to guarantee that conserved or purchased water will remain in the channel to benefit fish, and most importantly, the lack of sufficient funding to meet the demand for on-the-ground habitat improvement and mitigation projects.

Goal

The primary goal of SHIPUSS is to create a prioritized list of streams within watersheds to guide screening and habitat improvement projects on privately owned lands in the USBR. This will be used by the USBWP and other interested parties in conjunction with project level prioritization to accomplish screening and habitat objectives.

SHIPUSS will also serve as a habitat restoration prioritization template into which a variety of data types can be incorporated. Only by being continually updated will SHIPUSS be useful for a variety of entities and for a long period of time.

Integration with other recovery efforts

Upper Salmon Basin Watershed Project

The Idaho Model Watershed Plan (1995)

(<http://www.efw.bpa.gov/Environment/EW/EWP/DOCS/REPORTS/OTHER/Z2772.pdf>)

is the USBWP's guiding document intended to identify actions that are needed for salmon habitat and to establish a procedure to implement habitat improvement measures. It identified five factors that are limiting salmon production within the USBR. These are: 1) inadequate water flows; 2) high water temperatures; 3) lack of streamside vegetation; 4) high sediment levels; and 5) physical barriers (including lack of screens on ditches). Once these limiting factors were identified, associated objectives for improvement were identified. The objectives identified in the Plan were to: 1) Increase instream flows during critical fish migration periods; 2) Reduce the number of physical barriers hindering fish migrations; 3) Develop new rearing and resting pools; 4) Establish riparian vegetation along critical areas to provide cover and reduce temperatures; and 5) Reduce the sediment levels within spawning gravels.

From its creation in 1992 to 2001, the USBWP has focused on developing and implementing conservation measures in the Lemhi, Pahsimeroi, and East Fork Salmon River drainages. Funding has been provided primarily through the Bonneville Power Administration (BPA). In 2001, the USBWP's geographic area was expanded to include the entire Upper Salmon River Subbasin above the Middle Fork Salmon River. At the same time, more interest in conservation was expressed by area landowners, while less BPA funds became available. A method to prioritize projects and streams was therefore

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necessary. The IDFG Screen Shop (Screen Shop) began to develop a prioritization method to guide screening efforts in tributary streams during the winter of 2001-2002. This method used existing stream survey data from snorkel surveys and redd counts to determine fish densities in the tributaries. However, a more comprehensive approach was needed to address other habitat problems present in the USRB. The methodology and results of the Screen Shop prioritization scheme were used as a foundation for the initial development of SHIPUSS, which examines USRB problems in a more comprehensive manner.

Habitat Conservation Plans

SHIPUSS is a timely tool that integrates with conservation efforts in the USRB. A formal agreement specific to the Lemhi River is currently being developed under the ESA. The Idaho Office of Species Conservation (OSC), Idaho Department of Water Resources (IDWR), IDFG, State of Idaho Office of Attorney General, USBWP, Lemhi Irrigation District, Water Districts 74, 74Q, 74W, and 74Z, National Marine Fisheries Service (NMFS), and the US Fish and Wildlife Service (USFWS) are currently working to develop a long-term habitat conservation plan under §6 of the ESA which will provide area ranchers with incidental take coverage (i.e., authorization for a level of harm to listed fish) for irrigation-related activities. In return, the ranchers will agree to provide enhanced instream flows, identify and implement projects to restore connectivity, and pursue other habitat improvement measures. The Lemhi Agreement will incorporate some type of project prioritization scheme that may be influenced by SHIPUSS or may be a modified version of SHIPUSS that meets the needs of Lemhi water users.

U.S. Fish and Wildlife Service Bull Trout Recovery Plan

The USFWS released a draft recovery plan for bull trout in October 2002. The Salmon River Recovery Unit includes the entire Salmon River drainage, approximately half of which is above the confluence with the Middle Fork Salmon River. Therefore, much of this Recovery Unit falls within the geographic area considered by SHIPUSS. In the Salmon River Recovery Unit, many strong local populations of bull trout exist; however, the most significant limiting factor identified for bull trout is the lack of connected tributary habitat. This prevents bull trout from expressing the fluvial life history strategy (spawning in tributaries but migrating to larger rivers to over-winter). One of the implicit objectives of SHIPUSS is to connect tributaries to mainstem habitat wherever possible, so the intent of both documents is complementary.

The USFWS has solicited the professional opinion of the biologists working in the Upper Salmon area, and is also aware of the development of SHIPUSS. Since SHIPUSS uses a multi-species approach to prioritization, the priorities identified in SHIPUSS are not necessarily the same as the areas that would be identified as priorities for bull trout. However, the USFWS will use the factors evaluated in SHIPUSS to prioritize stream reconnections for bull trout. To that end, the USFWS intends to identify high priority

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tasks in the Recovery Plan for reconnecting Priority I and Priority II streams identified by SHIPUSS.

Subbasin Planning

In 1980, the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) directed the agencies responsible for managing hydropower projects on the Columbia River system to “protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, affected by such projects . . . in a manner that provides equitable treatment for such fish and wildlife” (Northwest Power Act 16 U.S.C. §839b(h)(11)(A)(i)). The Northwest Power Act also created the Northwest Power and Conservation Council (Council), formerly the Northwest Power Planning Council, made up of representatives from Idaho, Washington, Oregon, and Montana. As part of the Fish and Wildlife program, every year the Council reviews proposals for projects and research to implement the program. Proposals meeting the highest standards are then recommended to Bonneville Power Administration (BPA) for funding. The Council’s 2000 Columbia Basin Fish and Wildlife Program marked the start of a new review and selection process, which requires the development of local subbasin plans to guide project funding. The intent of these plans is to provide a blueprint to recovery efforts in each subbasin. Until recently, virtually all of the USBWP’s funding came from the BPA.

For the subbasin planning effort, a total of 62 subbasins were identified; the area covered by SHIPUSS is included in the upper half of the Salmon River subbasin. In December 2002, the Shoshone-Bannock Tribes were selected as the lead entity for the upper Salmon River, while the Nez Perce Tribe was selected as the lead entity for the lower Salmon River portion of the plan. The Shoshone-Bannock Tribes subcontracted with the USBWP for outreach activities. IDFG was the lead for assessments in both areas.

The subbasin plan identifies goals for fish, wildlife, and habitat; defines objectives that measure progress toward those goals; establishes strategies to meet those objectives; and incorporates much of the existing information into a single document. The three main parts of the plan are the inventory, assessment, and management plan. The inventory includes information on fish and wildlife protection, restoration, and artificial production and management plans within the subbasin. The assessment consists of a technical analysis to determine the biological potential of each subbasin and restoration opportunities. It describes existing and historic resources, conditions, and characteristics. Finally, the management plan includes a vision for the subbasin, biological objectives, and strategies. It is based on a 10-15 year planning horizon.

These subbasin plans were developed throughout the Columbia Basin by local fish and wildlife managers, tribes, government agencies, and citizens. The subbasin plans also involve a broad range of constituents and are linked to ongoing and previous restoration efforts. The final version of the Salmon Subbasin plan, assessment, and inventory are available at <http://www.nwccouncil.org/fw/subbasinplanning/salmon/plan/>

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SHIPUSS was used in the development of the subbasin assessment and plan, and was revised and supplemented during the subbasin planning process. In this manner, SHIPUSS has contributed to BPA-funded restoration efforts. SHIPUSS may also be a useful tool to guide non-BPA funded restoration activities, which will likely account for a larger portion of the projects in the area in the future.

Limitations

Although SHIPUSS is a very useful tool, it has several limitations that must be acknowledged. First, SHIPUSS is based on available survey information, most of which was collected over the last several decades after major population declines had already occurred. Therefore, the priorities may favor areas that currently have higher densities of fish, while underestimating the potential of areas where populations are low but historically had high densities. However, the current status is important, so the region has decided to commit resources to "protect the best, then restore the rest." Based on this philosophy, SHIPUSS is a very good approach for identifying the best areas to target resources. BPA has also selected this approach to prioritize project funding.

Second, because SHIPUSS is based on currently available survey information, and many streams and stream reaches have not been adequately surveyed, some streams with strong fish populations may not be identified as priority areas. For example, many streams originate on Forest Service managed land, pass through land managed by the Bureau of Land Management, then join with a mainstem on private land. Except on the Lemhi, East Fork, and Pahsimeroi, very few surveys of any kind have been conducted on streams or reaches passing through private land.

Third, data from stream flow studies and stream gauges were not included because the data are not comprehensive enough to be useful. A number of instream flow studies have been conducted in the Upper Salmon River drainage but few have been conducted in small streams. Likewise, instream flow data are available from a number of sources but continuous records on most of the tributary streams are lacking. Due to lack of data the current version of SHIPUSS does not address adequacy of instream flows for the target species. SHIPUSS does, however, acknowledge the importance of improving stream flows in tributaries and mainstem reaches. Instream flow studies are currently being expanded in the USRB and the resulting data can be incorporated into SHIPUSS as they become available.

Fourth, scoring of the non-fisheries categories is mostly subjective. For example flow velocity, and depth data are not available for most of the stream reaches and the adequacy of flows for fish passage was not considered, so a subjective approach was taken to determine connectivity, except where streams are completely dry. Habitat quality scores were also determined subjectively based on the judgment of field biologists who must consider the general stream characteristics (substrate, gradient, morphology, etc.),

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limiting factors (temperature, sediment, barriers, flows, etc.) and the potential for restoration activities to affect the limiting factors. For example, fencing a stream that is heavily impacted by sediment will have much less of an effect if that stream is spring-fed than if it is fed by run-off, since a spring-fed stream may not receive the flushing flows needed to clear the gravels of accumulated sediments.

Fifth, specific methods are not explained in detail. The urgent need for a useful prioritization process and the dynamic nature of SHIPUSS development has made a detailed description of methods impractical for the current version. The authors of SHIPUSS are involved in most restoration planning efforts in the Upper Salmon River drainage, so as SHIPUSS adapts and evolves to incorporate new data and meet changing circumstances, description of methods can be revised and updated as needed. Refer to Appendix E for a list of persons to contact for additional information on SHIPUSS.

Finally, scores in SHIPUSS cannot be compared across watersheds because each watershed has unique biologic, geologic, ecologic, social, and other characteristics. Because of this, it is impossible to effectively compare one watershed to another without some knowledge of the area. For example, Morgan Creek and Pole Creek, tributaries of the Salmon River, and Sheep Creek, tributary to the North Fork Salmon River, could possibly receive identical scores. These streams are all in different vegetation and climate zones and have different limiting factors and expected responses, so they cannot be compared based solely on the scores. Additional tools or prioritization processes would need to be developed if a comparison was needed.

GEOGRAPHIC AREA

The area covered by SHIPUSS includes all mainstem and tributary habitats of the Salmon River, from the mouth of the Middle Fork Salmon River upstream to the headwaters of the Salmon River near Galena Summit. The area is divided into 11 distinct drainage areas; five large river subbasins, and six mainstem river reaches of the Salmon River with associated tributaries. The 11 distinct drainage areas of the USRB were selected to ensure that known local populations of anadromous and resident fish would be addressed and provided adequate consideration for mitigation efforts. The five large river subbasins include: 1) North Fork Salmon River; 2) Lemhi River; 3) Pahsimeroi River; 4) East Fork Salmon River; and 5) Yankee Fork Salmon River. The six mainstem Salmon River reaches include: 1) Middle Fork Salmon River to North Fork Salmon River; 2) North Fork Salmon River to Pahsimeroi River; 3) Pahsimeroi River to East Fork Salmon River; 4) East Fork Salmon River to Yankee Fork of Salmon River; 5) Yankee Fork of Salmon River to Valley Creek, including Valley Creek; and 6) Valley Creek to Headwaters of Salmon River. These drainage areas will be referred to as watersheds throughout this document, although many actually include several watersheds.

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FISH SPECIES INCLUDED

Five fish species were considered in the development of SHIPUSS; three species are listed as threatened under the ESA, and two are not. They include:

- Snake River spring/summer chinook salmon (threatened)
- Snake River steelhead (threatened)
- Bull trout (threatened)
- Westslope cutthroat trout
- Resident rainbow/redband trout

Snake River sockeye salmon, which are listed as endangered under the ESA because of critically low population levels, were not specifically considered during the development of SHIPUSS for two reasons. First, SHIPUSS is intended to prioritize fish conservation efforts for USBWP, the Soil and Water Conservation Districts, and other entities working with private landowners and all sockeye salmon spawning and rearing habitat exists in areas not affected by actions on private lands. Second, although reduced flows in the main Salmon River likely affect both juvenile and adult survival during migration, adequacy of instream flow was not addressed by this version of SHIPUSS. Projects resulting in flow improvements in the Salmon River would benefit sockeye salmon as well as the target species; however since adequacy of flow is not a category that was considered, inclusion of sockeye salmon would have no effect on overall scores. Another reason sockeye were not specifically considered is that the data used as a foundation for SHIPUSS were collected in tributary streams where sockeye do not occur, or in the mainstem Salmon River using methods that do not effectively sample migrating sockeye salmon.

Two other historically anadromous species that were not considered during the development of SHIPUSS but should be mentioned are the white sturgeon and the Pacific lamprey. Very little is known about the Salmon River populations of these species. Sturgeon historically have been documented at least as far upstream as the town of Challis, Idaho, and possibly as far up as Clayton, Idaho based on reports from river outfitters in the 1990s. The Idaho Department of Fish and Game will be conducting a lamprey study in the Salmon River system in the future to more accurately describe the distribution of lamprey.

METHODS AND DESCRIPTION OF CATEGORIES

To begin the ranking process, the USBWP Tech Team SHIPUSS committee first started with the list of streams identified as priority streams by the Screen Shop's early prioritization. The Tech Team then identified which additional criteria would be considered. Criteria were broken into four general categories: Stream Connectivity and Size; Habitat; Fisheries; and Non-Biological Factors. A summarization of the criteria and ratings is included in Table 1, and described in detail below.

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All criteria were scored as High, Medium, or Low, and were phrased in such way that High was most desirable in all cases. High scores were given two points, Medium scores were given one point, and Low scores were not given any points. Based on this method, the highest overall score was considered the highest priority stream. Since it is possible for streams or reaches to receive a "Not Applicable" rating in several criteria, the final score was then divided by the total possible score for that stream to derive an Adjusted Percent Total.

After each stream was scored, streams were broken into Priorities based on their Adjusted Percent Total. Priority I streams are those receiving 70% of the possible points and Priority II streams are those receiving at least 50% of possible points. Priority III streams or reaches are those receiving less than 50% of possible points. These priority levels were based on what appeared to be natural break points during the early process.

Priority I streams are those that have the potential to realize immediate, tangible benefits to fish if recovery efforts are directed toward them. Priority II streams are those that will also have tangible benefits, but they may be less substantial or may be delayed for quite some time. There may be other factors limiting the potential of these tributaries, such as chemical contamination from mines and uncooperative landowners. Priority III streams are low priority streams because they have very limited production potential, or will require extremely high levels of effort to restore their productivity.

Appendix B lists streams that will be surveyed in the future for inclusion in SHIPUSS. Currently, little or no fish survey information exists for these streams, or the information was not readily available at the time of development. All of these streams may have the potential to provide suitable habitat for the five species considered during the development of SHIPUSS. Numerous other USBR streams that will not be considered for SHIPUSS are listed in Appendix C. These streams are not currently being considered for prioritization because they either are insignificant fish producers, or they have no problems that are targeted by the SHIPUSS prioritization. If future information suggests that any of these streams should be included, they will be reviewed at that time. Only perennial streams are included in Appendices B and C. Appendix D lists streams that have been prioritized, but removed from Tables 1 and 2. These streams have been removed from prioritization either because all conservation activities have been completed, or no projects remain that fall within the scope of SHIPUSS. Streams that receive a total score of at least 95% are listed in Appendix D. These streams will be monitored and may be returned to the prioritization if conditions warrant it.

RANKING CATEGORIES

1) Stream Connectivity and Size

Criteria under this category consider current and potential connectivity of a tributary (or mainstem reach) to the mainstem. Habitat connectivity between stream reaches can be impaired for a variety of reasons; however, this section only concerns connectivity

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impairment due to irrigation diversions. Other types of barriers are addressed in the Habitat section. Except in cases where streams are completely dry or barriers are absolute, the degree of connectivity is very difficult to quantify. Many stream reaches in the Upper Salmon River drainage are completely dry for part or all of the year, causing them to be disconnected from other fluvial habitats. Many other reaches, however, have surface flow connections that are degraded by irrigation diversions or other habitat perturbations. For SHIPUSS, connectivity was defined simply as the presence of water in a given reach. No attempt was made to determine the adequacy of flow and temperature for upstream or downstream movement of fish. Information on flow, depth, and temperature will be incorporated into SHIPUSS as more data become available.

Tributaries or mainstem reaches that have year-round surface water connections received a High rating. A Medium rating is given for tributaries or reaches connected at least nine months, and a Low rating is given for tributaries connected less than nine months. A High rating does not necessarily indicate that flows are sufficient for unimpaired fish passage; additional local knowledge is needed to make that determination.

The size of the stream is only considered relative to other streams within the same watershed, not across watersheds. This criterion was generally based on flow contribution, and not fish habitat. Therefore, a stream that currently or potentially contributes 5 cfs may receive a High rating in one watershed, while a comparable stream in a different watershed may receive a Medium score.

In the future, the Tech Team plans to include GIS mapping information showing the number of miles of available habitat in each stream, which will allow a more accurate comparison of watersheds.

2) Habitat

This category provides criteria based on current and potential habitat quality. High quality habitat has no major limiting factors and supports all expected life stages of species that occurred historically. Medium quality habitat may have minor problems that should not severely limit habitat potential. For example, two or more parameters (e.g. sediment and temperature) may be outside of recommended criteria for a portion of the stream, but problems can be remedied through restoration activities. Low quality habitat either (a) is degraded to the point of severe limitation, or b) only supports one life stage, such as migration, when multiple life stages are expected or have been historically documented.

Also under this category is a criterion that considers whether barriers besides diversions exist in the stream. These barriers may be natural, such as waterfalls that restrict fish access to large parts of the watershed, or man-made, such as culverts that do not allow fish passage. If a stream scores Medium or Low in this criterion because barriers are present, further explanation may be necessary.

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3) Fisheries

This category lists the current and potential life history expression of anadromous fish (naturally produced Chinook salmon and steelhead), bull trout, and resident trout (rainbow and cutthroat). The list of streams included in this category was derived from IDFG stream surveys and was weighted towards ESA listed fishes. The purpose of this category is to identify current and potential life history expression of anadromous and resident fish. Current conditions are based on existing snorkel survey and redd count information, and potential condition is based on current information and professional judgment. Areas with a High rating support all expected life stages, based on morphology, gradient, substrate, and other habitat variables. A High rating in both the current and potential columns does not mean that the stream is maximizing its fishery capacity, but rather that all expected life stages or histories are currently being expressed. In many cases, additional habitat restoration is necessary for the local population to realize its full potential. An area with a Medium rating may support all life stages, but restoration success is not expected to be very high. An area with a Low rating is generally only used as a migration corridor, if at all.

4) Non-Biological Factors

Virtually all fisheries restoration and recovery activities in the USBR must be conducted cooperatively with private landowners. This final category contains six criteria that address different components of landowner interaction. The expected cost-benefit ratio of "fixing" a stream is very difficult to determine, and has many variables. It must consider, among other variables, the value of the stream to the resource, how degraded it is, how many landowners are involved, how many types of projects will be involved, and the geology of the system. However, several key tributaries and reaches are crucial to salmonid recovery and population integrity, and this category attempts to attach a value to these streams. The Tech Team recognizes that its expertise lies in the realm of science, not economics, but also believes that it is qualified to conduct cursory cost-benefit analyses based on the expected biological benefit returned to the system. This category is not intended to attach real dollars to a stream, but to get a "feel" for whether the effort required to realize benefits is "worth it." For example, some systems would benefit greatly from a simple project such as a fence, while other systems may only realize minimal benefits through extensive restoration efforts. By including this rough cost-benefit estimate, the Tech Team hopes to reduce the diversion of limited amounts of money to non-productive projects, and document the Tech Team's biological opinion. A High rating would be given to an area where high benefits at relatively low costs could be expected. An area with a high benefit, high cost, or moderate benefits at medium to high costs would receive a Medium rating, and an area with low benefits would receive a Low rating, regardless of cost.

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Landowner interest and willingness was determined based on who has contacted the USBWP or IDFG Screen Shop regarding potential projects, and on knowledge of the people living in the area. Obviously, this criterion is prone to change, since it assesses the personal opinions of hundreds of landowners. Over time, landowners who are not currently interested in participating in conservation efforts may change their minds and wish to be included. Therefore, this category only reflects the current state of landowner willingness, and will be revised in the future. This section also addresses stream flows and diversions, and therefore may receive a Not Applicable (NA) rating on the table if no opportunities to improve these criteria exist.

Two criteria in this category address the potential to increase flows in a stream through either leases/acquisitions or through irrigation/management improvements. A High potential indicates that there are many willing landowners along the tributary, and that there is a high potential to return water to the stream. A Medium potential indicates that water returns may be limited or seasonal, or that there are few interested landowners. Low potential indicates low potential to return water to the stream due to lack of landowner interest or physical impracticalities. Not Applicable indicates that flows are not a limiting factor in that stream or reach.

Another criterion in this category addresses the simplicity of resolving diversion issues. A High score means that solving the problems in this drainage will be relatively simple and straightforward. For example, few landowners may be involved or the resolution may be simple. A Medium score means that solutions will be more difficult due to system complexity and the number of landowners involved. A Low score indicates that it will be very difficult to coordinate and design solutions to diversion issues in that system. Not Applicable means that diversions are not an issue in this stream or reach.

Two related criteria consider the potential to consolidate diversions in a stream and the simplicity of resolving screening issues. These criteria refer in part to the feasibility of consolidations and screening, with a High score correlated to a relatively easy "fix" to improving fish migration.

CONCLUSION

SHIPUSS will prove to be a valuable component for salmonid recovery in the USB. It will also be an important resource to the USBWP for implementation of the Model Watershed Plan, and for the Lemhi and Custer Soil and Water Conservation Districts as they work with area landowners to accomplish screening, conservation, and restoration projects in the USB.

Actual selection of prioritized streams may depend on external factors, such as constraints on funding, landowner willingness, lawsuits, availability of matching funds, or project readiness in light of environmental compliance (NEPA, ESA consultation, permits, etc.). Because of this variety of external factors that can affect the priority of a

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project, the Tech Team recommends that SHIPUSS be used by the USBWP or other people familiar with the USBR. The staff will be best equipped to deal with the external factors identified above, identify realistic goals, coordinate with the landowners, design projects, and determine when the stream or reach is “restored.”

SHIPUSS will also be a valuable resource for other planning activities in the USBR, such as the bull trout recovery plan, the Lemhi Agreement, and subbasin planning. Although, due to lack of available data, the current version of SHIPUSS is largely based on subjective criteria it can and will be amended on a regular basis as more data becomes available. SHIPUSS is envisioned as a “living” document that can evolve to meet the needs of a variety of users.

One of the most valuable features of SHIPUSS, beyond its adaptability as more data becomes available, is the format. By using the spreadsheet design, the user can easily look at a stream and identify areas that need attention. For example, a user can look at the criterion “Simplicity of resolving screening issues” and see that screens are not an issue in one tributary, but they are in another. The user can also look at the criterion “Stream connectivity to mainstem (current)” and tell whether connectivity is an issue in that tributary. While the spreadsheet cannot give a complete picture of each tributary, it can tell the user that a stream is of high, medium, or low priority for conservation efforts. This ability of SHIPUSS to give a concise overview of stream condition and compare conditions within a watershed will prove to be invaluable in the future.

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Table 1. Summarization of the ranking categories and scoring criteria.

Table 1: Summary of Watershed Assessment																		
Stream Connectivity and Size				Habitat		Fisheries					Non-Biological Factors							
	Stream Connectivity to mainstem (current)	Stream Connectivity to mainstem (potential)	Size of tributary stream	Habitat quality (existing)	Habitat Quality (potential)	Lack of other barriers besides diversions	Naturalized Anadromous Fish Life History Expression (Current)	Naturalized Anadromous Fish Life History Expression (Potential)	Bull Trout Life History Expression (current)	Bull Trout Life History Expression (Potential)	Resident Life History Expression (Current)	Resident Life History Expression (Potential)	Expected Cost benefit	Potential to increase flows via leases or acquisitions	Potential to increase flows through irrigation or mgt improvements	Simplicity of resolving diversion issues	Potential for diversion consolidation	Simplicity of resolving screening issues
2	Year-round surface water connections		Significant water contributions to mainstem compared to other tributaries in the watershed	No major limiting factors and supports all expected life stages and species that occurred historically		Watershed does not contain any natural or man-made barriers (falls, culverts, etc.) other than irrigation diversions	Supports all expected life stages/histories and species	Naturalized Anadromous Fish Life History Expression (Current)	Naturalized Anadromous Fish Life History Expression (Potential)				High benefit for species of concern compared to expected cost of conservation activities	Significant water conservation is expected if key landowners participate in a voluntary water transaction	Significant water conservation is expected if key landowners incorporate water saving measures	Few diversions, with willing landowners. Diversions are mostly single-user.	Opportunities to consolidate diversions exist	Few screens are needed, with willing irrigators
1	Connected at least nine months each year		Moderate water contributions to mainstem compared to other tributaries in the watershed	Has problems that are limiting life stages or species distribution, but problems can be easily remedied through conservation activities.		Watershed may have one natural or man-made barrier that needs to be replaced	May support all expected species, but certain life stages or histories are not being expressed						High benefit with high cost, or moderate benefits at medium to high costs	Moderate water conservation is expected, or non-key landowners are interested in water transactions	Moderate water conservation is expected through water saving measures	Many diversions with multiple users on each system	Opportunities to consolidate diversions exist, but there may be complex negotiations involved	Complex diversion systems; may have reluctant irrigators
0	Connected less than nine months each year		Insignificant water contributions to mainstem compared to other tributaries in the watershed	Habitat is severely degraded, or supports only one life stage when multiple life stages are expected or have been historically documented.		Watershed contains numerous man-made barriers other than irrigation diversions	Does not support all expected species						Low benefits, regardless of cost	Low potential for any water conservation through transactions	Low potential for any water conservation through water saving measures	Extremely complicated systems and/or unwilling landowners	Landowners are not interested in consolidations.	Extremely complicated systems and/or unwilling landowners
NA			This is a mainstem reach											Reach or tributary is not flow impaired	Reach or tributary is not flow impaired	All diversion issues have been addressed, or no diversions exist	All diversion issues have been addressed, or no diversions exist	All diversions have been screened to NMFS criteria, or no diversions exist

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Table 2. Streams and reaches rated for biological factors only, using the SHIPUSS system. Priority I streams are those receiving at least 70% of possible points. Priority II streams are those receiving between 50% and 69% of available points, and Priority III streams are those receiving less than 50% of available points. Streams can only be compared within the same watershed, since unique biologic, geologic, ecologic, social, and other characteristics interact to preclude comparisons across watersheds. The adjusted percent total adjusts for the possibility that a stream may receive a Not Applicable (NA) rating in some categories. See Table 1 and narrative for a complete description of categories. 2 = High; 1 = Medium; 0 = Low.

	Stream Connectivity* and Size			Habitat			Fisheries									
	Stream connectivity to mainstem (current)	Stream Connectivity to mainstem (potential)	Size of tributary stream	Habitat Quality (existing)	Habitat Quality (potential)	Lack of other barriers besides diversions	Naturalized Anadromous Fish Life History Expression (current)	Naturalized Anadromous Fish Life History Expression (potential)	Bull Trout Life History Expression (current)	Bull Trout Life History Expression (potential)	Resident Life History Expression (current)	Resident Life History Expression (potential)	Total Score	Possible Score	Adjusted Percent Total	
Salmon (MF-NF)																
Squaw	2	2	1	2	2	2	2	2	2	2	1	2	22	24	92	
Spring	2	2	1	2	2	2	2	2	1	2	2	2	22	24	92	
Boulder	2	2	1	2	2	1	2	2	2	2	2	2	22	24	92	
Indian	2	2	1	2	2	2	1	2	2	2	1	2	21	24	88	
Upper Panther (above Blackbird, including mainstem and tributaries)	2	2	2	1	2	1	1	2	1	2	2	2	20	24	83	
Owl	2	2	2	2	2	2	2	2	1	1	1	2	21	24	83	
Pine	2	2	1	2	2	2	1	2	1	2	1	2	20	24	83	
Moose	2	2	1	2	2	2	2	2	0	1	2	2	20	24	83	
Lower Panther (below Blackbird, including mainstem and tributaries)	2	2	NA	1	2	2	1	2	1	2	1	2	18	22	82	
Colson	2	2	1	2	2	1	2	2	0	1	2	2	19	24	79	
Lake	2	2	1	1	2	1	1	2	0	1	1	1	15	24	63	
East Boulder	2	2	0	1	1	1	1	1	0	0	1	1	11	24	46	
Dump	2	2	0	0	1	2	1	2	0	0	0	1	11	24	46	
Sage	2	2	0	1	1	1	0	0	0	0	1	2	10	24	42	
Salmon(NF-Pah)																
Carmen	1	2	2	1	2	2	1	2	2	2	1	2	20	24	83	
4th of July	1	2	2	1	2	2	1	2	2	2	1	2	20	24	83	
Hat	2	2	2	1	2	1	1	2	2	2	1	1	19	24	79	
Iron	1	2	2	1	2	1	1	2	2	2	1	1	19	24	79	
Twelvemile Creek	1	2	1	2	2	0	1	2	1	2	1	2	17	24	71	

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	Stream Connectivity* and Size			Habitat			Fisheries									
	Stream connectivity to mainstem (current)	Stream Connectivity to mainstem (potential)	Size of tributary stream	Habitat Quality (existing)	Habitat Quality (potential)	Lack of other barriers besides diversions	Naturalized Anadromous Fish Life History Expression (current)	Naturalized Anadromous Fish Life History Expression (potential)	Bull Trout Life History Expression (current)	Bull Trout Life History Expression (potential)	Resident Life History Expression (current)	Resident Life History Expression (potential)	Total Score	Possible Score	Adjusted Percent Total	
Tower	1	2	1	1	2	1	1	2	1	2	1	2	17	24	71	
Mainstem Salmon River - North Fork to Pahsimeroi	2	2	NA	1	1	2	1	1	1	1	1	1	14	22	64	
Wagonhammer	2	2	1	2	2	1	0	0	0	0	2	2	14	24	58	
Williams	1	2	1	1	2	0	1	2	0	0	1	2	13	24	54	
Lake	0	1	1	1	2	0	0	2	1	2	1	2	13	24	54	
Wallace Creek	1	2	0	1	2	1	1	1	0	0	1	1	11	24	46	
Salmon(Pah-EF)																
Morgan	2	2	2	1	2	1	1	2	1	2	2	2	20	24	83	
Challis	1	2	2	1	2	1	1	2	1	2	2	2	19	24	79	
Mainstem Salmon River - Pahsimeroi to East Fork (12 Mile)	2	2	NA	1	2	2	1	2	1	1	1	2	17	22	77	
Garden	1	2	1	1	2	1	1	2	1	2	1	2	17	24	71	
Mainstem Salmon River - Pahsimeroi - East Fork (exc. 12 Mile)	2	2	NA	1	2	2	1	1	1	1	1	1	15	22	68	
Bayhorse Creek	1	2	1	1	2	1	1	2	0	0	1	2	14	24	58	
Salmon (EF-YF)																
Mainstem Salmon River-East Fork to Headwaters	2	2	NA	1	2	2	2	2	1	2	1	2	19	22	86	
Slate	2	2	2	1	2	2	1	2	1	2	1	2	20	24	83	
Yankee Fork-and tributaries	2	2	NA	1	2	1	1	2	1	2	1	2	18	22	82	
Thompson	1	2	1	1	2	2	1	1	1	1	1	2	16	24	67	
Squaw	1	2	1	1	2	1	1	1	1	1	1	2	15	24	63	
Peach	0	2	0	1	2	1	0	1	0	1	1	2	11	24	46	
French	0	2	0	1	2	1	0	1	0	1	1	1	11	24	46	
Kinnikinnick	0	2	1	1	2	0	0	1	0	1	1	2	11	24	46	
Salmon(Yankee Fork-Valley Creek, including Valley Creek)																
Valley- above Stanley Lake Creek	2	2	2	2	2	2	2	2	1	2	1	2	22	24	92	
Big Casino	2	2	1	1	2	2	1	2	1	2	1	2	19	24	79	
Elk	2	2	2	1	2	2	1	2	0	2	1	2	19	24	79	

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	Stream Connectivity* and Size			Habitat			Fisheries									
	Stream connectivity to mainstem (current)	Stream Connectivity to mainstem (potential)	Size of tributary stream	Habitat Quality (existing)	Habitat Quality (potential)	Lack of other barriers besides diversions	Naturalized Anadromous Fish Life History Expression (current)	Naturalized Anadromous Fish Life History Expression (potential)	Bull Trout Life History Expression (current)	Bull Trout Life History Expression (potential)	Resident Life History Expression (current)	Resident Life History Expression (potential)	Total Score	Possible Score	Adjusted Percent Total	
Iron (Valley Creek)	1	2	1	1	2	2	1	2	0	1	1	2	16	24	75	
Goat (Valley Creek)	1	2	1	1	2	2	1	2	0	1	1	2	16	24	71	
Meadow	1	2	1	1	2	1	0	1	0	1	1	2	13	24	54	
Salmon (Valley Creek - Headwaters)																
4th of July	1	2	2	1	2	2	1	2	2	2	2	2	21	24	75	
Main Salmon River above Pole Creek	1	2	1	1	2	2	2	2	0	1	1	2	17	24	75	
Smiley	1	2	1	1	2	2	1	2	0	2	1	2	17	24	75	
Huckleberry Creek	2	2	1	1	2	2	1	2	0	2	1	2	18	24	75	
Pole	1	2	2	1	2	2	1	2	0	2	1	2	18	24	71	
Beaver	1	2	1	1	2	1	1	2	0	2	1	2	16	24	71	
Williams	1	2	1	1	2	1	1	2	0	2	1	2	16	24	67	
Gold	1	2	1	1	2	1	1	2	0	2	1	2	16	24	67	
Champion	1	2	1	1	2	2	1	2	1	2	1	2	18	24	63	
Big Lake Creek (above the lake)	1	1	2	1	2	1	0	0	0	2	2	2	14	24	58	
Boundary	0	2	1	1	2	0	0	2	0	2	1	2	13	24	54	
Fisher	0	2	1	1	2	1	0	1	0	2	1	2	13	24	54	
North Fork																
Pierce	2	2	2	2	2	2	1	2	0	1	2	2	20	24	83	
Mainstem North Fork	2	2	NA	1	2	2	1	2	1	2	1	2	18	22	82	
Dahlonaga	2	2	2	2	2	2	1	2	0	1	1	2	19	24	79	
Hughes	2	2	1	1	2	1	2	2	1	2	1	2	19	24	79	
Ditch	2	2	1	1	2	1	1	2	0	1	1	2	16	24	67	
Hull	1	2	1	1	2	1	1	1	0	1	1	2	14	24	58	
Lemhi																
Hayden (except Basin)	2	2	2	2	2	2	2	2	2	2	2	2	24	24	100	
Kenney	2	2	1	2	2	2	1	2	1	2	1	2	20	24	83	
Mainstem Lemhi - Hayden Creek to Leadore	2	2	NA	1	2	2	2	2	1	1	1	2	18	22	79	
Mainstem Lemhi- Agency Creek to Hayden Cr.	2	2	NA	1	2	2	1	2	1	1	1	2	17	22	77	
Bohannon	1	2	1	1	2	2	1	2	1	2	1	2	18	24	75	

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	Stream Connectivity* and Size			Habitat			Fisheries									
	Stream connectivity to mainstem (current)	Stream Connectivity to mainstem (potential)	Size of tributary stream	Habitat Quality (existing)	Habitat Quality (potential)	Lack of other barriers besides diversions	Naturalized Anadromous Fish Life History Expression (current)	Naturalized Anadromous Fish Life History Expression (potential)	Bull Trout Life History Expression (current)	Bull Trout Life History Expression (potential)	Resident Life History Expression (current)	Resident Life History Expression (potential)	Total Score	Possible Score	Adjusted Percent Total	
Big Timber	0	2	2	1	2	2	1	2	1	2	1	2	18	24	75	
Big Springs	2	2	2	1	2	2	1	2	0	0	2	2	18	24	75	
Pattee	1	2	1	1	2	2	0	1	1	2	1	2	16	24	67	
Big Eightmile	1	2	1	1	2	1	0	2	1	2	1	2	16	24	67	
Agency	1	2	1	1	2	1	2	2	0	1	1	2	16	24	67	
Benedict Little Springs	2	2	1	1	2	2	1	2	0	0	1	2	16	24	67	
Mainstem Lemhi- mouth to Agency Creek	1	2	NA	1	2	1	1	1	1	1	1	2	14	22	64	
Eighteenmile	1	2	1	1	2	1	0	2	1	1	1	2	15	24	63	
Lee	1	1	1	1	2	1	0	2	1	2	1	2	15	24	63	
Hawley	0	2	1	1	2	1	0	1	1	2	1	2	14	24	58	
Wimpey	1	2	1	1	2	1	0	2	0	1	1	2	14	24	58	
Canyon	1	2	1	1	2	2	0	2	0	0	1	2	14	24	58	
Mill	1	1	1	1	2	1	0	1	1	2	1	2	14	24	58	
Lemhi Little Springs	1	2	1	1	2	1	1	2	0	0	1	2	14	24	58	
Texas	1	1	1	1	2	1	0	2	0	1	1	2	13	24	54	
Little Eightmile	1	1	1	1	2	0	0	1	1	1	1	2	12	24	50	
Geertson	0	0	1	1	2	2	0	1	1	2	0	1	11	24	46	
Basin (Hayden Creek)	0	1	1	1	2	1	0	1	0	1	1	2	11	24	46	
Kirtley	1	1	1	0	1	1	0	1	1	1	1	1	10	24	42	
Pahsimeroi																
Lower Pahsimeroi - Mouth to Hooper Lane	1	2	NA	1	2	1	1	2	1	2	1	2	16	22	73	
Big	1	2	2	1	2	1	0	2	1	2	1	2	17	24	71	
Middle Pahsimeroi (Hooper Lane to McCoy Lane, including tributaries)	1	2	2	1	2	1	0	2	1	2	1	2	17	24	71	
Little Morgan	0	2	1	1	2	1	0	2	1	2	1	2	15	24	68	
Falls	0	2	2	1	2	1	0	1	2	2	1	2	16	24	67	
Patterson	0	2	1	1	2	1	0	2	1	2	1	2	15	24	63	
Upper Pahsimeroi (McCoy Lane to headwaters, including	0	1	2	1	2	2	0	0	1	2	1	2	14	24	58	

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	Stream Connectivity* and Size			Habitat			Fisheries									
	Stream connectivity to mainstem (current)	Stream Connectivity to mainstem (potential)	Size of tributary stream	Habitat Quality (existing)	Habitat Quality (potential)	Lack of other barriers besides diversions	Naturalized Anadromous Fish Life History Expression (current)	Naturalized Anadromous Fish Life History Expression (potential)	Bull Trout Life History Expression (current)	Bull Trout Life History Expression (potential)	Resident Life History Expression (current)	Resident Life History Expression (potential)	Total Score	Possible Score	Adjusted Percent Total	
tributaries)																
Sulphur	0	1	1	1	2	1	0	1	0	0	1	2	10	24	42	
East Fork																
Germania	2	2	2	2	2	2	1	2	2	2	2	2	23	24	96	
Mainstem East Fork - Herd Creek to Germania	2	2	NA	1	2	2	2	2	2	2	2	2	21	22	95	
Herd	2	2	2	1	2	2	2	2	2	2	1	2	22	24	92	
Upper EF - above West Pass	2	2	2	1	2	2	1	2	1	2	1	1	19	24	79	
West Pass	1	2	1	1	2	2	0	1	2	2	1	2	17	24	71	
Big Boulder	1	2	1	1	2	1	1	2	1	2	1	2	17	24	71	
Bowery	1	2	1	1	2	2	0	1	1	2	1	2	16	24	67	
Mainstem East Fork - Mouth to Herd Creek*	2	2	NA	1	2	2	1	1	1	1	1	2	16	22	67	

* - Connectivity is defined as the presence of water and does not currently consider the adequacy of flows or depth for fish passage

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Table 3. Streams and reaches rated for biological and non-biological factors, using the SHIPUSS system. Priority I streams are those receiving at least 70% of possible points. Priority II streams are those receiving between 50% and 69% of available points, and Priority III streams are those receiving less than 50% of available points. Streams can only be compared within the same watershed, since unique biologic, geologic, ecologic, social, and other characteristics interact to preclude comparisons across watersheds. The adjusted percent total adjusts for the possibility that a stream may receive a Not Applicable (NA) rating in some categories. See Table 1 and narrative for a complete description of categories. 2 = High; 1 = Medium; 0 = Low.

		Non-Biological Factors								
	Biological Factors Score (from Table 1)	Expected cost/benefit	Potential to increase flows via leases or acquisitions	Potential to increase flows through irrigation or mgt improvements	Simplicity of resolving diversion issues	Potential for diversion consolidation	Simplicity of resolving screening issues	Total Score	Possible Score	Adjusted Percent Total
Salmon (MF-NF)										
Squaw	22	2	1	2	2	NA	2	31	34	91
Indian	21	2	1	2	2	NA	2	30	34	88
Owl	21	1	NA	2	2	NA	2	28	32	88
Upper Panther (above Blackbird, including mainstem and tributaries)	20	2	1	NA	2	2	2	29	34	85
Pine	20	1	1	2	2	1	2	29	36	81
Moose	20	1	NA	NA	NA	NA	NA	21	26	81
Lower Panther (below Blackbird, including mainstem and tributaries)	18	1	NA	NA	NA	NA	NA	19	24	79
Spring	22	2	0	1	1	0	1	27	36	75
Boulder	22	2	0	0	0	0	1	25	36	69
Colson	19	2	0	1	1	0	1	24	36	67
Lake	15	0	NA	NA	NA	NA	NA	15	26	58
Dump	11	1	NA	NA	NA	NA	NA	12	26	46
East Boulder	11	0	NA	NA	NA	NA	NA	11	26	42
Sage	10	1	NA	NA	NA	NA	NA	11	26	42
Salmon(NF-Pah)										
Hat	19	2	2	2	2	2	2	31	36	86
Twelvemile	17	2	2	2	2	2	2	29	36	81
Iron	19	1	1	2	2	2	2	28	36	78
Carmen	20	2	1	2	1	1	1	28	36	78
4th of July	20	1	1	2	1	1	1	27	36	75
Tower	17	1	1	1	2	1	1	24	36	67

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		Non-Biological Factors								
	Biological Factors Score (from Table 1)	Expected cost benefit	Potential to increase flows via leases or acquisitions	Potential to increase flows through irrigation or mgt improvements	Simplicity of resolving diversion issues	Potential for diversion consolidation	Simplicity of resolving screening issues	Total Score	Possible Score	Adjusted Percent Total
Williams	13	2	2	2	2	1	1	23	36	64
Wagonhammer	14	1	NA	NA	NA	NA	NA	15	26	58
Mainstem Salmon River - North Fork to Pahsimeroi	14	0	NA	1	1	1	NA	17	30	57
Lake	13	1	NA	2	0	NA	2	18	32	56
Wallace	11	1	1	1	1	1	1	17	36	47
Salmon(Pah-EF)										
Morgan	20	2	1	1	2	1	1	28	36	78
Challis	19	1	2	2	0	2	1	27	36	75
Mainstem Salmon River - Pahsimeroi to East Fork (12 Mile)	17	1	1	1	1	1	NA	22	32	69
Garden	17	1	1	1	1	1	1	23	36	64
Bayhorse	14	2	1	2	1	2	1	23	36	64
Mainstem Salmon River - Pahsimeroi - East Fork (exc. 12 Mile)	15	0	NA	1	1	1	NA	18	30	60
Salmon (EF-YF)										
Yankee Fork-and tributaries	18	1	NA	NA	NA	NA	NA	18	24	75
Squaw	15	2	2	2	2	NA	2	25	34	74
Slate	20	1	1	1	1	1	1	26	36	72
Mainstem Salmon River- East Fork to Headwaters	19	1	1	1	1	1	1	24	34	71
Thompson	16	1	2	1	1	2	2	25	36	69
Peach	11	1	2	1	1	2	1	19	36	53
French	11	1	1	1	1	1	1	17	36	47
Kinnikinnik	11	1	NA	NA	NA	NA	NA	12	26	46
Salmon(Yankee Fork- Valley Creek, including Valley Creek)										
Valley- above Stanley Lake	22	2	NA	NA	NA	NA	NA	24	26	92
Elk	19	2	1	2	2	1	1	28	36	78
Big Casino	19	1	2	2	1	NA	1	26	34	76
Iron (Valley Creek)	16	1	1	1	1	2	1	23	36	64

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		Non-Biological Factors								
	Biological Factors Score (from Table 1)	Expected cost:benefit	Potential to increase flows via leases or acquisitions	Potential to increase flows through irrigation or mgt improvements	Simplicity of resolving diversion issues	Potential for diversion consolidation	Simplicity of resolving screening issues	Total Score	Possible Score	Adjusted Percent Total
Goat (Valley Creek)	16	1	1	1	1	2	1	23	36	64
Meadow	13	1	1	1	1	2	1	20	36	56
Salmon (Valley Creek - Headwaters)										
4th of July	21	2	2	1	2	NA	NA	28	32	88
Pole	18	2	2	2	2	NA	NA	26	32	81
Beaver	16	1	2	1	2	2	2	26	36	72
Champion	18	1	2	1	1	2	1	26	36	72
Huckleberry Creek	18	1	2	1	1	NA	NA	23	32	72
Main Salmon River above Pole Creek	17	2	1	1	1	1	2	25	36	69
Smiley	17	1	1	1	1	1	1	23	36	64
Williams	16	1	1	1	1	1	1	23	36	64
Gold	16	1	1	1	1	1	1	22	36	61
Boundary	13	1	1	1	1	NA	2	19	34	56
Fisher	13	1	1	1	1	2	1	20	36	56
Big Lake Creek (above the lake)	14	1	1	1	1	1	1	20	36	56
North Fork										
Pierce	20	2	NA	NA	NA	NA	NA	22	26	85
Hughes	19	1	NA	NA	2	1	2	25	32	78
Mainstem North Fork	18	1	0	1	1	1	NA	22	32	69
Dahlonaga	19	1	0	2	0	0	1	23	36	64
Ditch	16	1	0	1	0	0	1	19	36	53
Hull	14	1	0	2	0	0	1	18	36	50
Lemhi										
Kenney	20	2	2	2	2	2	2	32	36	89
Hayden (except Basin)	24	1	1	1	1	1	NA	29	34	85
Mainstem Lemhi - Hayden Creek to Leadore	18	2	2	2	1	1	1	27	34	79
Bohannon	18	2	2	2	1	2	1	28	36	78
Big Springs	18	2	1	1	2	2	2	28	36	78
Mainstem Lemhi- Agency Creek to Hayden Cr.	17	2	2	2	1	1	1	26	34	76

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		Non-Biological Factors								
	Biological Factors Score (from Table 1)	Expected cost/benefit	Potential to increase flows via leases or acquisitions	Potential to increase flows through irrigation or mgt improvements	Simplicity of resolving diversion issues	Potential for diversion consolidation	Simplicity of resolving screening issues	Total Score	Possible Score	Adjusted Percent Total
Big Timber	18	2	2	2	1	1	1	27	36	75
Pattee	16	2	2	1	2	1	2	26	36	72
Agency	16	2	2	2	1	1	1	25	36	69
Benedict Little Springs	16	2	NA	NA	NA	NA	NA	18	26	69
Big Eightmile	16	2	1	2	1	2	1	25	36	69
Eighteenmile	15	2	2	2	1	1	1	24	36	67
Lemhi Little Springs	14	2	2	2	1	2	1	24	36	67
Mainstem Lemhi- mouth to Agency Creek	14	1	2	2	1	1	NA	21	32	66
Canyon	14	2	1	1	2	0	2	22	36	61
Hawley	14	1	1	1	1	1	2	21	36	58
Mill	14	1	1	2	1	1	1	21	36	58
Lee	15	1	1	1	1	1	1	21	36	58
Little Eightmile	12	1	1	2	1	1	2	20	36	56
Texas	13	1	1	1	1	1	1	19	36	53
Wimpey	14	1	0	1	1	1	1	19	36	53
Basin Creek (Hayden Creek)	11	0	0	1	1	1	1	15	36	42
Kirtley	10	0	1	1	1	1	1	15	36	42
Geertson	11	1	1	0	0	0	1	14	36	39
Pahsimeroi										
Lower Pahsimeroi - Mouth to Hooper Lane	16	2	2	2	0	1	2	25	34	74
Big	17	1	2	2	1	1	2	26	36	72
Middle Pahsimeroi (Hooper Lane to McCoy Lane, including tributaries)	17	2	2	2	0	2	1	26	36	72
Falls	16	1	2	2	1	2	2	26	36	72
Little Morgan	15	1	1	1	1	2	2	23	36	64
Upper Pahsimeroi (McCoy Lane to headwaters, including tributaries)	14	1	2	2	1	2	1	23	36	64
Patterson	15	1	1	1	0	1	1	20	36	56

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		Non-Biological Factors								
	Biological Factors Score (from Table 1)	Expected cost/benefit	Potential to increase flows via leases or acquisitions	Potential to increase flows through irrigation or mgt improvements	Simplicity of resolving diversion issues	Potential for diversion consolidation	Simplicity of resolving screening issues	Total Score	Possible Score	Adjusted Percent Total
Sulphur	10	0	2	2	1	1	1	17	36	47
East Fork										
Germania	23	1	1	1	2	NA	1	29	34	85
Herd	22	2	2	1	1	NA	2	28	34	82
Upper EF - above West Pass	19	1	2	NA	NA	NA	2	24	30	80
Mainstem East Fork - Herd Creek to Germania	21	1	1	1	1	1	1	27	34	79
West Pass	17	1	1	1	1	1	1	23	36	64
Bowery	16	1	1	1	1	NA	1	21	34	62
Mainstem East Fork - Mouth to Herd Creek	16	1	1	1	1	1	NA	21	34	62
Big Boulder	17	0	1	1	1	0	2	22	36	61

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APPENDIX A. Upper Salmon Basin Watershed Project (USBWP) Technical Team members and other technical experts involved with the development of SHIPUSS.

NAME (capacity)	TITLE	AFFILIATION
Dan Blake (review)	Natural Resource Specialist	NOAA Fisheries
Arnie Brimmer (technical)	Regional Anadromous Fishery Biologist	IDFG/USBWP TT
Janna Brimmer (editorial, review, technical)	Fish and Wildlife Biologist	USFWS/ USBWP TT
Roxanne Brown (Review)	Senior Water Resource Agent	Idaho Department of Water Resources/ USBWP TT
Tom Curet (technical)	Regional Fishery Manager	IDFG/ USBWP TT
Kate Forster (technical)	Fisheries Biologist	BLM, Challis FO/ USBWP TT
Bart Gamett (technical)	Fisheries Biologist	USFS, SCNF, Lost River and Challis RD
Dan Garcia (technical)	Fisheries Biologist	USFS, SCNF, North Fork RD
Tom Herron (review)	Water Quality Analyst	Idaho Department of Environmental Quality/ USBWP TT
Ted Koch (review)	Fish and Wildlife Biologist	USFWS
Andy Kohler (technical)	Research Biologist	Shoshone-Bannock Tribes
Bob Loucks (review, technical)	Citizen	USBWP TT
Jeff Lutch (review, technical)	Fisheries Biologist	IDFG
Mark Moulton (technical)	Fish and Water Program Leader	USFS, SNRA, Ketchum
Patrick Murphy (technical)	Regional Fishery Biologist	IDFG Screen Shop/ USBWP TT
Heather Ray (technical)	Fisheries Biologist	Shoshone-Bannock Tribes/ USBWP TT
Chris Reighn (review)	Fish and Wildlife Biologist	USFWS
Al Simpson (review)	Biologist	Bureau of Reclamation
Bruce Smith (review)	Supervisory Fisheries Biologist	USFS, SCNF
Jude Trapani (technical, review)	Fisheries Biologist	BLM, Salmon FO/ USBWP TT
Chuck Warren (technical, review)	Fisheries Biologist	IDFG Screen Shop

ABBREVIATIONS USED:

BLM = Bureau of Land Management

FO = Field Office

IDFG = Idaho Department of Fish and Game

NOAA = National Oceanic and Atmospheric Administration

RD = Ranger District

SCNF = Salmon Challis National Forest

SNRA = Sawtooth National Recreation Area

USBWP TT = Upper Salmon Basin Watershed Project Tech Team

USFS = U.S. Forest Service

USFWS = U.S. Fish and Wildlife Service

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APPENDIX B. Streams for which no or insufficient data exists to warrant their current inclusion in SHIPUSS. Federal and state land management agencies in the Upper Salmon River Basin will attempt to survey as many of these streams as possible for prioritization in SHIPUSS.

Salmon River (Middle Fork to North Fork)

Salmon River (North Fork to Pahsimeroi)

McKim Creek Cow Creek

Salmon River (Pahsimeroi to East Fork)

Ellis Creek Warm Springs Cr.

Salmon River (East Fork to Yankee Fork)

Holman Creek¹ Burnt Creek Gardner Creek

Salmon River (Yankee Fork to Headwaters)

Rough Creek² Little Casino Cr. Hell Roaring Creek

North Fork

Lemhi River

Pratt Creek Haynes Creek McDevitt Cr.

Pahsimeroi River

East Fork Salmon River

Road Creek Pine Creek Little Boulder Cr. Sheep Creek

¹ Holman Creek was electrofished in 2004 by USFS and cutthroat trout and rainbow trout are present. No habitat surveys were conducted.

² Rough Creek was electrofished in 2004 by USFS and cutthroat trout and brook trout are present. No habitat surveys were conducted.

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APPENDIX C. Perennial streams not included in this prioritization, and not scheduled for additional surveys. These streams may either be too small to support significant numbers of fish, or may have no problems that would be addressed by restoration activities targeted by SHIPUSS. These streams may be included in the SHIPUSS prioritization in the future if data shows their inclusion is warranted.

Salmon River (Middle Fork to North Fork)

Long Tom Creek	Shell Creek	Ebenezer Creek	Cove Creek Line Creek
Dutch Oven Creek	Big Sheepeater Cr.	Little Sheepeater Cr.	Little Spring Creek
Transfer Gulch	Hale Gulch	Little Sage Creek	Fan Gulch
Buster Gulch	Camel Gulch	Rose Gulch	

Salmon River (North Fork to Pahsimeroi)

Fernster Creek	Jesse Creek	Turner Creek	Pollard Can
Elf Creek	Sevenmile Cr.	Hotsprings Cr	Henry Creek
Birch Creek	Camp Creek	Briney Creek	Second Creek
Rattlesnake Cr	Lost Creek	Deer Creek	Warm Spring
Cabin Creek	Poison Creek	Ezra Creek	Allison Creek

Salmon River (Pahsimeroi to East Fork)

Birch Creek	Rattlesnake Creek	Lyon Creek	Sink Creek
Birch Creek			

Salmon River (East Fork to Yankee Fork)

Spud Creek	Potoman Creek	Spring Creek	Mill Creek
Beaver Creek	Cold Creek	Treon Creek	Elk Creek

Salmon River (Yankee Fork to Headwaters)

Blind Creek	Four Aces Cr.	Nip and Tuck Cr.	Cleveland Cr.
Mays Creek	Warm Creek	Lost Creek	Taylor Creek

North Fork

Big Silver Lead Creek	Little Silver Lead Cr.	Dry Creek	Trail Creek
Copper Creek	Roske Creek	Bills Canyon	Little Hull Cr.
Carl Canyon	Lick Creek	Votler Creek	Friedorf Creek
Johnson Gulch	Hammerean Creek	Quartz Creek	Deep Creek
Elk Creek	Trapper Gulch	Vine Creek	State Creek
Moose Creek	West Fork North Fork		

Lemhi River

Withington Creek	Sandy Creek	Yearian Creek	Reese Creek
Peterson Creek			

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East Fork Salmon River

Spar Canyon

Big Lake Creek

Deer Creek

McDonald Creek

Bluett Creek

Fox Creek

Baker Creek

Marco Creek

Wickiup Cr.

Pahsimeroi River

Lawson Creek

Trail Creek

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APPENDIX D. Perennial streams that have been removed from the prioritization either because all conservation activities have been accomplished, or no projects remain that fall within the scope of SHIPUSS. Streams that scored at least 95% overall have been included here. The rankings have been included here in parentheses (biological factors/total score).

Salmon River (Middle Fork to North Fork)

Salmon River (North Fork to Pahsimeroi)

Salmon River (Pahsimeroi to East Fork)

Salmon River (East Fork to Yankee Fork)

Warm Springs Creek (100/100)

Salmon River (Yankee Fork to Headwaters)

Basin Creek (96/96) score reduced because this is a small tributary

Redfish Lake Creek (96/96) score reduced because the weir serves as a partial barrier

Alturas Lake Creek (96/96) score reduced due to habitat degradation from a road blowout.

Restoration efforts on Alturas Lake Creek by the USFS are ongoing.

North Fork

Twin Creek (100/100)

Sheep Creek (100/100)

Lemhi River

East Fork Salmon River

Pahsimeroi River

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APPENDIX E. Persons to contact for additional information on SHIPUSS.

For general information on the history, development, or process, contact:

Janna Brimmer
Fish and Wildlife Biologist
US Fish and Wildlife Service
1206 South Challis Street
Salmon, Idaho 83467
(208)756-5190
Janna_Brimmer@fws.gov

For specific information on Fisheries survey methods or data, contact:

Tom Curet
Regional Fishery Manager
Idaho Department of Fish and Game
P.O. Box 1336
Salmon, Idaho 83467
(208)756-2271
tcuret@idfg.idaho.gov

Paddy Murphy
Regional Fishery Biologist
Idaho Department of Fish and Game
P.O. Box 1336
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U.S. Fish and Wildlife Serv., Interior

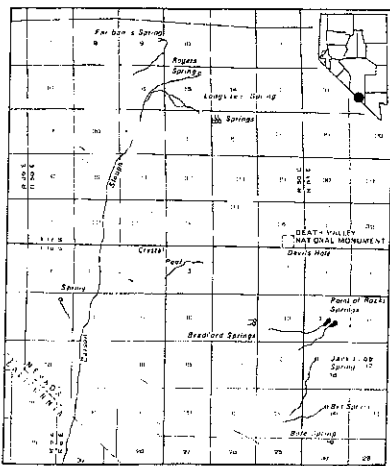
§ 17.95, Note

ASH MEADOWS NAUCORID (*Ambrysus amargosus*)

Nevada, Nye County. Point of Rocks Springs and their immediate outflows in SE¼ sec. 7, T18S, R51E.

Known primary constituent elements include flowing warm water over rock and gravel substrate

NOTE: Map follows:



EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §17.95(c) to End, see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access

EFFECTIVE DATE NOTE: At 70 FR 56265, Sept. 26, 2005, §17.95 was amended in paragraph (e) by revising the entry for Bull Trout (*Salvelinus confluentus*), effective Oct. 26, 2005. For the convenience of the user, the revised text is set forth as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(e) Fishes

* * * * *

BULL TROUT (*Salvelinus confluentus*)

(1) Locations of the designated critical habitat. Critical habitat is designated in the following States and counties on the maps and as described below:

[42 FR 47840, Sept. 22, 1977]

State	Counties
(i) Idaho	Adams, Benewah, Bonner, Boundary, Kootenai, Nez Perce, Shoshone, Washington.
(ii) Montana	Deer Lodge, Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Mineral, Missoula, Powell, Ravalli, Sanders.
(iii) Oregon	Baker, Deschutes, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lane, Sherman, Umatilla, Union, Wallowa, Wasco.
(iv) Washington	Asotin, Benton, Clallam, Clark, Columbia, Cowlitz, Garfield, Grays Harbor, Island, Jefferson, King, Kittitas, Klickitat, Mason, Pend Oreille, Pierce, Skagit, Skamania, Snohomish, Stevens, Thurston, Walla Walla, Whatcom, Whitman, Yakima.

(2) Topographic features included in the critical habitat designation. Critical habitat includes the stream channels within the designated stream reaches and inshore extent of critical habitat for marine nearshore areas (the mean high high-water (MHHW) line), including tidally influenced freshwater heads of estuaries indicated on the maps below.

(i) Critical habitat includes the stream channels within the designated stream reaches, and includes a lateral extent as defined by the ordinary high-water line. In areas where ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge that generally has a recurrence interval of 1 to 2 years on the annual flood series. Critical

habitat includes the stream channels within the designated stream reaches, and includes a lateral extent from the bankfull elevation on one bank to the bankfull elevation on the opposite bank. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge that generally has a recurrence interval of 1 to 2 years on the annual flood series. If bankfull elevation is not evident on either bank, the ordinary high-water line must be used to determine the lateral extent of critical habitat. The lateral extent of designated lakes is defined by the perimeter of the water body as mapped on standard 1:24,000 scale topographic maps.

(ii) Critical habitat includes the inshore extent of critical habitat for marine nearshore areas (the MHHW line), including



tidally influenced freshwater heads of estuaries. This refers to the average of all the higher high-water heights of the two daily tidal levels. Adjacent shoreline riparian areas, bluffs, and uplands are not designated as critical habitat. However, it should be recognized that the quality of marine habitat along shorelines is intrinsically related to the character of these adjacent features, and human activities that occur outside of the MHHW line can have major effects on physical and biological features of the marine environment. The offshore extent of critical habitat for marine nearshore areas is based on the extent of the photic zone, which is the layer of water in which organisms are exposed to light. Critical habitat extends offshore to the depth of 33 ft (10 m) relative to the mean low low-water line (MLLW) (average of all the lower low-water heights of the two daily tidal levels). This equates to the average depth of the photic zone and is consistent with the offshore extent of the nearshore habitat identified under the "Notice of Change to the Nation's Tidal Datums With the Adoption of a New National Tidal Datum Epoch Period of 1983 Through 2001". This area between MHHW and minus 10 MLLW is considered the habitat most consistently used by bull trout in marine waters based on known use, forage fish availability, and ongoing migration studies, and captures geological and ecological processes important to maintaining these habitats. This area contains essential foraging habitat and migration corridors such as estuaries, bays inlets shallow subtidal areas, and intertidal flats.

(3) *Primary constituent elements needed for bull trout survival* Within the designated critical habitat areas, the primary constituent elements (PCEs) for bull trout are those habitat components that are essential for the primary biological needs of foraging, reproducing, rearing of young, dispersal, genetic exchange, or sheltering. Note that only the PCEs described in paragraphs (e)(3)(i) (vi), (vii), and (viii) apply to marine nearshore waters identified as critical habitat. The PCEs are as follows:

(i) Water temperatures that support bull trout use. Bull trout have been documented in streams with temperatures from 32 to 72 °F (0 to 22 °C) but are found more frequently in temperatures ranging from 36 to 59 °F (2 to 15 °C). These temperature ranges may vary depending on bull trout life-history stage and form, geography, elevation, diurnal and seasonal variation, shade, such as that provided by riparian habitat, and local groundwater influence. Stream reaches with temperatures that preclude bull trout use are specifically excluded from designation;

(ii) Complex stream channels with features such as woody debris, side channels, pools, and undercut banks to provide a variety of depths, velocities and instream structures;

(iii) Substrates of sufficient amount, size, and composition to ensure success of egg and embryo overwinter survival, fry emergence and young-of-the-year and juvenile survival. This should include a minimal amount of fine substrate less than 0.25 inch (0.63 centimeter) in diameter.

(iv) A natural hydrograph, including peak, high, low, and base flows within historic ranges or, if regulated, currently operate under a biological opinion that addresses bull trout, or a hydrograph that demonstrates the ability to support bull trout populations by minimizing daily and day-to-day fluctuations and minimizing departures from the natural cycle of flow levels corresponding with seasonal variation. This rule finds that reservoirs currently operating under a biological opinion that addresses bull trout provides management for PCEs as currently operated;

(v) Springs, seeps, groundwater sources, and subsurface water to contribute to water quality and quantity as a cold water source;

(vi) Migratory corridors with minimal physical, biological, or water quality impediments between spawning, rearing, overwintering, and foraging habitats, including intermittent or seasonal barriers induced by high water temperatures or low flows;

(vii) An abundant food base including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish; and

(viii) Permanent water of sufficient quantity and quality such that normal reproduction, growth, and survival are not inhibited.

(4) *Exclusions from the critical habitat designation.* Certain geographic areas are excluded from the critical habitat designation as described below in this paragraph (4).

(i) 3(5)(A) and Exclusions under section 4(b)(2) of the Act. (A) *Habitat conservation plans.* We are excluding from the critical habitat designation any non-Federal lands covered by an incidental take permit for bull trout issued under section 10(a)(1)(B) of the Act on or before September 26, 2005, as long as such permit, or a conservation easement providing comparable conservation benefits, remains legally operative on such lands. These excluded areas are covered by habitat conservation plans (HCPs). They include lands and waters covered by the Washington Department of Natural Resources HCP, the Plum Creek Native Fish HCP/Stimson Lumber Company HCP, the Tacoma Water Green River HCP, the Green Diamond Resources Company HCP, and the City of Seattle Cedar River Watershed HCP.

(B) *Tribal lands.* The following tribal lands contain stream segments or marine nearshore habitat areas that have been excluded from designated critical habitat pursuant to section 4(b)(2) of the Act: Tribal lands of the Blackfoot Nation, Swinomish Tribe, Quinalt Indian Nation, Muckleshoot Tribe, Jamestown S'Klallam Tribe, Hoh Tribe,

Skokomish, and Co. Warm Springs Reserve.

(C) *Federal lands.* Federal lands contain stream nearshore habitat areas excluded from designation pursuant to section 4(a) within the Nisquallyuge; the Washington Rules and Forest Plan Bull Trout; the Lewis Conservation Easement Basin Adjudication; Plan Aquatic Conservation Strategy for Fish-Producing Washington River Power River from Missoula Fork of the Boise River Basin E Project; the South Management Plan; Land and Resource waters impounded; many purpose is for

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Skokomish, and Confederated Tribes of Warm Springs Reservation of Oregon.

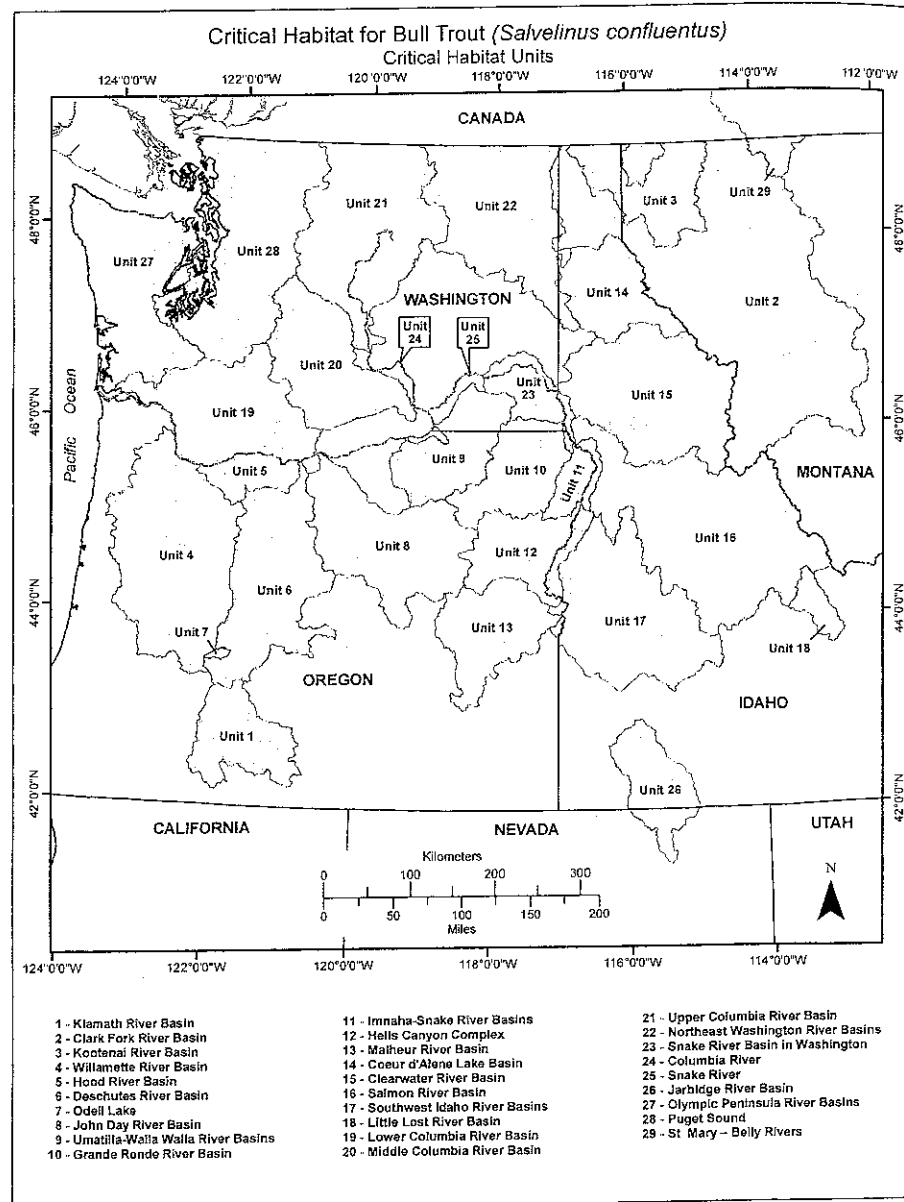
(C) *Federal lands.* The following Federal lands contain stream segments or marine nearshore habitat areas that have been excluded from designated critical habitat pursuant to section 4(a)(3) of the Act: Lands within the Nisqually National Wildlife Refuge; the Washington State Forest Practices Rules and Forest Practices Regulations for Bull Trout; the Lewis Hydroelectric Project Conservation Easements; the Snake River Basin Adjudication; the Northwest Forest Plan Aquatic Conservation Strategy; the Interim Strategy for Managing Anadromous-Fish-Producing Watersheds; the Federal Columbia River Power System; the Clark Fork River from Missoula to Butte, MT; the Middle Fork of the Boise River; the Interior Columbia Basin Ecosystem Management Project; the Southeast Oregon Resource Management Plan; the Southwest Idaho Land and Resource Management Plan; and waters impounded behind dams whose primary purpose is for flood control or water

supply for human consumption (reservoirs and pools)

(ii) *Non-Inclusions under section 4(a)(3) of the Act.* (A) *Military lands.* The following military lands contain stream segments or marine nearshore habitat areas that have been excluded from designated critical habitat pursuant to section 4(a)(3) of the Act: Bayview Acoustic Research Detachment, Naval Surface Warfare Center ID; Naval Radio Station Jim Creek, WA; Naval Station, Everett, WA; Naval Air Station, Whidbey Island, WA; the Naval Under Sea Warfare Center Division, Newport, WA (Dabob Bay and Crescent Harbor). Keyport facilities and Fort Lewis, WA

(B) [Reserved]
(5) The designated critical habitat units for bull trout are set forth in the text and depicted on the maps below.

(6) An index map of designated critical habitat for the Klamath River, Columbia River, Olympic Peninsula, Puget Sound, and Saint Mary-Belly bull trout populations follows:



Boulder Creek
Brownsworth Creel
Coyote Creek
Deming Creek
Dixon Creek ..
Leonard Creek
Long Creek
North Fork Spragu
Sheepry Creek
Sun Creek ..
Sycan Marsh
Threemile Creek .

(ii) Map of
follows:

(7) Unit 1: Klamath River Basin
(i) Critical habitat is designated on the
water bodies listed in the following table:

30°15' N and 28°00' N from the coast out 5 nautical miles (Figure 8 to part 226).

[59 FR 28805, June 3, 1994 Redesignated and amended at 64 FR 14067, Mar. 23, 1999; 68 FR 17562, Apr. 10, 2003; 70 FR 1832, Jan. 11, 2005]

§ 226.204 Critical habitat for Sacramento winter-run chinook salmon.

The following waterways, bottom and water of the waterways and adjacent riparian zones: The Sacramento River from Keswick Dam, Shasta County (River Mile 302) to Chipps Island (River Mile 0) at the westward margin of the Sacramento-San Joaquin Delta, all waters from Chipps Island westward to Carquinez Bridge, including Honker Bay, Grizzly Bay, Suisun Bay, and Carquinez Strait, all waters of San Pablo Bay westward of the Carquinez Bridge, and all waters of San Francisco Bay (north of the San Francisco/Oakland Bay Bridge) from San Pablo Bay to the Golden Gate Bridge

[58 FR 33218, June 16, 1993. Redesignated and amended at 64 FR 14067, Mar. 23, 1999]

§ 226.205 Critical habitat for Snake River sockeye salmon, Snake River fall chinook salmon, and Snake River spring/summer chinook salmon.

The following areas consisting of the water, waterway bottom, and adjacent riparian zone of specified lakes and river reaches in hydrologic units presently or historically accessible to listed Snake River salmon (except reaches above impassable natural falls, and Dworshak and Hells Canyon Dams). Adjacent riparian zones are defined as those areas within a horizontal distance of 300 feet (91.4 m) from the normal line of high water of a stream channel (600 feet or 182.8 m, when both sides of the stream channel are included) or from the shoreline of a standing body of water. The complete text delineating critical habitat for each species follows. Hydrologic units (table 3) are those defined by the Department of the Interior (DOI), U.S. Geological Survey (USGS) publication, "Hydrologic Unit Maps, United States Geological Survey Water Supply Paper 2294, 1987", and the following DOI, USGS, 1:500,000 scale hydrologic unit map: State of Oregon, 1974; State of

Washington, 1974; State of Idaho, 1974 which are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the USGS publication and maps may be obtained from the USGS, Map Sales, Box 25286, Denver, CO 80225. Copies may be inspected at NMFS, Endangered Species Branch, Environmental and Technical Services Division, 911 NE 11th Avenue, room 620, Portland, OR 97232 NMFS, Office of Protected Resources, 1335 East-West Highway, Silver Spring, MD 20910, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(a) *Snake River Sockeye Salmon (Oncorhynchus nerka)* The Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) and including all Columbia River estuarine areas and river reaches upstream to the confluence of the Columbia and Snake Rivers; all Snake River reaches from the confluence of the Columbia River upstream to the confluence of the Salmon River; all Salmon River reaches from the confluence of the Snake River upstream to Alturas Lake Creek; Stanley, Redfish, Yellow Belly, Pettit, and Alturas Lakes (including their inlet and outlet creeks); Alturas Lake Creek, and that portion of Valley Creek between Stanley Lake Creek and the Salmon River. Critical habitat is comprised of all river lakes and reaches presently or historically accessible (except reaches above impassable natural falls, and Dworshak and Hells Canyon Dams) to Snake River sockeye salmon in the following hydrologic units: Lower Salmon, Lower Snake, Lower Snake-Asotin, Lower Snake-Tucannon, Middle Salmon-Chamberlain, Middle Salmon-Panther, and Upper Salmon. Critical habitat borders on or passes through the following counties in Oregon: Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla,

Wallowa in Wash Columbia Klickita Wahkial following Custer, Perce.

(b) *Snake Salmon (Oncorhynchus tshawytscha)* is design River fr the west jetty, On the Pea ington s River es proceedi of the C Snake l fluence stream habitat presentl cept rea falls (inc Dworsha Snake l salmon units: H Little S Lower Salmon, Snake-T Chamber Pahsime Middle Ronde, ical ha through egon: Gillium, nomah, Wallowa in Wash Columbia Klickita Wahkial following Blaine, Nez Perc (c) *Snake Salmon (Oncorhynchus tshawytscha)* connecting jetty (sc west en jetty, W



Wallowa, Wasco; the following counties in Washington: Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Pacific, Skamania, Wahkiakum, Walla, Whitman; and the following counties in Idaho: Blaine, Custer, Idaho, Lemhi, Lewis, Nez Perce.

(b) *SNAKE RIVER SPRING/SUMMER CHINOOK SALMON* (*Oncorhynchus tshawytscha*). Geographic Boundaries. Critical habitat is designated to include the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) and including all Columbia River estuarine areas and river reaches proceeding upstream to the confluence of the Columbia and Snake Rivers; all Snake River reaches from the confluence of the Columbia River upstream to Hells Canyon Dam. Critical habitat also includes river reaches presently or historically accessible (except reaches above impassable natural falls (including Napias Creek Falls) and Dworshak and Hells Canyon Dams) to Snake River spring/summer chinook salmon in the following hydrologic units: Hells Canyon, Imnaha, Lemhi, Little Salmon, Lower Grande Ronde, Lower Middle Fork Salmon, Lower Salmon, Lower Snake-Asotin, Lower Snake-Tucannon, Middle Salmon-Chamberlain, Middle Salmon-Panther, Pahsimeroi, South Fork Salmon, Upper Middle Fork Salmon, Upper Grande Ronde, Upper Salmon, Wallowa. Critical habitat borders on or passes through the following counties in Oregon: Baker, Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, Wasco; the following counties in Washington: Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Lincoln, Pacific, Skamania, Wahkiakum, Walla, Whitman; and the following counties in Idaho: Adams, Benewah, Clearwater, Idaho, Latah, Lewis, Nez Perce, Shoshone, Valley.

(c) *SNAKE RIVER FALL CHINOOK SALMON* (*Oncorhynchus tshawytscha*). The Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) and including

all Columbia River estuarine areas and river reaches proceeding upstream to the confluence of the Columbia and Snake Rivers; the Snake River, all river reaches from the confluence of the Columbia River, upstream to Hells Canyon Dam; the Palouse River from its confluence with the Snake River upstream to Palouse Falls; the Clearwater River from its confluence with the Snake River upstream to its confluence with Lolo Creek; the North Fork Clearwater River from its confluence with the Clearwater River upstream to Dworshak Dam. Critical habitat also includes river reaches presently or historically accessible (except reaches above impassable natural falls, and Dworshak and Hells Canyon Dams) to Snake River fall chinook salmon in the following hydrologic units: Clearwater, Hells Canyon, Imnaha, Lower Grande Ronde, Lower North Fork Clearwater, Lower Salmon, Lower Snake, Lower Snake-Asotin, Lower Snake-Tucannon, and Palouse. Critical habitat borders on or passes through the following counties in Oregon: Baker, Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla, Wallowa, Wasco; the following counties in Washington: Adams, Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Lincoln, Pacific, Skamania, Spokane, Wahkiakum, Walla, Whitman; and the following counties in Idaho: Adams, Benewah, Clearwater, Idaho, Latah, Lewis, Nez Perce, Shoshone, Valley.

[58 FR 68551, Dec. 28 1993 as amended at 63 FR 1393, Jan. 9, 1998 Redesignated and amended at 64 FR 14067, Mar. 23, 1999; 64 FR 57403, Oct. 25, 1999; 69 FR 18803 Apr. 9, 2004]

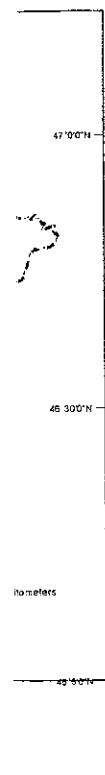
§ 226.206 [Reserved]

§ 226.207 Critical habitat for leatherback turtle.

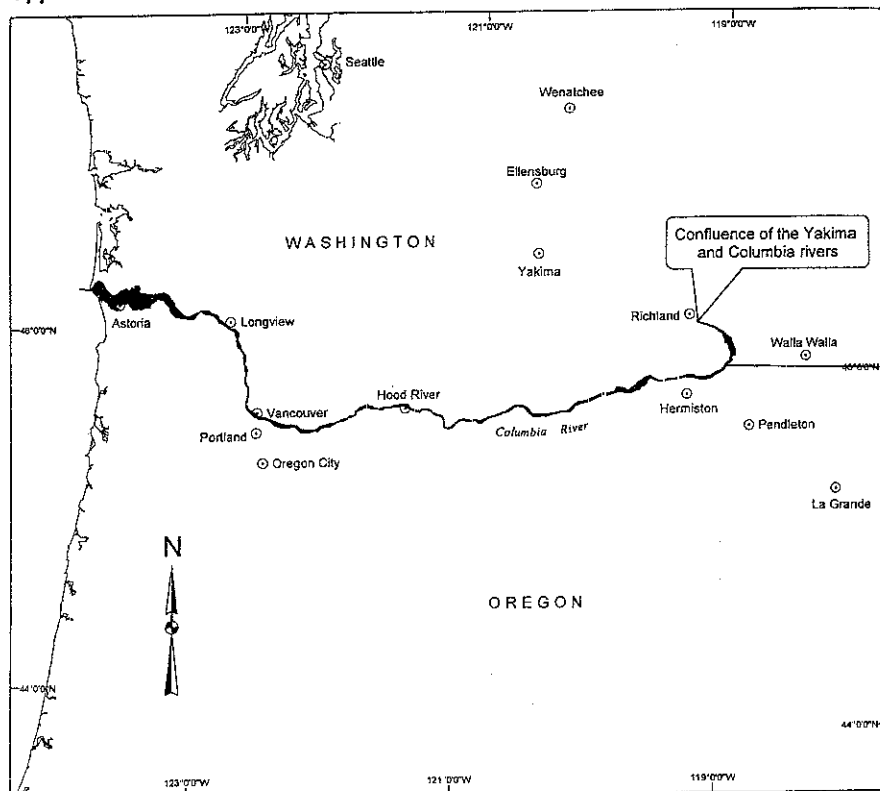
LEATHERBACK SEA TURTLE (DERMOCHELYS CORIACEA)

The waters adjacent to Sandy Point, St. Croix, U.S. Virgin Islands, up to and inclusive of the waters from the hundred fathom curve shoreward to the

SUBBASIN



Rearing / Migration Corridor for the Upper Columbia River Steelhead ESU



Legend

- Cities / Towns
- State Boundary
- Rearing / Migration Corridor

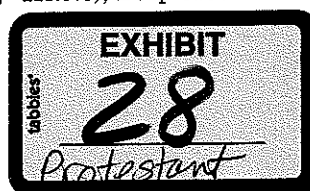
Upper Columbia River Steelhead ESU

Columbia River Corridor
The Columbia River Corridor is that segment from the mouth of the Columbia River at the Pacific Ocean upstream to the confluence of the Yakima River.

(q) Snake River Basin Steelhead (*Oncorhynchus mykiss*). Critical habitat is designated to include the areas defined in the following subbasins:

- (1) Hells Canyon Subbasin 17060101—
- (i) Snake River/Granite Creek Watershed

1706010101 Outlet(s) = Snake River (Lat 45.467, Long -116.554) upstream to end-point(s) in: Battle Creek (45.307, -116.697); Bernard Creek (45.387, -116.569); Brush Creek (45.275, -116.657); Bull Creek (45.329, -116.673); Deep Creek



(11) Lemhi Subbasin 17060204—(i) *Lemhi River/Bohannon Creek Watershed 1706020401*. Outlet(s) = Lemhi River (Lat 45 188, Long -113 889) upstream to endpoint(s) in: Bohannon Creek (45 189, -113 692); Lemhi River (45 098, -113 720).

(ii) *Lemhi River/Whimpey Creek Watershed 1706020402*. Outlet(s) = Lemhi River (Lat 45 098, Long -113 720) upstream to endpoint(s) in: Lemhi River (45 032, -113 662); Wimpey Creek (45 131, -113 678); Withington Creek (45 058, -113 750).

(iii) *Lemhi River/Kenney Creek Watershed 1706020403*. Outlet(s) = Lemhi River (Lat 45 032, Long -113 662) upstream to endpoint(s) in: Kenney Creek (45 087, -113 551); Lemhi River (44 940, -113 639).

(iv) *Lemhi River/McDevitt Creek Watershed 1706020405*. Outlet(s) = Lemhi River (Lat 44 940, Long -113 639) upstream to endpoint(s) in: Lemhi River (44 870, -113 626).

(v) *Lemhi River/Yearian Creek Watershed 1706020406*. Outlet(s) = Lemhi River (Lat 44 867, Long -113 626) upstream to endpoint(s) in: Lemhi River (44 778, -113 535).

(vi) *Peterson Creek Watershed 1706020407*. Outlet(s) = Lemhi River (Lat 44 778, Long -113 535) upstream to endpoint(s) in: Lemhi River (44 739, -113 459).

(vii) *Big Eight Mile Creek Watershed 1706020408*. Outlet(s) = Lemhi River (Lat 44 739, Long -113 459) upstream to endpoint(s) in: Lemhi River (44 692, -113 366).

(viii) *Canyon Creek Watershed 1706020409*. Outlet(s) = Lemhi River (Lat 44 692, Long -113 366) upstream to endpoint(s) in: Lemhi River (44 682, -113 355).

(ix) *Texas Creek Watershed 1706020412*. Outlet(s) = Texas Creek (Lat 44 6822, Long -113 3545) upstream to endpoint(s) in: Purcell Creek (44 5726, -113 3459), Texas Creek (44 5348, -113 3018).

(x) *Hayden Creek Watershed 1706020414*. Outlet(s) = Hayden Creek (Lat 44 870, Long -113 626) upstream to endpoint(s) in: Bear Valley Creek (44 796, -113 790); East Fork Hayden Creek (44 708, -113 661); Hayden Creek (44 726, -113 769); Kadletz Creek (44 761, -113 767); West Fork Hayden Creek (44 706, -113 768); Wright Creek (44 759, -113 794).

(12) Upper Middle Fork Salmon Subbasin 17060205—(i) *Lower Loon Creek Watershed 1706020501*. Outlet(s) = Loon Creek (Lat 44 808, Long -114 811) upstream to endpoint(s) in: Cabin Creek (44 742, -114 708); Loon Creek (44 552, -114 849).

(ii) *Warm Springs Watershed 1706020502*. Outlet(s) = Warm Spring Creek (Lat 44 653, Long -114 736) upstream to endpoint(s) in: Trapper Creek (44 504, -114 617); Warm Spring Creek (44 609, -114 481).

(iii) *Upper Loon Creek Watershed 1706020503*. Outlet(s) = Loon Creek (Lat 44 552, Long -114 849) upstream to endpoint(s) in: Cottonwood Creek (44 593, -114 679); East Fork Mayfield Creek (44 494, -114 700); Loon Creek (44 469, -114 923); Pioneer Creek (44 466, -114 873); South Fork Cottonwood Creek (44 563, -114 780); Trail Creek (44 506, -114 959); West Fork Mayfield Creek (44 473, -114 730).

(iv) *Little Loon Creek Watershed 1706020504*. Outlet(s) = Little Loon Creek (Lat 44 731, Long -114 940) upstream to endpoint(s) in: Little Loon Creek (44 615, -114 963).

(v) *Rapid River Watershed 1706020505*. Outlet(s) = Rapid River (Lat 44 680, Long -115 152) upstream to endpoint(s) in: Float Creek (44 546, -115 148); North Fork Sheep Creek (44 656, -114 997); Rapid River (44 551, -115 007); South Fork Sheep Creek (44 628, -114 988); Vanity Creek (44 500, -115 072).

(vi) *Marsh Creek Watershed 1706020506*. Outlet(s) = Marsh Creek (Lat 44 449, Long -115 230) upstream to endpoint(s) in: Asher Creek (44 374, -115 126); Banner Creek (44 291, -115 187); Bear Creek (44 490, -115 098); Beaver Creek (44 494, -114 964); Camp Creek (44 384, -115 144); Cape Horn Creek (44 333, -115 287); Knapp Creek (44 424, -114 915); Marsh Creek (44 329, -115 091); Swamp Creek (44 300, -115 175); Winnemucca Creek (44 479, -114 972).

(vii) *Middle Fork Salmon River/Soldier Creek Watershed 1706020507*. Outlet(s) = Middle Fork Salmon River (Lat 44 680, Long -115 152) upstream to endpoint(s) in: Boundary Creek (44 507, -115 328); Dagger Creek (44 498, -115 307); Elkhorn Creek (44 582, -115 369); Greyhound Creek (44 626, -115 158); Middle Fork Salmon River (44 449, -115 230); Soldier Creek (44 528, -115 201).

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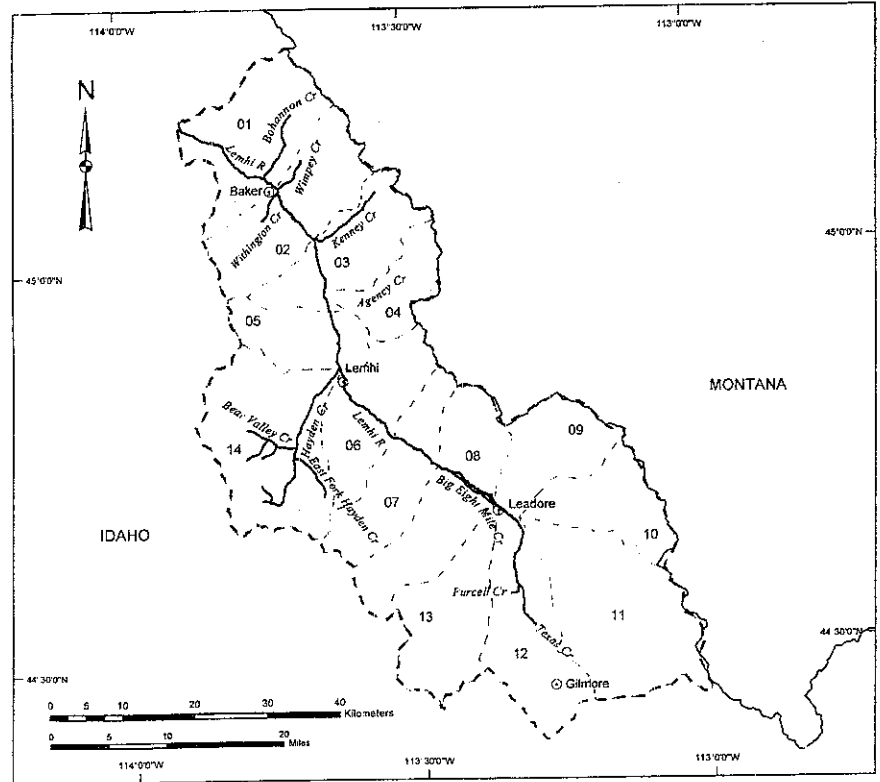


of Detail



Final Critical Habitat for the Snake River Basin Steelhead ESU

LEMHI SUBBASIN
17060204



Legend

- Cities / Towns
 - State Boundary
 - ~ Critical Habitat
 - - - Subbasin Boundary
 - - - Watershed Boundaries
- 01 - 14 = Watershed code - last 2 digits of 17060204xx

Area of Detail



Law Offices
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JAN 26 2007

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**Also Licensed in Utah & Colorado

January 24, 2007

COPY

~~I&I Reporting
525 Park Ave., Ste. 1E
Idaho Falls, ID 83402~~

Re: Deposition of F. James Whittaker

Dear Ladies & Gentlemen:

Enclosed is the original verification page for the F. James Whittaker deposition. If you have any questions, please feel free to contact this office at your convenience.

Yours very truly,



Kent W. Foster

Enclosure

c: Idaho Department of Water Resources
Bureau of Land Management
Ellsworth Angus Ranch
Lemhi Irrigation District
Idaho Dept. of Fish & Game
✓ David J. Barber

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VERIFICATION

STATE OF Idaho)
COUNTY OF Bernhi)

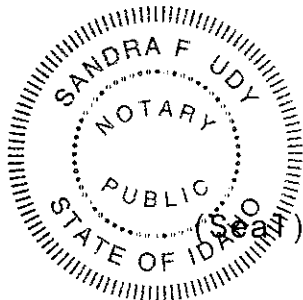
SS.

I, F. JAMES WHITTAKER, say that I am the witness referred to in the foregoing deposition, taken on January 5, 2007, consisting of pages numbered 1 to 111; that I have read the said deposition and know the contents thereof; that the same are true to my knowledge, or with corrections, if any, as noted.

Page	Line	Should Read	Reason
<u>59</u>	<u>5</u>	<u>Shoup gauge</u>	<u>shoot is wrong</u>
	<u>9</u>	<u>Shoup gauge</u>	<u>AREA reference</u>
<u>107</u>	<u>19</u>	<u>wolves</u>	<u>instead of sheep</u>

F. James Whittaker
F. JAMES WHITTAKER

Subscribed and sworn to before me this 23RD
day of January 2007, at LEADORE, Idaho.



Sandra F. Udy
Notary Public for Idaho
My Commission Expires 09/18/08

COPY

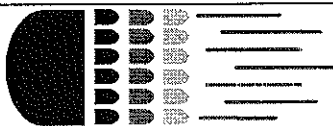
BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE
STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR)
PERMIT NO. 74-15613 IN THE NAME)
OF F. JAMES OR PAULA J. WHITTAKER)
_____)

DEPOSITION OF F. JAMES WHITTAKER

January 5, 2007, 1:31 p.m.

Idaho Falls, Idaho



T&T REPORTING

CERTIFIED SHORTHAND REPORTERS

COPY

REPORTED BY:

PREPARED FOR:

David J. Barber

Tina DuBose Gibson, RPR, CSR

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LAWYER'S NOTES

[illegible]

OF THE
STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR)
PERMIT NO. 74-15613 IN THE NAME)
OF F. JAMES OR PAULA J. WHITTAKER)

DEPOSITION OF F. JAMES WHITTAKER

January 5, 2007, 1:31 p.m.

Idaho Falls, Idaho

Tina DuBose Gibson, RPR, CSR

EXAMINATION

WITNESS: F. JAMES WHITTAKER
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Verification..... 110
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BE IT REMEMBERED that the deposition of F. JAMES WHITTAKER was taken by the attorney for the State of Idaho Department of Fish and Game at the office of Holden, Kidwell, Hahn & Crapo, located at 1000 Riverwalk, Idaho Falls, Idaho, before Tina DuBose Gibson, Court Reporter and Notary Public, in and for the State of Idaho, on January 5, 2007, commencing at the hour of 1:31 p.m., in the above-entitled matter.

A P P E A R A N C E S

For the Applicant:
HOLDEN, KIDWELL, HAHN & CRAPO, P.L.L.C.
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Also Present:
Tom Curet
Jeff Iutch
Allan Bittner
Roger Warner

1 (The deposition proceeded at 1:31 p.m. as follows:)
2
3 F. JAMES WHITTAKER,
4 produced as a witness at the instance of the State of
5 Idaho Department of Fish and Game, having been first
6 duly sworn, was examined and testified as follows:

EXAMINATION

9 BY MR. BARBER:
10 Q. Good afternoon, Mr. Whittaker. My name
11 is David Barber. I'm a Deputy Attorney General
12 representing the Idaho Department of Fish and Game in
13 this matter. Could you please state your name and
14 spell your last for the record?
15 A. My name is James Whittaker,
16 W-H-I-T-T-A-K-E-R
17 Q. And are you feeling well today?
18 A. I am.
19 Q. Great. Do you have any ailment or other
20 condition that would affect your ability to answer my
21 questions completely and truthfully today?
22 A. No.
23 Q. Have you taken any medicine or other
24 substance that could affect your ability to answer my
25 questions completely or truthfully today?

SHEET 2 PAGE 5

1 A. No
2 Q. Okay. I have some instructions for you.
3 The purpose of this deposition is not to trick you in
4 any manner. I simply want to create a record of your
5 most complete and truthful answer to my questions.
6 Therefore, if you do not understand a question,
7 please tell me, and I will try to rephrase the
8 question. The deposition is not intended to be a
9 marathon. If you need a break, please tell me, and
10 I'll try to accommodate you. Finally, the court
11 reporter is transcribing this deposition. Therefore,
12 you need to make an audible answer to my questions.
13 Nods of the head or other gestures create problems
14 for creation of an accurate record. Do you
15 understand my instructions?
16 A. I do
17 Q. Great. Where were you born, sir?
18 A. Missoula, Montana
19 Q. Okay. And did you graduate from high
20 school?
21 A. I did.
22 Q. Where?
23 A. Leadore.
24 Q. Okay. When did you move from Missoula,
25 Montana to Leadore?

PAGE 6

1 A. As soon as my mother could take me
2 there. I've been in Leadore, Idaho my whole life.
3 Q. Okay. And did you attend any colleges
4 after high school?
5 A. I went to Idaho State for a very short
6 stint. I didn't even complete a quarter, maybe six
7 weeks at the most.
8 Q. What subject areas were you taking at
9 that college?
10 A. At that time I just started to take some
11 business.
12 Q. I see. Okay. Have you ever been
13 deposed in the past, sir?
14 A. No.
15 Q. Okay. Have you ever been a witness in a
16 court proceeding?
17 A. No.
18 Q. Have you ever been a witness in an
19 administrative proceeding such as something -- a
20 hearing before the Idaho Department of Water
21 Resources?
22 A. Not really.
23 Q. When you say "not really," there's --
24 A. Well --
25 Q. -- indication there's something there.

PAGE 7

1 Can you at least tell the circumstances? I just want
2 to understand what was happening.
3 A. I was in another hearing of my own
4 and -- but I didn't really make any comment. I don't
5 remember.
6 Q. Was Mr. Foster an attorney representing
7 one of the protestants in that matter?
8 A. He was on the opposite side at that
9 time.
10 Q. That's what I thought. From looking at
11 the record, yes. Okay. Do you remember what the
12 water right was for that matter?
13 A. I don't.
14 Q. Who was the -- were you the applicant or
15 were you the protestant?
16 A. I was the applicant.
17 Q. And do you know who the -- recall who
18 the protestant was?
19 A. The Clark family.
20 Q. The Clark family.
21 And about when did that happen?
22 A. I think it started probably 1999, 2000,
23 somewhere in there.
24 Q. I see, okay. I want to read you
25 something, and then I want to ask you a question

PAGE 8

1 about it. Idaho Rule of Evidence 702 provides that:
2 "a witness qualified as an expert by knowledge,
3 skill, experience, training, or education may testify
4 thereto in the form of an opinion or otherwise." My
5 question to you is: Based on your knowledge, skill,
6 experience, training or education, do you consider
7 yourself an expert in any subject area?
8 A. I do as far as it comes to water in
9 Lemhi County as how the flows do.
10 Q. Okay.
11 A. I've been there my whole life and.
12 Q. Okay. Let me make sure I understand how
13 you would describe your area of expertise. Do you
14 consider yourself an expert in measurement of water?
15 A. No.
16 Q. Okay. Do you -- give me a little better
17 explanation of what the scope of your expertise is in
18 water in Lemhi County.
19 A. Well, I guess the scope of my expertise
20 is if you look at the basin as a whole, why, you've
21 got small narrow valleys coming down, and you have
22 Salmon at 4,500 feet elevation and Leadore at
23 6000 feet elevation. Pahsimeroi is similar in
24 elevation. And so it's only natural and common sense
25 that the high flow starts down at the lower end of

SHEET 3 PAGE 9

1 the valley and continues to build as it goes up the
2 valley. And as the summer warms up, why, it gets to
3 the higher elevations, and so all the tributaries
4 start flowing in. And so at that point in time, in a
5 normal year we have lots of water going down to
6 Lemhi, which I have some graphs there that confirm
7 that, that the flows there at L5 start previous to
8 the Big Timber Creek flows and they stay long after
9 the Timber Creek flows. Timber Creek is in pretty
10 high elevation and when it starts to flow and it gets
11 warm up there, why, it gets excessively high.
12 In 2003, according to that -- what I
13 gave to you there, done by the Bureau of Reclamation,
14 why, it went from a low of 17 cfs above where the
15 water is diverted into two main diversions to a high
16 of 295 cfs. That is -- creates a graph just like
17 this (indicating). And during this time frame, why,
18 we've got ten days to two weeks in there. And that's
19 how it normally happens on all the tributaries up
20 there, is that you have a graph that goes like that,
21 and so during that time frame, there's lots of water
22 for everybody.
23 It's above and beyond all the decreed
24 rights, their high water flows. And that amount
25 above there goes on down the river and else it's

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1 diverted out and put in the bank -- in the flood
2 plain so that it slows it up and goes on through the
3 summertime and it comes out cool all ready for your
4 fish.
5 It's just logical. Why would we want to
6 let all that high water go down the river? The power
7 company, the fish, the whole works benefit if that's
8 stored up there in the upper valleys.
9 Q. Okay. You said a lot of things, sir.
10 And one of my problems, of course, is creating a
11 record to where we can understand it later. And
12 certainly you made references to some geographic
13 points that, since I don't live in Leadore, I don't
14 have a clue where we're talking about. So I need to
15 back up a little bit. And I realize this is
16 commonplace to you and everything, but it isn't to
17 me. So have a little patience with me.
18 When you said at one point, Timber
19 Creek, were you making reference to Big Timber Creek
20 or Little Timber Creek or both, or what were you
21 referring to?
22 A. Big Timber Creek. But our ditch comes
23 out below the confluence of Big and Little Timber
24 Creek. Just below them, not very far. But it comes
25 out in the application, that ditch. We have other

PAGE 11

1 ditches that just come out of Big Timber Creek.
2 Q. Okay.
3 A. But this proposed one would come out
4 just below the confluence.
5 MR. BARBER: I'd like to have this marked as
6 the first Deposition Exhibit No. 1, if the court
7 reporter could do that.
8 And, Kent, here is one that you can look
9 at.
10 MR. FOSTER: Oh, thank you.
11 (Exhibit 1 marked.)
12 (Mr. Warner entered the proceedings.)
13 MR. BARBER: First off, I'd like to point
14 out that we've had a new person come in the room.
15 I'd like him to introduce himself to the court
16 reporter so that she knows.
17 MR. WARNER: Roger Warner, Idaho Department
18 of Water Resources. Idaho Falls.
19 MR. BARBER: Thank you, Roger.
20 Q. (BY MR. BARBER) Mr. Whittaker, I'm
21 going to hand you what's been marked as Deposition
22 Exhibit No. 1 and ask if you can identify that?
23 A. That's my revised application for
24 74-15613.
25 Q. And looking through this -- first off,

PAGE 12

1 can you look at every page to make sure it's a true
2 and correct copy, and if there's something extraneous
3 there, please point it out to me.
4 A. For some reason -- let's see. The map
5 is not very good, but it is -- appears to be true.
6 Q. Okay. So have you looked at all the
7 entire document, sir?
8 A. I have.
9 Q. And is it a true and correct copy, and
10 do you have any comments about the last two pages?
11 I'll ask a compound question there.
12 A. Well, the last two pages are really, I
13 guess, unclear. They're hard to look at, especially
14 if you didn't recognize the area and tell anything
15 about it.
16 Q. Were they attached -- better copies of
17 those, were they attached to your original
18 application?
19 A. Oh, yes, a lot better copies.
20 Q. Yeah. I can actually see something.
21 Okay. Let's go through this application. We'll
22 start on the first page, sir.
23 A. Okay.
24 Q. And I have to admit I'm confused about
25 some things. I'm going to ask you about Paragraph

SHEET 4 PAGE 13

1 No. 4, and I notice that the amount is stated in
2 Paragraph No. 4 as 7 cfs. And, yet, if I come down
3 to Paragraph 5, I see the number 7 cfs crossed out
4 and something written in -- 4.00 and someone's name
5 that I can't decipher. Can you help me out as to
6 what happened here?
7 A. I can. That is Dennis Dunn with the
8 Idaho Department of Water Resources that changed
9 that. And the reason for the change is they only
10 allocate you so much per acre, and I was above that
11 and would have to file that -- would have had to hire
12 a hydrologist to go out there and describe and figure
13 it all out why I needed an extra 3 cfs to irrigate
14 200 acres. So rather than go through that process,
15 why, yeah, I give him the go ahead to reduce that to
16 4 cfs.
17 Q. And so it should have been changed to 4
18 cfs in Paragraph 4 as well?
19 A. It should have.
20 Q. Okay. I'm going to hand you a pen. Why
21 don't you mark with the pen and change that to 4 and
22 put your initials by it, sir.
23 A. (Witness complies.)
24 Q. Okay. I'll take my pen back. Thank
25 you.

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1 A. Okay.
2 Q. Let's go on to the next page.
3 (Discussion off the record.)
4 THE WITNESS: You'll see Dennis Dunn's name
5 at the bottom of this. He's the one that changed
6 that.
7 Q. (BY MR. BARBER) Okay. Thanks for
8 pointing that out to me. And that's the bottom of
9 page 2 of the application, Deposition Exhibit No. 1;
10 is that correct, sir?
11 A. It is.
12 Q. Okay. Thank you.
13 Now, if you go to Paragraph 9 on the
14 second page where you have a legal description of the
15 permissible place of use, I note that the -- you have
16 200 acres shown there as a total place of use. Have
17 I read it correctly?
18 A. You have.
19 Q. And that the southeast southeast quarter
20 of Section 25, Township 16 north, Range 25 east, has
21 no -- is not indicated as within the place of use.
22 Have I read it correctly?
23 A. Let's see. Now, say that again. I'm
24 sorry. I didn't follow you.
25 Q. The southeast southeast quarter is not

PAGE 15

1 indicated as part of the place you use of Township 16
2 north --
3 A. No. There's just the five.
4 Q. Okay.
5 A. Five 40-acre parcels that's identified
6 there that makes up the 200 acres.
7 Q. Okay. Let's compare that to the next
8 page, sir, because it appears like you have marked as
9 being within the place of use and, again, I'll --
10 right here that the southeast southeast quarter is
11 part of the place of use. And maybe it's just a poor
12 copy. I don't know.
13 A. It come off. I don't know -- that isn't
14 there.
15 Q. Okay.
16 A. I think that -- the one quarter was
17 already marked because that was the BLM map, and on
18 mine, see, it shows that it's darker.
19 Q. Okay.
20 A. And I just filled in around it and
21 that's what made it -- this is a BLM range map that I
22 used, and they showed that parcel as being theirs.
23 They had a conflict. The previous owner built a
24 stack yard out there, and so I suspect that's why.
25 Q. Okay. And I -- I just wanted to clarify

PAGE 16

1 that there's no confusion on the application, that
2 you do not intend to put water on the southeast
3 southeast quarter of BLM land?
4 A. No.
5 Q. And you and I agree that southeast
6 southeast quarter of Section 25, Township 16 north,
7 Range 25 east is BLM; is that correct?
8 A. Okay. Say that again, once more.
9 Q. Southeast southeast quarter --
10 A. Right.
11 Q. -- of Section 25?
12 A. That's right.
13 Q. 16 north, 25 east?
14 A. Yeah, I agree.
15 Q. Okay. Good.
16 A. See, that doesn't show on this map here.
17 Q. I see that, and I wish I had a copy of
18 that map. It would be a lot easier to understand.
19 MR. FOSTER: I'll tell you what we can do
20 THE WITNESS: Just a minute. I've got the
21 answer right here. I think I've got two of these. I
22 do. There you go.
23 Q. (BY MR. BARBER) Okay. Well, thank you.
24 MR. BARBER: For the court reporter,
25 Mr. Whittaker has just handed me a orthophoto quad

SHEET 5 PAGE 17

1 with the legal description place of use shown on it
2 that I'd like to have marked as Deposition Exhibit
3 No 2
4 And I want to thank Mr. Whittaker for
5 that courtesy.
6 (Exhibit 2 marked.)
7 **Q. (BY MR. BARBER)** I'm going to hand you
8 back Deposition Exhibit No. 2, and maybe you can help
9 orient me a little bit here. And at the southern
10 portion of the place of use, is there a road, sir?
11 A No. Well, there is The highway --
12 **Q. Yeah.**
13 A Lee Creek Road goes right across there
14 **Q. That's what I wanted.**
15 A Yes, it does. That's Lee Creek Road.
16 **Q. And we have a -- some type of lighter**
17 **structure over here, and I'm going to have you circle**
18 **it. Is that a --**
19 A -- gravel pit.
20 **Q. That's a gravel pit?**
21 A Yeah.
22 **Q. And if you could write gravel pit on**
23 **there, that would help me in understanding.**
24 A. (Witness complies)
25 **Q. Okay. And is there any -- are there any**

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1 **other gravel pits on this map that you're aware of?**
2 A There might be one right here. It seems
3 like -- I think this is a gravel pit too. I'm not
4 plumb sure
5 **Q. Before you mark it -- I don't want you**
6 **to think I'm tricking you. Let me show you. I have**
7 **a BLM map here with me. Well, I've got another map**
8 **with me. Just give me a minute.**
9 MR. BARBER: For the court reporter, I'm
10 going to -- I'm showing -- handing to the witness for
11 him to look at west of Leadore, Idaho 7.5 minute
12 series, a topographic map, and ask him to look at
13 that area to see whether he can identify whether
14 there is a gravel pit.
15 **Q. (BY MR. BARBER)** Here is Section 25,
16 **sir.**
17 A So it would be right -- that's got to be
18 the one that's down here, I think. Let's see
19 There's a little gravel pit up this road just a
20 little ways here, but this map here -- but -- what's
21 the date on this map? Let's see, 1987 That --
22 well, that gravel pit would have been there then
23 I -- I don't know, but my other map indicates that
24 there -- I'm pretty sure there is a gravel pit right
25 there (indicating) Let's say about 80 percent sure

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1 there is.
2 **Q. Okay. Why don't you write on Deposition**
3 **Exhibit 2 as well.**
4 A (Witness complies.)
5 **Q. I want to back up to something that**
6 **we -- I got distracted from. It happens frequently**
7 **to me in these depositions, sir. I was asking you**
8 **about what you considered yourself an expert in. And**
9 **do you consider yourself an expert in soils regarding**
10 **irrigation of a particular soil?**
11 A. Well, I don't regard myself in that
12 aspect as professional, no
13 **Q. Okay. And, of course, Mr. Whittaker,**
14 **what I want to make sure you understand is that a**
15 **person can be qualified as an expert even though he's**
16 **not had a day of college. A person can be an expert**
17 **based on his knowledge, skill, experience, training**
18 **or education, and so I'm asking you to be broader**
19 **than that. Based on your knowledge, skill,**
20 **experience, training, et cetera, do you consider**
21 **yourself an expert in soils?**
22 A. Yes.
23 **Q. Okay. Can you explain the scope of that**
24 **expertise, sir?**
25 A. Well, I have a lifetime in agriculture

PAGE 20

1 production as far as crops and things in the Leadore
2 area. And I know that we have a big bar that comes
3 down through there, and on top that of bar, that soil
4 has got really good water-holding capacity. But you
5 get off that bar, it's not near as good. But it will
6 produce if it's irrigated. And so --
7 **Q. Is this area, sir, is it on top of the**
8 **bar or off the bar?**
9 A. Well, you might say this is off the bar.
10 **Q. It's off the bar?**
11 A. This isn't the best soil. It's got good
12 soil, though. It does. This is on the other side.
13 This is the draw I'm referring to down here. Most of
14 our property is six and a half miles west of here
15 **Q. Okay.**
16 A. Or about three miles west of here, six
17 and a half miles west of town. But there's a big
18 drainage. You can see it going right down here,
19 David. In this area, you might say, right through
20 here is off the bar. This is kind of on the bar,
21 again, but it's not as good as the bar out here
22 **Q. Okay. Now, Mr. Whittaker, I'm going to**
23 **have to back up a little bit. I understood what**
24 **you're saying, but someone that looks at the written**
25 **record two months from now necessarily may not**

SHEET 6 PAGE 21

1 understand what you're saying. You were making some
2 motion referring to Deposition Exhibit 2. So what
3 I'd like you to do is very briefly try to explain in
4 words. You were starting -- you were talking about a
5 drainage -- you were in the left-hand portion of
6 Deposition Exhibit 2 in the middle, and you went,
7 essentially, on a 45-degree angle up towards the top.
8 Is that a fair description of what you were showing
9 me?

10 A Yeah, that's close.

11 Q. Okay. Do you want to add anything else
12 to the description? I just want to make sure that we
13 create a written record so that everyone can
14 understand it later at some point in time.

15 A. I think that's accurate.

16 Q. Okay. And I want to go on further with
17 this issue --

18 A David?

19 Q. Yes, sir.

20 A. Could I just mark that map?

21 Q. Certainly, if you want to mark -- here,
22 I've got a green highlighter. Why don't you mark the
23 drainage you were talking about and then describe
24 what you've done.

25 A. On the northwest of the green line on

PAGE 23

1 clear record. Do you consider yourself an expert in
2 production of alfalfa or other types of hay used by
3 livestock?

4 A. I don't know that I'm an expert in it --
5 as where I'm really an expert, I feel, is in
6 livestock. That is my true expertise. There's
7 better farmers up there in our area than myself. But
8 I can look at a cow and tell if they're gaining or
9 not and what. We are livestock people. That's what
10 we've made our living in.

11 Q. Okay. I think you've almost answered
12 this, but I'm going to ask you again to make sure.
13 Do you consider yourself an expert in irrigated
14 agriculture?

15 A. I'd say yes.

16 Q. Okay.

17 A. Do you want me to elaborate on that?

18 Q. I would like you to elaborate.

19 A. Okay. In order to be efficient and cost
20 effective and be able to get things done in a
21 reasonable fashion and yet have a good product,
22 you've just about got to have pivot irrigation on a
23 lot of this. But we wouldn't do pivot irrigation on
24 this because the time frame is too short. We want to
25 soak that area up so it holds the moisture. Pivot

PAGE 22

1 the Exhibit No. 2, lays the drainage that I'm
2 referring that it's not much grows there when
3 irrigated. It's hard to irrigate, and it's not easy
4 to irrigate. That, on the east side, is relatively
5 good soil, and you can produce good crops there.
6 Q. Thank you. This is sort of a related
7 question. Do you consider yourself an expert, with
8 the definition we've talked about already, in forage
9 plants used by domestic livestock in the Lemhi River
10 Valley?

11 A. I do.

12 Q. Okay. So let me ask you with respect to
13 that, if we walked out in this area, could you
14 identify the species of grasses that grow out there?

15 A. I could identify the species like
16 alfalfa and orchard grass and bone grass.

17 Q. Well, what about the Bluebunch
18 wheatgrass?

19 A. And Bluebunch wheatgrass and Idaho
20 fescue, the ones that are common to our area.

21 Q. Okay. Do you know their scientific
22 name, sir?

23 A. No, I don't.

24 Q. Okay. I think you almost answered this,
25 but I want to ask it to make sure we have a good

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1 irrigation, you have to just keep it moving most of
2 the time on a normal year.

3 Some of the years we got enough rain and
4 you might shut it off, but you're really not ahead to
5 do that. But it's just about impossible to hire many
6 flood irrigators anymore. We have to hire some, but,
7 boy, they're getting harder and fewer between all the
8 time, and it's getting so family. But this
9 particular piece here lays right beside the road, and
10 so it wouldn't be a big deal for the family just to
11 irrigate that.

12 Q. Can you tell me what the problem is with
13 getting people that will flood irrigate?

14 A. Well, the main problem with flood
15 irrigation is -- a deal like this, in order to get in
16 and flood irrigate it, you have to change it three
17 times a day. You have to change it at six in the
18 morning, two in the afternoon and ten at night. And
19 there aren't many people that will do that
20 consistently day in and day out. You've got to push
21 it, and you've got to move it. You've got to change
22 it every eight hours. That's how this pays.

23 Q. What you described to me is a great deal
24 of labor involved in getting irrigation to work in a
25 parcel such as the permissible place you used for

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1 this application. Is that a fair summary, sir?
 2 A. That's a fair summary, and I'm a person
 3 that work hasn't ever hurt.
 4 Q. Yeah. Let me go to a couple of other
 5 areas. Do you consider yourself an expert in the
 6 subject of fisheries?
 7 A. No.
 8 Q. Do you consider yourself an expert in
 9 the subject of endangered or threatened species in
 10 the Lemhi River Valley?
 11 A. No.
 12 Q. Okay.
 13 A. But I did read in that -- one trout
 14 magazine that -- and I think it was Petit Lake that
 15 99 percent of the kill of salmonoid was done by the
 16 bull trout. And I'm wondering how come we're pushing
 17 bull trout if they eat all our salmon.
 18 MR. BARBER: I'm going to ask you to mark
 19 this as the next deposition exhibit in line.
 20 And, Kent, I'll hand you a copy.
 21 (Exhibit 3 marked.)
 22 Q. (BY MR. BARBER) Okay. Great. I'm
 23 going to hand what has been marked as Deposition
 24 Exhibit No. 3. It's entitled Transfer of Water
 25 Right, Transfer No. 4071. Would you take a look at

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1 that. And I ask you whether you've ever seen that
 2 document before, or a copy of it?
 3 A. I have. That is ours, and this is the
 4 water that was transferred off the property that we
 5 are now discussing, and that was transferred off in
 6 1993 in April.
 7 Q. And is this a true and complete copy?
 8 Go through it and make sure it's got everything there
 9 that's supposed to be, and if it's not, we'll try to
 10 get it figured out. And certainly the copying job on
 11 the map leaves a lot to be desired there,
 12 Mr. Whittaker. I realize I have that problem, but
 13 that's the best copy I had.
 14 A. It looks true. It's kind of hard to
 15 confirm without looking at a map, specifically, but I
 16 assume it's from the water department; it's the same
 17 one I had.
 18 Q. And, sir, I'm not trying to trick you.
 19 I went over the IDWR's main offices and looked
 20 through their files until I found that, and I made an
 21 attempt to get a true and correct and complete copy,
 22 but you're the expert about it, not me. And so I
 23 thought I'd ask you.
 24 A. Like I say, I assume the land
 25 descriptions are right, if that's where it come from.

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1 Q. Okay.
 2 A. That would be my assumption, yes.
 3 Q. Okay. Now, the 200 acres that is the
 4 proposed place of use under Application For Permit
 5 No. 74-15613, approximately when did you acquire that
 6 property?
 7 A. Let's see. I'm sorry. State that,
 8 again.
 9 Q. Real simple question. When did you
 10 acquire the place of use? This area, this land?
 11 A. Oh, 1989.
 12 Q. 1989?
 13 A. Uh-huh.
 14 Q. And so from 1989 to 1993, you evidently
 15 irrigated this 200 acres that are shown in Deposition
 16 Exhibit No. 2 --
 17 A. We did.
 18 Q. -- with the two water rights that are
 19 described in that transfer that you moved off in
 20 1993; is that right?
 21 A. That's true.
 22 Q. Now, the -- what I want to understand is
 23 what were you doing with the property in 1989 and
 24 1990? Was all of this land irrigated pasture? Was
 25 it alfalfa land? What was it?

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1 A. Well, previous to us, you can see that
 2 they'd had hay meadows and things out there. There's
 3 some old maps of loose hay stacks and things. But I
 4 can remember them, but I wasn't able to secure any of
 5 those. But this ground here, why, they hayed part of
 6 it and they pastured part of it. And my recollection
 7 was -- is that they produced a 150 ton of hay on
 8 this, plus the pasture, and I don't know how much
 9 pasture they got out of it. But they had let the
 10 farming -- they were lax on farming to say -- they
 11 didn't believe in farming until they worked around me
 12 and was convinced otherwise. They would come in and
 13 harvest some of our grain and things, and they could
 14 see the increased production. But this was pretty
 15 well depleted at that time. It still produced good
 16 pasture and some hay, but
 17 Q. And you used the preposition "they." I
 18 have no idea who they is. Who are they? Who had it
 19 before you?
 20 A. It was Chuck Shiner and Beverly Shiner.
 21 Q. Okay. And those are the people that
 22 sold you the property?
 23 A. They are.
 24 Q. Okay. Do you know how long they owned
 25 the property?

SHEET 8 PAGE 29

1 A. They would have had to have owned it –
 2 I'm just guessing, but I'm saying 12 to 15 years
 3 anyway
 4 **Q. Okay. And –**
 5 A. Maybe longer. Probably longer than
 6 that
 7 **Q. And how long had you observed their**
 8 **farming of this land out there during that 12 to 15**
 9 **years?**
 10 A. Well, the whole time
 11 **Q. And is it your statement that the**
 12 **farming during that 12 to 15 years was, quote, pretty**
 13 **lax?**
 14 A. Well, it was. And especially on this
 15 particular piece of ground. We bought another piece
 16 of ground from them in the same transaction and
 17 they'd started farming up on it and it was quite a
 18 lot better shape. There was – we didn't have to
 19 reform it
 20 **Q. Okay. So in terms of the hay they cut,**
 21 **is this just meadow hay that was native grasses that**
 22 **they cut, or was it alfalfa? Or what was it?**
 23 A. This is alfalfa. There's still some old
 24 plants that's left there yet. It's unbelievable, but
 25 there's a few. Not a lot, but there's a few

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1 scattered through there.
 2 **Q. When you acquired the property in 1989,**
 3 **did you cut hay off of it, or did you just put it in**
 4 **pasture or what was it? What did you do with it?**
 5 A. We just pastured it
 6 **Q. Was there enough alfalfa at that point**
 7 **in time to create a problem of bloat with your**
 8 **cattle?**
 9 A. There was
 10 **Q. I see.**
 11 A. It doesn't take very much if it's that
 12 high (indicating)
 13 **Q. Yeah, I've had that experience.**
 14 **So you just pastured it. Do you have**
 15 **any recollection of just how many cattle you had on**
 16 **there and how long you had them on there, et cetera?**
 17 A. I don't know. To the best of my
 18 knowledge, it seemed to me like we had somewhere –
 19 and, again, this is – I guess a good estimation is
 20 somewhere – 120 to 150 at close to a month to begin
 21 with, somewhere. And that might be – probably
 22 closer to 120 during that three years, something like
 23 that
 24 **Q. And when would you put them on the**
 25 **property?**

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1 A. Oh, normally it would be like somewhere
 2 very tail end of June to the first of July, first
 3 part of July. Normally first of July because right
 4 after we bought the property – it lays kind of down
 5 out of the snow a lot more than our home place, and
 6 so as soon as we get – we have one bunch of lead
 7 cows that we need to build at 220 to go on a certain
 8 BLM allotment. And so we put that 220 – that's
 9 cows, number 1 – every year down there and we feed
 10 them from, oh, I'm going to say the 25th of March
 11 until the 10th, 15th of May. We can go on the BLM
 12 permit the 15th of May, and we take those cows either
 13 home and haul them up, or we drive them up –
 14 **Q. Okay.**
 15 A. – depending on the year and conditions
 16 and things.
 17 **Q. And so you've had cattle there, and I**
 18 **assume –**
 19 A. We're cheating off late, so it's
 20 probably end of July before alfalfa would be ready to
 21 be eaten.
 22 **Q. I see. So in other words you've had to**
 23 **allow the alfalfa to grow from the middle of May to**
 24 **the end of June to have enough forage to put cattle**
 25 **on there is what – I understood you correctly?**

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1 A. That's right. That's right.
 2 **Q. Okay. So you put them in there. Let's**
 3 **say it's the – July 1st you put them in there. How**
 4 **long would you leave them in there?**
 5 A. Oh, anywhere from two weeks to a month,
 6 depending on the year, if we got additional rain and
 7 something like that. But the first – like I say,
 8 those first years when we irrigated, it was pretty
 9 good. It was pretty good pasture. It was.
 10 **Q. So when you got done with that, what did**
 11 **you do with the cattle? Did you put them someplace**
 12 **else or what?**
 13 A. Oh, yeah. We put them someplace else
 14 We got lots of places to put cattle.
 15 **Q. And so what happened to the property**
 16 **after you removed those cattle?**
 17 A. It was idle until the following spring
 18 when we put cows back down there, again
 19 **Q. Okay. So do cattlemen use the phrase**
 20 **AUM?**
 21 A. That's correct
 22 **Q. And that refers to animal unit month?**
 23 A. It does
 24 **Q. So if I've understood you correctly, you**
 25 **are, in terms of pasture for this, you're –**

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1 depending upon when you put them on and take them
2 off, et cetera, and the quality of the forage in the
3 year -- you're getting between 60 and 120 AUMs. Is
4 that a fair conclusion from what you've said?

5 A Oh, I think when it was irrigated, why,
6 we'd get possibly a hundred every year, probably.

7 Q. A hundred AUM every year?

8 A Uh-huh. I think we was getting that
9 Sometimes we came back. We might not get it
10 immediately right there, but on a good year, we might
11 graze it off and then hit it again a little later

12 Q. So you have done that. You've put them
13 back on there at some point in the past?

14 A. We did during those first four years
15 We haven't since because the longer it goes, now
16 there isn't anything there. It's not worth going
17 after.

18 Q. Yeah. The -- so tell me about your
19 diversion on Big Timber Creek. The -- what was the
20 diversion like when you acquired the property in
21 1989? You've got some pictures with you?

22 A. Yeah. They're fresh as this morning

23 Q. Oh, they are?

24 A. Yeah

25 Q. Okay.

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1 what we're referring to this ditch as is the Clark
2 ditch; is that correct?

3 A. Yeah. It's kind of ironical. But this
4 place locally is referred to as the Clark place.

5 Q. Okay. And when you say "this place,"
6 you're talking about the 200 acres that is shown on
7 the Deposition Exhibit 2?

8 A. Yeah. This was actually Lloyd Clark's
9 father's place, Kent, to clarify that.

10 Q. Okay. And so have you walked down the
11 Clark ditch from the head gate all the way down to
12 the permissible place of use?

13 A. I don't have time.

14 Q. Okay.

15 A. But I've ridden a motorcycle or
16 four-wheeler down it.

17 Q. Okay. So you've gone down it. It's a
18 question as to how you got down there. Okay.

19 When would you have first done that?

20 A. Oh, I would have done that in 1989

21 That's one of the first things you do if you're flood
22 irrigating, is make sure you get all your water.

23 Q. And so did you have to repair your ditch
24 when you did that in '89?

25 A. We did.

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1 A. When we got the property it had a wooden
2 head gate, and so -- it's kind of hard to see, but
3 this is the head gate. It's still there in
4 existence. It's a metal heavy gate. And I called
5 the builder up to see what that head gate was worth
6 this morning, and he said it was 1,800 bucks if he
7 built it.

8 Q. So let me make sure I understand what
9 has happened. When you acquired the property in
10 19 -- did I understand --

11 A. -- 1989.

12 Q. -- 1989, it was a wood head gate.

13 A. Right.

14 Q. And you tore that out, and in 1989 you
15 put in a metal head gate.

16 A. I don't know that we did it in 1989. I
17 think we might have went a couple years before we did
18 that. I'm sure we didn't do it in '89; it would have
19 been one to two years after that.

20 Q. So perhaps 1991 is when you did that?

21 A. Perhaps, yeah.

22 Q. Okay. Now, let's assume that I walk
23 down this -- let me back up. The picture that you've
24 handed to me to look at has a notation on it that
25 says: "Our Clark ditch headgate, 1/5/07." So that's

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1 Q. How many places did you have to fix?

2 A. Oh, I'm going to say four or five,
3 probably.

4 Q. Okay. And I have a hard time with
5 respect to dimensions. Can you tell me how wide the
6 ditch is and how deep it is, et cetera? Give me some
7 idea about that?

8 A. Well, the ditch is probably, like,
9 3 feet wide and probably, somewhere, 18 inches deep
10 with, like -- that's level with the ground with maybe
11 a foot bank on the side.

12 Q. Okay. So have you ever had an engineer
13 measure the hydraulic capacity of the ditch?

14 A. No, we haven't. But I couldn't read --
15 our water master hasn't had real good records. I
16 don't know if there's been a problem that way, and so
17 I couldn't secure anything. But I'm sure we had high
18 water beyond the 6 and 8 -- the 7. We probably had
19 4- or 500 inches of water in there in '88, '89. And
20 I'm sure we did, again, in 1995, even though we
21 didn't have a water right there at that point in
22 time, why, we diverted water in that ditch.

23 Q. Okay. So I want to make sure what has
24 happened. So you cleaned the ditch in '89?

25 A. Right.

1 Q. And have you had to clean the ditch any
2 other times after that?
3 A. Yeah. We cleaned that ditch once --
4 after we was, you might say, done. We anticipated we
5 was going to put water in that thing again. And,
6 like I say, the moratorium come on, and we was unable
7 to do that.
8 Q. Okay. Well --
9 A. The ditch is, you might say, has been
10 cleaned. It's been years ago and really hasn't had
11 that much water in it.
12 Q. You put two other pictures on the table.
13 May I look at them, sir?
14 A. Yes.
15 Q. Okay.
16 A. This one here -- this is that same ditch
17 where it crosses the road, there. You can see the
18 ditch pretty good. And here is the neighbors' ditch
19 adjacent to it. And this had water in it every year,
20 and I don't think you can tell any difference in
21 them. They're both existing ditches.
22 Q. Okay.
23 A. The ditch has been there over a hundred
24 years, now.
25 Q. Okay. I want to go off the record for a

1 (Exhibit 4 marked.)
2 Q. (BY MR. BARBER) And this document has
3 been marked as Deposition Exhibit No. 4. Let me
4 explain what this is to you, sir. Again, I brought
5 the seven and a half minute map for you to look at,
6 but, essentially, what I did is I went to one of
7 these computer mapping programs and had this small
8 portion of this larger topographic map printed out on
9 a computer. But if you want to, you can certainly
10 compare the two -- why don't you -- and make sure
11 that you feel comfortable with what you're looking
12 at. If you can see, there's this prominence right
13 here, and it shows up in the bottom of part of the
14 map.
15 A. Right here?
16 Q. Yes.
17 A. All right.
18 Q. It allows you to get oriented, I think.
19 A. Okay. I'm oriented, I think.
20 Q. Okay. Well, good. Now, the -- what has
21 been marked as Deposition Exhibit No. 4 is -- shows
22 Big Timber Creek and the confluence of Little Timber
23 Creek in the far lower right-hand corner; is that
24 correct?
25 A. That's correct.

1 minute.
2 (Discussion off the record.)
3 Q. (BY MR. BARBER) Mr. Whittaker, we're
4 back on the record. We're going to continue while
5 those copies are being made. The -- so I want to
6 make sure I understand what's happened with this
7 ditch, et cetera. And I believe you've already
8 testified you put in a new head gate in about, best
9 guess, somewhere around 1991?
10 A. '91, '92, somewhere in there.
11 Q. And that you cleaned the ditch and made
12 some repairs in 19 --
13 A. -- 1989.
14 Q. -- in 1989.
15 And do you have a recollection of
16 whether you made any repairs on the ditch in 1990?
17 A. I'm not for sure, no.
18 Q. What about in 1991?
19 A. I can't tell you the date, but there's a
20 place where it crosses another ditch that we had some
21 trouble with. We had -- about had to fix it every
22 year, as I remember.
23 Q. Okay. Let's get to that, then. I'm
24 going to hand you this map to be marked as the next
25 deposition exhibit.

1 Q. Okay. Now, I proceed northeast on Big
2 Timber Creek, and there are some markings that
3 appears to be a diversion, et cetera. And frankly
4 I'm confused about this. Can you explain to me about
5 how those two different diversions occur out of Big
6 Timber Creek that are shown on the map?
7 A. Well, one belongs to the neighbor that I
8 was talking about. That's the picture of the ditch I
9 took. It's the further ditch south. The ditch just
10 north of it, they run parallel northwest from Timber
11 Creek. The one on the further north is ours.
12 Q. Okay. And so you are down grading of
13 the other ditch; is that correct?
14 A. Yes.
15 Q. Okay.
16 A. Anytime the other ditch plugs up or
17 something, why, we collect that water and run it down
18 and irrigate.
19 Q. I see. Now, the point of diversion that
20 you showed me in the picture that's being copied
21 right now, that point of diversion only diverts or --
22 let me go back to 1990 -- only diverted the two water
23 rights that you owned; is that correct?
24 A. Plus flood water.
25 Q. Plus flood water?

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1 A. Right.
2 Q. Okay. So what I'm trying to understand
3 is: Did anyone else have use of your ditches in
4 addition to you? Any other person with a water right
5 holder?
6 A. No.
7 Q. Okay. And this other ditch you've
8 talked about, I believe that's to the Purcells?
9 A. It is.
10 Q. That's to the south and up grading of
11 yours. Does that ditch come out at a separate point
12 of diversion on Big Timber Creek?
13 A. It does.
14 Q. And about what's the distance between
15 the one diversion and the other?
16 A. Probably like -- I don't know. It's
17 been a while, but I'm going to say somewhere between
18 5- and 800 feet.
19 Q. Okay.
20 MR. FOSTER: 500 and 800
21 THE WITNESS: Yeah. Somewhere between 5-
22 and 800 feet.
23 MR. FOSTER: Okay.
24 THE WITNESS: Probably.
25 Q. (BY MR. BARBER) Now, I'm going to give

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1 you my green marker, again. Now, can you mark --
2 essentially highlight your ditch from where it takes
3 off from Big Timber Creek over to the end of the
4 ditch? And you're highlighting that in green, sir.
5 A. (Witness complies.)
6 Q. Okay. If I could look at Deposition
7 Exhibit 4 -- and I'll have my green pen back. I'm
8 going to hand you back Deposition Exhibit No. 4, and
9 I have some questions for you about some of these
10 waterways that are shown on Deposition Exhibit No. 4
11 that cross the green line from south to north. Can
12 you explain what those are? Are those ditches? Are
13 they water courses?
14 A. There's actually only one that crosses
15 three ditches, it looks like, there. And it's this
16 kind of a straight line here, this ditch that runs
17 from south to north down here to this property. But
18 you can see they've got flumes marked three different
19 places, there.
20 Q. Okay. Why don't we --
21 A. And it does cross all three of them.
22 Q. I've run out of my colored markers.
23 MR. BARBER: Do you per chance have a
24 different color, Kent? If I could impose upon you
25 THE WITNESS: I've got black.

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1 MR. BARBER: That covers up two much
2 THE WITNESS: Okay.
3 MR. BARBER: Thank you, Counselor
4 MR. FOSTER: Sure
5 Q. (BY MR. BARBER) Why don't we take a red
6 one and mark the water course that you've just
7 described?
8 A. The one that runs from south to north?
9 Q. Yes. The one with the flumes.
10 A. Okay.
11 Q. Okay. Now, I'm going to point to a blue
12 line on Deposition Exhibit No. 4 and ask you to tell
13 me what this is, this line right here. What is that?
14 Do you know?
15 A. I think it's just a draw, just the
16 bottom of a draw.
17 Q. Unnamed water courses?
18 A. Yeah.
19 Q. Okay. Now, you notice there are several
20 other unnamed water courses there as well?
21 A. But that's one reason I say there aren't
22 many years that there isn't water in that ditch
23 sometime for at least a while, whether it's overflow
24 from him or flood water coming down from melt or
25 what.

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1 Q. Okay. But if water were in your ditch
2 because of those unnamed water courses, it wouldn't
3 be because of Big Timber Creek. It would be
4 because --
5 A. Well, other than from that one ditch, it
6 would be from Big Timber Creek. But it wouldn't be
7 measured in the ditch. That's true.
8 Q. Okay.
9 A. After 1995. It was measured in the
10 ditch at 1995.
11 Q. Okay. What I'm trying to do is sort of
12 get the evolution, the dates, what's happened with
13 the ditch over time. And so you think you've at
14 least repaired the ditch at least once a year during
15 the years that you had the water rights for the 200
16 acres because of a problem --
17 A. This flume right here.
18 Q. -- with the flume that you've marked in
19 red on Deposition Exhibit No. 4. Have I summarized
20 that correctly?
21 A. Yes.
22 Q. Okay. Now, other than that maintenance,
23 what other maintenance that you have -- do you recall
24 of that ditch from the time period of 1989 to 1993?
25 A. Well, we'd check it every year and go

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1 through it.
 2 **Q. Okay.**
 3 A And usually that -- in the spring, a lot
 4 of times, that involves just driving along with a
 5 backhoe. There's kind of a road there on part of it,
 6 and just drive along and look at it.
 7 **Q. Okay. So when was the last time that**
 8 **you went along the entire ditch from the beginning to**
 9 **the end?**
 10 A. I'm not sure, but it was after 1993. I
 11 had a grader, and I had one of the employees clean
 12 that ditch out.
 13 **Q. Okay.**
 14 A. It was probably, like, '94, something
 15 like that, '94, '95. It was probably actually '96.
 16 We was probably anticipating the water that we had.
 17 It was probably 1996 because 1995 we had a tremendous
 18 amount of water up there. My uncle actually drowned
 19 there at the Carey Act Dam that year. And that's why
 20 I remember that so vividly. There was just water
 21 everywhere. You just couldn't keep it out. And so
 22 I'd say that we cleaned the ditch in 1996.
 23 **Q. Okay. Now, let's take you to the --**
 24 **1993. You've got the transfer approved. On the --**
 25 **at the diversion point on Big Timber Creek, after the**

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1 **transfer was approved, did you divert any water into**
 2 **this ditch from Big Timber Creek?**
 3 A. I don't think we did in '93 because we
 4 had a drought. We might have prior. We were late
 5 getting our crops in and getting the pivot going, so
 6 we probably did in '93. We were a little slow, so we
 7 probably diverted the water there for a time being
 8 and then put it out. But I honestly don't remember
 9 that.
 10 **Q. Okay. What about 1994? Did you divert**
 11 **any water into the ditch?**
 12 A. Probably not. As I remember, that was
 13 another drought, looking at my records last night.
 14 **Q. Okay. What about in 1995?**
 15 A. No doubt, we had full, all it would
 16 hold, and we probably washed part of it out.
 17 **Q. So you diverted in 1995?**
 18 A. We did.
 19 **Q. Okay. And what about 1996? I think**
 20 **you've partially explained that, but let's go forward**
 21 **with it. What happened in '96?**
 22 A. Well, in 1996 we cleaned the ditch
 23 And, again, I can't be sure that that was the year.
 24 Somewhere between '96 and '99, in that time frame,
 25 the water master was told by the Idaho Department of

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1 Water Resources not to turn water in that ditch
 2 anymore.
 3 **Q. Uh-huh.**
 4 A. Somewhere in that time frame.
 5 **Q. Okay.**
 6 THE WITNESS: Oh, they actually turned out
 7 pretty good.
 8 MR. BARBER: Kent, can you give me a bill
 9 for that? I'll get you paid.
 10 MR. FOSTER: Sure
 11 MR. BARBER: Okay. We'll get that taken
 12 care of.
 13 MR. FOSTER: I think I had her make five
 14 extras.
 15 MR. BARBER: Okay. That's great.
 16 **Q. (BY MR. BARBER) Let's continue with**
 17 **this. So 1996 was no more diversions? Did I**
 18 **understand you correctly?**
 19 A. I'm saying somewhere between '96 and
 20 '99, for some reason, my records aren't real accurate
 21 in that time frame whether we had a drought, or when
 22 that turned off --
 23 **Q. Okay.**
 24 A. -- and the water masters can't confirm
 25 it either. So I can't actually say. But sometime

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1 between '96 and '99 the water master told us that we
 2 couldn't divert water in that ditch anymore.
 3 **Q. Okay. So after that point in time, have**
 4 **there been any diversions into the ditch, that you're**
 5 **aware of?**
 6 A. No.
 7 **Q. Okay. And has there been any water in**
 8 **the ditch after -- whenever that cutoff was?**
 9 A. Not through the head gate.
 10 **Q. Okay. Has there been any water in the**
 11 **ditch by other means?**
 12 A. There has from the ditch that's up
 13 ground from it.
 14 **Q. Okay. And so we get this --**
 15 A. And melt runoff in the spring comes down
 16 and runs in there too.
 17 **Q. Okay.**
 18 A. But, usually, that's too early to
 19 irrigate with a lot of times, but there's water
 20 there.
 21 **Q. Okay. So let's just -- so we've got**
 22 **nothing after 1999 diverted from the creek, nothing**
 23 **in 2000; is that correct?**
 24 A. That's correct.
 25 **Q. And nothing in 2001?**

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1 A That's correct.
 2 Q. 2002?
 3 A. There's --
 4 Q. Nothing?
 5 A. There hasn't been anything diverted --
 6 Q. Okay.
 7 A. -- through that head gate since 1999.
 8 Q. Okay. Now -- okay. We've got that.
 9 With respect to the maintenance of the
 10 ditch, I believe the last maintenance you described
 11 was the cleaning of 1996. Has there been any
 12 maintenance of the ditch after that in '96 to the
 13 present?
 14 A. No.
 15 Q. Okay. Now, do you remember what year
 16 was the last time that you traveled the entire
 17 distance from the head gate all the way down to the
 18 Place of Use For Water Right, Application 74-15613?
 19 A. I probably actually looked at that
 20 probably -- I think I had some reference to it in
 21 1998 anyway --
 22 Q. Okay.
 23 A. -- that I traveled and looked and I
 24 think, at that time, I was contemplating another
 25 transfer into that ditch.

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1 Q. Okay. So are you aware of any physical
 2 problems with that ditch from the point of diversion
 3 all the way down to the place of use?
 4 A. There where the flume is, since it
 5 hasn't had any maintenance, why, we need to repair
 6 that area. But the rest of the ditch shouldn't need
 7 anything.
 8 Q. Okay. We have --
 9 A. But the new owner of the property that
 10 has that ditch, I don't think they put water -- they
 11 haven't had water in that ditch, now, for several
 12 years. They transferred it. So...
 13 Q. Okay. You say "that ditch," is that the
 14 other ditch that's upstream up grading of yours? Is
 15 that what you're talking about?
 16 A. This is the one that runs -- I'm talking
 17 about this ditch right here.
 18 Q. Oh, the flumes. With the flumes?
 19 A. With the flumes.
 20 Q. Okay. Thank you.
 21 What's that person's name?
 22 A. That person's name was Kermit Purcell.
 23 It's now Carl Tyler.
 24 Q. Okay. Now, earlier during this
 25 deposition, there was -- you had showed me some

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1 pictures, and we have since had copies made of those
 2 pictures. I'm going to have one of those copies
 3 marked as a deposition exhibit.
 4 (Exhibit 5 marked.)
 5 Q. (BY MR. BARBER) Mr. Whittaker, I'm
 6 going to show you what's been marked as Deposition
 7 Exhibit No. 5 and ask you to compare that Deposition
 8 Exhibit No. 5 with the three photos that you showed
 9 me earlier that are in front of you.
 10 A. They're copies of them.
 11 Q. Are they pretty good copies?
 12 A. They're pretty good copies.
 13 Q. Okay, good. Now, so that we can know
 14 what we're talking about, I'm going to hand --
 15 MR. FOSTER: Can I have one of those?
 16 MR. BARBER: Absolutely.
 17 MR. FOSTER: Thank you.
 18 MR. BARBER: You're certainly welcome.
 19 Q. (BY MR. BARBER) I'm going to hand you a
 20 pen and have you just mark in the bottom right-hand
 21 corner of each one of them, A, B or C so that we can
 22 make a easy reference to it. I've given you two
 23 pens, I see.
 24 A. Yeah.
 25 Q. Just put it actually on the picture,

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1 like, A --
 2 A. Okay. A, B and C.
 3 Q. Okay, good. Now, with respect to the
 4 picture that you have marked as A, you have described
 5 that as a "Culvert under Coleman Road where ditch
 6 runs 1/5/07 our Clark." Now, on Deposition Exhibit
 7 No. 2, can you mark with an A in red where that is?
 8 Does it show up on there?
 9 A. No.
 10 Q. It doesn't show up?
 11 A. Oh, just a minute. Maybe it does. It
 12 does. Okay. Now, let's see. You want me to mark A.
 13 Q. Yeah. Now, here is a red pen. I can
 14 see it a lot better that way.
 15 A. Okay.
 16 Q. Okay, good. Now, the picture that
 17 you've marked as B, does that show up on Deposition
 18 Exhibit 2?
 19 A. No.
 20 Q. Yeah, that's the head gate. Let's go
 21 back to the -- what is this, Deposition Exhibit 4,
 22 this map, the one that you marked the green on?
 23 A. Yes.
 24 Q. Can you mark B where B shows up on that?
 25 A. Let's see. B, okay.

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1 Q. Okay. Great. Now, let's go to what has
2 been marked as C, and can you show me approximately
3 where that picture was taken?
4 A. (Witness complies)
5 Q. Okay, great. And these are -- these
6 pictures are true and correct representations of what
7 you saw on January 5th; is that correct?
8 A. Yeah. Do you want me to put A on here
9 too?
10 Q. If you want.
11 On Deposition Exhibit 4, put A on there
12 as well. It helps us understand --
13 A. There, now you've got them all on one
14 map.
15 Q. Okay. Good. Thank you, very much.
16 During the time period of 1989 until you
17 ceased using the ditch in 1993, did you ever have
18 anyone measure the amount of water that you were
19 putting in the ditch at B and how much arrived at the
20 end of the ditch in Section 25?
21 A. It was measured at B, but it never was
22 measured on down as far as knowing how much was lost
23 or anything. We don't know that amount.
24 Q. Do you have any estimate of how much was
25 lost?

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1 A. Oh, just -- I don't know. But the
2 ditches that run kind of on contour like this one --
3 Q. Uh-huh.
4 A. -- they don't really lose that much.
5 But the ditches that run like this one here, there's
6 a tremendous amount of loss
7 Q. When you say "this one here," I'm sorry,
8 Mr. Whittaker, I have to interrupt you. You need to
9 slow down and explain what "this one here" means.
10 A. The ditch that we've marked on Exhibit
11 No. 4, in red, flows extremely fast and the water
12 sinks. A lot of times when they turn the water in
13 those type of ditches, why, sometimes, it takes as
14 high as two weeks or more to run through there and
15 fill that up. But the ditches like we have marked
16 here, in green, on Exhibit 4 that run more on a
17 contour going around, it doesn't seem like they have
18 much loss. And I'm guessing somewhere, like, 10,
19 15 percent, something like that. And that's merely a
20 guess. We haven't measured it.
21 Q. Okay. Do you have any explanation why
22 that might be the case?
23 A. I think for one thing is that the one
24 marked in red just falls so fast it just keeps
25 cutting out the gravel and things. The ones that go

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1 on contour fill up with that silt and things, and
2 it's not washed out, and so the water doesn't sink
3 in.
4 Q. Okay. Now . . .
5 MR. BARBER: I'm going to ask the court
6 reporter to mark this as the next deposition exhibit
7 in line
8 (Exhibit 6 marked.)
9 Q. (BY MR. BARBER) Mr. Whittaker, I've had
10 marked another map of the Leadore area marked as
11 Deposition Exhibit No. 6, and I'm also going to hand
12 you a BLM Leadore map and ask that you compare this
13 Leadore map with the map that has -- is in front of
14 you as Deposition Exhibit No. 6. And just so you
15 understand, again, I'm not trying to trick you or
16 anything. All I'm trying to do is make sure that we
17 have a good record. I had a paralegal print out, on
18 one of these map programs, a portion of the Leadore
19 map so that I can make it as an exhibit easily in
20 this matter.
21 A. Exhibit No. 6 looks, to me, to be the
22 same, only a small version cut out of the center of
23 the --
24 Q. It's called Leadore, sir.
25 A. -- the Leadore map that Mr. Barber has

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1 given me.
2 Q. It's a Surface Management Status Map,
3 BLM edition 2002, 1 to 100,000 scale. Now, I'm going
4 to take my big map back. I just have a couple of
5 quick questions for you. I think you've actually
6 already answered them for me, but I wanted to make
7 sure that I got it. You -- on Deposition Exhibit
8 No. 6, I believe you can see the main channel of Big
9 Timber Creek marked in blue; is that correct?
10 A. Uh-huh, it is.
11 Q. Okay. And the -- I believe there's also
12 a blue line that appears to be the ditch that you've
13 called the Clark ditch that serves the 200 acres in
14 Section 25; is that correct?
15 A. That's correct.
16 Q. Okay. Now, that blue ditch, the Clark
17 ditch, crosses some yellow land and then some blue
18 land. Is my understanding correct that the yellow
19 land refers to lands administered by the Bureau of
20 Land Management?
21 A. That's true.
22 Q. And the blue land refers to lands
23 administered by the Idaho Department of Lands?
24 A. It is.
25 Q. Okay. Do you have any disagreement with

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1 the portrayal of the BLM and the Department of Lands
2 land shown on Deposition Exhibit No. 6?

3 A. No.

4 Q. Now, when I arrived at this deposition,
5 you handed me a document, sir, that has a number of
6 pages attached to it. I'm going to have that marked
7 as a deposition exhibit. Is that -- or did you need
8 it back, or is that acceptable?

9 A. No. I brought that for you.

10 Q. Okay.

11 A. It's what I thought you asked for in
12 your letter.

13 (Exhibit 7 marked.)

14 Q. (BY MR. BARBER) And so I'm going to
15 hand you what's been marked as Deposition Exhibit
16 No. 7. I'm going to borrow a copy of that back so I
17 can ask the question. Now, if I understand your
18 response correctly, this was your attempt to respond
19 to the duces tecum portion of the notice of
20 deposition; is that correct, Mr. Whittaker?

21 A. That's correct.

22 Q. Okay. Now, you make reference to a
23 number of items here, and I want to make sure that
24 I've understood what you provided me. Under the
25 application, you talk about an IDWR letter dated

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1 the United States Salmon River in-stream flow rights
2 are further subordinated to 150 cfs of new water
3 right development. Water right priority dates as of
4 September 1st, 2003, in the Salmon River Basin
5 upstream of the shoot gauge including not more than
6 5,000 acres of new irrigation development. New
7 development above the 150 cfs 5,000-acre limits may
8 be authorized and water used, depending on daily flow
9 at the shoot gauge, and to the extent to which water
10 is actually used within the first 150 cfs of
11 authorized development.

12 Q. So let me make sure I understand what --
13 the point that you're trying to make. The priority
14 date of your application is April 22nd, 2005; is that
15 correct?

16 A. That's correct.

17 Q. Okay. And so -- I'm trying to make this
18 as simple as possible.

19 A. Let me anticipate you on this.

20 Q. Okay. Sure.

21 A. The point I'm trying to make here is
22 that we actually got knowledge that the moratorium
23 was going to be lifted, and its 150 cfs of expansive
24 water rights were going to be allowed through that
25 negotiation process that they had just completed on

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1 February 9th, 2005. I probably have seen that, but
2 I'm not a hundred percent. Do you have a copy there
3 just so I can look at it quickly?

4 A. I do.

5 Q. Okay. And this is a letter to you from
6 Tim Luke, Manager, Water Distribution Section, and it
7 is evidently a two-page letter. The subject of it
8 is: Announcement of meeting with existing state
9 water districts in the Upper Salmon River basin, et
10 cetera.

11 A. Main reference is right at the bottom of
12 the page.

13 Q. Right. And that -- why don't you read
14 that reference.

15 A. With respect to the United States wild
16 and scenic in-stream flow right on the main Salmon
17 River, the agreement requires or provides the
18 following water administration and management
19 features. The United States Salmon River in-stream
20 flow 75-13316 and 77-11941 are subordinated to all
21 water rights in the Salmon River Basin upstream of
22 the shoot gauge bearing a priority date senior to
23 September 1st, 2003. Includes water rights in Idaho
24 Department of Water Resources Administrative Basin
25 71, 72, 73, 74, 75 and a portion of Basin 77. No. 2,

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1 the wild and scenic rivers. And so, at that point in
2 time, why, I got organized and filed the application
3 in April for the land that we have described in the
4 proceedings.

5 Q. So you basically wanted to join the
6 club, be one of the persons in line.

7 A. I wanted to get my name in line.

8 Q. Okay. We go back to Deposition Exhibit
9 No. 7, and you make reference to an IDWR letter
10 May 25th, 2005.

11 A. Was that May 23rd, 2005?

12 Q. No. It says May 25th. Do you think
13 there's a typo there, perhaps, in your Deposition
14 Exhibit 7?

15 A. I bet there is. It should be May 23rd.

16 Q. Okay. Why don't you take this pen that
17 you have and, by interlineation on Deposition
18 Exhibit 7, make that correction in the date.

19 A. Okay.

20 Q. Okay?

21 A. Okay.

22 Q. Thank you.

23 Can I take a quick look at that letter,
24 sir?

25 A. You can. That says why we changed that

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1 from 7 to 4 cfs, I believe
 2 Q. Okay. Thank you. I guess pull up the
 3 next item, the November 21, 2005 IDWR letter. Take a
 4 look at that quickly.
 5 A. November 21st, 2005.
 6 Q. Okay. And the December 28th letter is
 7 the one immediately following that?
 8 A. Yes, it is.
 9 Q. Okay.
 10 Okay. I believe on Deposition Exhibit 7
 11 on the second page, you make reference to a letter to
 12 F.J. Whittaker dated August 10th, 1950, and two
 13 separate land patents. Do you have those documents,
 14 sir? This is what -- or did you attach them?
 15 A. I've got them, but I thought -- I guess
 16 I didn't put them in there. Let's see now.
 17 Q. Okay. And this letter that you have
 18 just shown me dated August 10th, 1915 -- 1950,
 19 rather -- is from Mark R. Cull, State Reclamation
 20 Engineer, and it's addressed to F.J. Whittaker. I
 21 assume that's you?
 22 A. That's my father.
 23 Q. That's your father. Okay.
 24 A. I was only five years old.
 25 Q. Okay. I didn't mean to age you.

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1 pipeline in an existing ditch that had been laid
 2 there for years, and that was with the BLMs wanting
 3 us to do that so we wouldn't file for a right-of-way
 4 and take two or three years. When we moved that
 5 water on that transfer, we wanted to be able to start
 6 irrigating immediately. At that time, it was
 7 Stephanie Snook that held that position in the Salmon
 8 BLM office. And she says, "Instead of messing with
 9 that, I realize it's going to cost you more money
 10 because you've got to run a lot more pipe, but you'll
 11 be ahead if you'll just run it up the old existing
 12 ditch." So that's just exactly what we did.
 13 Q. Okay. And about -- when did that occur?
 14 What was the date that she gave you that advice in
 15 which --
 16 A. I'd say it was in '92. We put it in --
 17 I can't remember for sure -- the pipeline in -- well,
 18 we wouldn't have put it in before it was approved.
 19 We put it in in '93.
 20 Q. Okay. Okay. Now, the land patents,
 21 those 11-6-0100 [sic] and 11-97-0004.
 22 A. (Handing to counsel)
 23 Q. Okay. In Deposition Exhibit 7 you've
 24 got the last two pages. Can you explain what those
 25 last two pages are?

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1 A. I didn't think I looked that old.
 2 Q. No. I figured you looked like a man in
 3 great shape for his age.
 4 And I guess I'm not understanding the
 5 factual situation. Is it your understanding, based
 6 on that letter, that the ditch that you are talking
 7 about that we marked on the one map in green, that
 8 that was constructed after the date of that letter?
 9 A. No.
 10 Q. Okay. Explain it to me. Interpret it
 11 for me, rather.
 12 A. This is actually the ditch that feeds
 13 what was called the pipeline ditch in the Watersheds
 14 versus Matejko.
 15 Q. Okay.
 16 A. With the -- that included the BLM and
 17 things. But he filed on this. The ditch there in
 18 the green line had to be put in 1900, 1901 because
 19 that's when the water right called for.
 20 Q. Okay.
 21 A. This initially was somewhere put in
 22 about 1947, is when the water right, I think, is.
 23 It's for 1947. But part of the point I'm making is
 24 that the water that was on the green map was
 25 transferred to this ditch, here, and was put in a

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1 A. The very back ones?
 2 Q. Yeah. I don't have all the ones that
 3 you have there.
 4 A. Oh, let's see. Of the written --
 5 Q. Okay. Let's -- that's the actual
 6 exhibit. Let's go to the next page. This thing,
 7 what is it?
 8 A. What this is -- let's see, you need your
 9 map that I gave you. It's in here, I think.
 10 Q. Okay. We're talking about Deposition
 11 Exhibit 2?
 12 A. Okay. The point I'm making there is
 13 that -- is what I used is State Section 36 is right
 14 here.
 15 Q. Uh-huh.
 16 A. And included in State Section 36 is 434
 17 acres as you'll note with this right here. Go to
 18 State Section --
 19 Q. Okay. I'm going to have to look at
 20 that.
 21 A. Let's see. Have I got you right side
 22 up? There you go.
 23 Q. Just give me a minute here.
 24 A. Let's see it. Just a second, David, and
 25 I'll fix it for you.

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1 Q. I'm not following what you're saying so
2 you're going to have to help me out.
3 A. Okay.
4 Q. Mr. Whittaker, can you describe what you
5 have done so that we have this written down?
6 A. I have just highlighted on exhibit -- on
7 Table 1, Lemhi Resource Management Planning Area
8 Grazing Allotment and Livestock Use, State Section
9 that there are 434 acres of BLM in that allotment and
10 that with the corresponding page in front of that,
11 you will note that there are in State Section --
12 there are 33 BLM AUMs in that 434 acres. That means
13 that there are only 15 AUMs in that. The rest are in
14 the State Section, the State ground --
15 Q. Okay.
16 A. -- that is fenced in common with that.
17 And look at the map. You can't really tell any
18 distinguishable difference. So's what I'm saying,
19 the carrying capacity on this ground here is
20 deteriorated until it's not worth going there after
21 anymore because it's a small area. This is over a
22 thousand, so it's worth it. But to move the cattle
23 here, when we move out so late, generally speaking,
24 there isn't anything left there to graze.
25 Q. Let me look at this so I think I can

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1 A. But -- and it really doesn't make any
2 difference to us. It shows between the two of them
3 that there are -- let's see. Is what happens is
4 instead of running the 52 cattle for 45 days, we run
5 like a hundred for less than two weeks because 52
6 cattle just doesn't work for us.
7 Q. Okay. Not enough to mess with?
8 A. Not enough to mess with.
9 Q. Yeah, that's what I thought. Okay. But
10 the total AUMs would be the same?
11 A. The total AUMs would be the same.
12 Normally we don't get the full amount.
13 Q. Okay. Now, the next page of this --
14 next two pages are -- let's say the next four pages
15 appear to be some hydrology, mean discharge, et
16 cetera. Can you explain the significance of that to
17 me, those pages?
18 A. Well, this one that says page 13, here,
19 is the one I referenced earlier in that they had a
20 high of 295 cfs, I think, on May 31st and a low of 17
21 cfs somewhere, I think, last of September, first of
22 October. And the point I'm making here is that
23 you've got that real high spike there. Let's keep
24 some of that water up there. In essence that's the
25 only time this water right that we're filing an

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1 understand what you're saying.
2 A. It does make a great antelope pasture
3 though, as the Fish and Game can probably verify.
4 Q. I'm going to see if I can summarize
5 this, and you tell me whether I've got it all fouled
6 up, or whether I have understood it. You have an
7 allotment number, 6220, and in that allotment number
8 6220 there's 640 acres of State land and 434 acres of
9 BLM land.
10 A. That's correct.
11 Q. And that is used, on the one page, it
12 shows from May 13th to June 27th.
13 A. Yes, that's correct.
14 Q. Now, we go back to the previous page for
15 allotment 6220, the grazing period shows May 16th,
16 not 13th, to June 30th. Have I understood that
17 correctly? So there's a discrepancy there in terms
18 of the grazing period?
19 A. I don't know why it's actually those
20 dates because, for some reason -- and we haven't --
21 to my knowledge -- we haven't been getting the
22 special use on that unless the State has okayed
23 earlier because normally we go on there 5/5 to 5/10
24 That's one of the earliest ones we can go on.
25 Q. I see. Okay.

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1 application for would be running, is this -- it looks
2 like from -- it's kind of hard to tell by this chart,
3 but it looks like from, oh, say -- looks like maybe
4 the 25th of May to the 11th of June. I'd say year
5 in, year out, well, you're probably not going to
6 average two weeks. Probably, two weeks. But
7 according to our way of figuring, that's 42 sets.
8 That's enough to irrigate it over once.
9 Q. Okay. Now, let me make sure I
10 understand. The -- if I can get this back.
11 A. (Handing to counsel.)
12 Q. So that spike that you see that you've
13 described at the end of May and the first part of
14 June, do you attribute that to a rainfall event?
15 A. Oh, that's not rainfall. That's melt.
16 That's snow melt.
17 Q. That's snow melt?
18 A. That's snow melt. That's not rainfall.
19 Q. Okay. And I want to make sure I
20 understand where this is being measured or projected.
21 It describes: "Graphical representation of data in
22 Table 5 for unimpaired discharge measured in Big
23 Timber Creek upstream from diversions." So that is
24 upstream from all diversions?
25 A. You might say, yes.

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1 **Q. Okay.**
 2 A There's one small one above it But you
 3 might say, for all practical purposes, above all
 4 diversions
 5 **Q. And do you know what the existing**
 6 **diversions would do to that spike in terms of**
 7 **changing the shape of it? Let's say I put --**
 8 A. Well, you might say they'd take 100 cfs
 9 out of it. There's 96-something decreed. If you
 10 put some -- say you put 20 percent flood on there,
 11 which could be true or not. On ours, why, 20 percent
 12 would be high. On some of the others, like -- but I
 13 think he's got a pretty high decree because he's got
 14 such a late water right. So I think there's 96 point
 15 something cfs that's decreed on Big Timber Creek.
 16 **Q. Okay. Now, let me go back to --**
 17 A. Let's look at that one other flow --
 18 **Q. -- okay.**
 19 A. -- that's highlighted there. That's in
 20 2006. That's last year, and I'll describe that to
 21 you.
 22 **Q. Okay. Why don't you do that.**
 23 A. Okay. That was measured at the Timber
 24 Creek bridge below all diversions.
 25 **Q. Okay.**

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1 A. That was the one that was measured along
 2 with the Carey Act ditch adjacent to it. The Carey
 3 Act ditch had a lot of fish in it. But this ditch
 4 didn't have any fish in it.
 5 **Q. Okay.**
 6 A. And that ditch ran a lot longer than
 7 we're projecting running this one. So I'm assuming
 8 it would be very negligible if there was any fish in
 9 it.
 10 **Q. Okay. So let me ask the question this**
 11 **way. Let's -- assuming the Department of Water**
 12 **Resources approves the application as stated, do you**
 13 **have any intention to put any type of fish screening**
 14 **devices in this ditch?**
 15 A. At this point in time I don't. I don't
 16 know that -- I can't say what the future is going to
 17 bring, but at this point in time, I wouldn't.
 18 **Q. All right.**
 19 A. It's going to be two weeks, remember.
 20 **Q. Okay. I understand. I understand that.**
 21 A. Two weeks.
 22 **Q. But it comes at a bad time of year, too,**
 23 **from our perspective, and I don't want to argue with**
 24 **you, Mr. Whittaker.**
 25 A. Yeah.

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1 A. And if you will look from the 18th of
 2 May until the 29th of May, you go over to the May
 3 column there, you've got 17 as high as 83 cfs and
 4 down on the last day, 8 6 cfs. And we're only saying
 5 that we're going to take 4 cfs out of that, so they
 6 talk about 13 cfs being minimum, why, they've got
 7 plenty of water for fish. There's 13 above that, you
 8 might say, every day with the exception of May 29th.
 9 And then you go back over to June, 9th and 10th. Now
 10 that's rain. This last year, June 9th and 10th,
 11 that's rain. We had probably a good inch and a half
 12 of rain, and it really brought that creek back up.
 13 And so we had 20 and 21 cfs. But that is below all
 14 diversions.
 15 **Q. Okay. Let's go back to this deposition**
 16 **exhibit. It's No. 5, I believe.**
 17 A. It is.
 18 **Q. And I want you to talk about Picture**
 19 **No. B, "Our Clark ditch head gate." Are there any**
 20 **structures associated with the Clark ditch head gate**
 21 **that prevent fish from being taken down the ditch?**
 22 A. No, there isn't, but according to Scott
 23 Feldhausen, when we was on the tour, they measured
 24 this ditch that we referred to in the 1950 agreement.
 25 **Q. Uh-huh.**

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1 **Q. I'm not trying to do that. I'm just**
 2 **trying to understand where we are with it. And do**
 3 **you understand that there are at least some programs**
 4 **for funding fish screening of diversion ditches?**
 5 A. I understand there are.
 6 **Q. And have you participated in any of --**
 7 A. I haven't.
 8 **Q. Okay. And when you say you haven't,**
 9 **does that refer to the different water rights that**
 10 **you have throughout the Lemhi River basin?**
 11 A. Yeah. They're all on tributaries. We
 12 don't have anything that comes off the main -- Lemhi
 13 main stem. Ours are all off on tributaries.
 14 **Q. And are there some factors that would**
 15 **convince you to change your position on that and**
 16 **participate in some of those programs? What would**
 17 **those factors be?**
 18 A. You know, it's hard to project what the
 19 future brings. I'm not saying that I'm unwilling to
 20 do anything, you know, that something isn't
 21 negotiable. At this point in time, I'll say I'm not
 22 anxious. I'll put it that way.
 23 **Q. Okay. Let me just pose some other**
 24 **questions along those lines. If there were a**
 25 **condition imposed on this water right, that before**

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1 you could divert any water, that a fish screen
2 adequate by Department of Fish and Game standards be
3 installed, would you have a problem with that?

4 A I guess it'd depend on who is going to
5 put up the money and things, et cetera. You know,
6 we're talking about a two-week irrigating system.
7 Why, there's a limit to how much money you can put
8 in, you know. We're not -- we don't want to do it
9 for our health. We want to do it because it's going
10 to be profitable

11 Q. Okay. I understand that. The existing
12 diversion that's shown in Deposition Exhibit -- I
13 forgot the number -- 5?

14 A. Yes, it's 5 on the picture.

15 Q. -- does it have a measuring device
16 associated with it to where a water master can go out
17 there and actually measure the water?

18 A. It doesn't at this point in time, but
19 we've got several of them that the Lemhi River water
20 masters has given us sitting there. We can put one
21 in, so that's not a problem.

22 Q. Okay. So if a condition were imposed on
23 this water right, that before you could divert any
24 water, that there be an adequate measuring device
25 installed and in place, would you have any objection

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1 Q. Okay. Now, let's assume that the same
2 applies to the BLM land, that the conclusion is that
3 that right-of-way has been lost for nonuse for a
4 similar period of time. Do you have any objection to
5 filing an application with the BLM to cross the land
6 that is shown on Deposition Exhibit 6?

7 A. Well, at this point in time, I certainly
8 don't agree that I don't have an 1866 right-of-way.

9 Q. Okay. And I realize --

10 A. The ditch is in existence. It's been
11 there over a hundred years. All the old-timers would
12 sign affidavits to that

13 Q. And I understand --

14 A. And that's my interpretation that I read
15 in the --

16 Q. Okay.

17 A. -- Watersheds versus Matejko.

18 Q. And I understand there's that dispute
19 there, and it's really, essentially, a mixed question
20 of facts -- fact and law, and it's something I'm
21 not -- you know, we're not going to agree about that.
22 And I just want to make sure I understand what your
23 position is, assuming that your conclusion is
24 incorrect, that -- what you would do in response to
25 it. Let me see here.

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1 to that?

2 A. No objection. We won't only not object,
3 we'll do it. No argument at all there. That's part
4 of the plan. We'll put in the measuring device.

5 Q. Now -- I'm fumbling too much. Just give
6 me a minute here.

7 I want to go back to Deposition Exhibit
8 No. 7. And --

9 A. Let's see. Are you talking on mine?

10 Q. Yes, your Deposition Exhibit 7.

11 A. Let see. What did I do with that?

12 Q. I'm just going to point it out to you.

13 You have a reference on page 2 about a right-of-way
14 over State land, sir. And I want you to assume that
15 whatever right-of-way may have existed over the State
16 land in Section 36 for your ditch has been lost
17 because it's not been used for a period of over five
18 years. Just assume that that's been the case. I
19 know you probably don't agree with that, but let's
20 just assume, hypothetically, that that is in fact the
21 correct legal conclusion. Do you have any objection
22 to filing an application for an easement across
23 Section 36 if that's what the facts are?

24 A. If that's what the facts are, why, I'd
25 do it.

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1 A. I guess very last resort

2 Q. Okay. You haven't asked for a break,
3 but I need to take a break.

4 A. Okay.

5 (Break from 3:27 p.m. to 3:36 p.m.)

6 Q. (BY MR. BARBER) We're back on the
7 record, Mr. Whittaker. We're going to try to get
8 this finished up. I would like to get back to Boise
9 sometime tonight.

10 And I may have misunderstood what the
11 circumstances were. In 1995, I believe you testified
12 there was water in the ditch that you've marked as
13 green on the Deposition Exhibit No. 4.

14 A. No. 4.

15 Q. Okay.

16 A. That's true.

17 Q. Okay. And where did that water come
18 from? Was that --

19 A. It came from Big Timber Creek

20 Q. Was it at your -- at point B?

21 A. At point B.

22 Q. At point B, okay. And is that the only
23 year after about 19 -- okay. That was the last year
24 that you diverted water into Big Timber Creek?

25 A. I don't know that for sure, from Big

1 Timber Creek I'm going to say somewhere between '95
2 and '99.
3 **Q. Okay.**
4 A. Somewhere in that time frame, but I
5 can't verify that with any record.
6 **Q. Okay.**
7 A. It's just strictly memory. But I do
8 know that in 1999, for sure, that it was turned off.
9 And it might have been from that previous lawsuit or
10 hearing that we had with the Clarks because somebody
11 turned me in and said he's diverting water and he
12 doesn't have any water rights. And that's why I kind
13 of think it might be '99 --
14 **Q. I see. Okay.**
15 A. -- for the water department. At that
16 point in time, it was turned off
17 **Q. Okay. Good. Now, do you have any**
18 **familiarity with the plans to reconnect Big Timber**
19 **Creek with the Lemhi River?**
20 A. I do.
21 **Q. Explain to me what your understanding of**
22 **what's being proposed there is.**
23 A. Well, my understanding -- I'm not real
24 clear -- is that they're contemplating moving the
25 point of diversion up and taking part of the water

1 from Carl Tyler and putting the rest in a pipe or
2 something for him to irrigate with pivots, I suppose
3 But I'm not -- as far as -- that's about what I know
4 **Q. Okay.**
5 A. Is --
6 **Q. I want you to assume that that**
7 **reconnection is accomplished within a year. Is it**
8 **your conclusion that the approval of this application**
9 **would adversely affect that reconnection?**
10 A. You know, I don't think it would
11 adversely affect that reconnect at all because we're
12 talking about two different extremes. We're talking
13 about the earliest water right on Big Timber Creek as
14 opposed to what would become the latest water right.
15 This time there might be some filed behind me. But
16 at this point in time, this will be the last right on
17 Big Timber Creek.
18 **Q. Okay. And so is it your testimony today**
19 **that you don't believe that this approval of this**
20 **application would have any adverse impact upon the**
21 **goals of the reconnection of Big Timber Creek?**
22 A. I don't think it would have any impact
23 at all
24 **Q. Let me assume that it was demonstrated**
25 **to you that there would be substantial adverse impact**

1 **from that. Would you withdraw your application at**
2 **that point in time?**
3 A. That there's a substantial impact?
4 **Q. Yes. Now, I'm just -- I'm asking you a**
5 **hypothetical question about that. If that's what the**
6 **facts are from this -- if we get the Big Timber Creek**
7 **reconnected, whether at that point in time you would**
8 **say, "Well, I'll withdraw my application"?**
9 A. It's hard for me to visualize that, I
10 guess, because it seems uncomprehendable because
11 we're talking about -- you might say 85, 90 cfs in
12 between there that's decreed plus the floodwaters.
13 **Q. Okay.**
14 A. So I can't visualize a circumstance like
15 that.
16 **Q. Okay. Let's go to what you propose to**
17 **do with this water, assuming that it is -- the**
18 **application is approved. I believe you testified**
19 **already that you're going to put it in pasture.**
20 A. That's correct.
21 **Q. Now, so let's assume that the**
22 **application is approved and any court appeal is**
23 **resolved. What's the first thing you're going to do**
24 **out there on the land?**
25 A. The first thing we're going to do is

1 start cleaning ditches and farming, and we will
2 probably put in intermediate crested wheatgrass along
3 with a dryland alfalfa and maybe a dryland bonegrass,
4 something like that. So in those years when we have
5 a drought and we don't have any water at all, it
6 won't burn out, and we'll have it the succeeding
7 year
8 **Q. Okay. So do you intend to, essentially,**
9 **remove the existing vegetation that exists there and**
10 **farm the whole 200 acres?**
11 A. I would say that we'll probably farm
12 everything that is east of the green line on Exhibit
13 No. 2, and we'd probably irrigate the rest just
14 probably the way it is
15 **Q. Okay. So the west --**
16 A. West would be irrigated the way it is
17 **Q. Okay. And so with respect to that**
18 **stuff, the stuff west of that line, you're simply**
19 **going to be applying water to native forage, whatever**
20 **is there?**
21 A. That's correct.
22 **Q. Okay. And the basis for doing that is**
23 **that the native forage -- there will more of it if**
24 **you put some water on it; is that the assumption?**
25 A. Not only that, it won't only be more,

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1 it'll change in kind over time being irrigated
 2 You'll go from a dryland grass to a Timothy or maybe
 3 this intermediate grass, crested wheat or something
 4 will blow over there and it will seed down. Or the
 5 other option we have is you can kind of seed that --
 6 something like that probably with cattle just feeding
 7 them there, and then when they're there in the
 8 springtime, why, it's melting and stuff, they'll just
 9 naturally seed something like that
 10 **Q. So --**
 11 A. That's a possibility too.
 12 **Q. So you're -- if I understand your**
 13 **testimony, you're not going to out there with a drill**
 14 **in the area west of the green line and --**
 15 A. That's correct. It's kind of rough
 16 country and it doesn't lend itself to being farmed.
 17 **Q. Okay. In other words if I tried to use**
 18 **a drill out there, I'd probably break my drill?**
 19 A. That's correct
 20 **Q. The area -- I guess it would be east of**
 21 **the green line on Deposition Exhibit No. 2, you could**
 22 **seed that with a drill?**
 23 A. We could
 24 **Q. Okay. What about stones in the area**
 25 **east of the green line? Is that at all stoney?**

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1 A. Oh, somewhat. But the whole country up
 2 there is. If you didn't farm stones, you wouldn't be
 3 farming in the Leadore area
 4 **Q. Okay. Let's see here. I need to get**
 5 **something else. I'd like to have this marked as a**
 6 **deposition exhibit.**
 7 (Exhibits 8 and 9 marked.)
 8 (Discussion off the record.)
 9 **Q. (BY MR. BARBER) Mr. Whittaker, I might**
 10 **ask you to look at Deposition Exhibit No. 8 and**
 11 **Deposition Exhibit No. 9 and ask whether you've ever**
 12 **seen these documents before?**
 13 A. It's hard to say. I actually
 14 participated in, I think, the soil survey that this
 15 is talking about some years ago. And I think I have
 16 that information probably in my collection somewhere.
 17 **Q. Okay.**
 18 A. But as far as knowing the different soil
 19 types or anything like that, well, I don't.
 20 **Q. Okay. Have you ever seen Deposition**
 21 **Exhibit No. 9?**
 22 A. I don't believe that I have. I don't
 23 know what that refers to
 24 **Q. Well --**
 25 A. The yellow line, you mean?

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1 **Q. The --**
 2 A. I know the map and the area
 3 **Q. Okay.**
 4 A. I know that. But as far as the yellow
 5 line around there -- our ground that we're talking
 6 about is on this map.
 7 **Q. Okay. That's --**
 8 A. I know that, if that's what you're
 9 asking
 10 **Q. Yes. And let me -- again, I'm not**
 11 **trying to trick you, so I'll tell you how I came up**
 12 **with this. And if you note, it actually has a date,**
 13 **in the lower right-hand corner, of January 4th, 2007.**
 14 **I did that late yesterday afternoon. This actually**
 15 **is a -- on the Internet, you can go to the U.S.D.A.**
 16 **website and they have the soil surveys there. And**
 17 **for at least this particular one, this is the only**
 18 **way you can get it. You can't get a published**
 19 **version of it. You have to get it over the Internet.**
 20 **And what I did was simply, with some struggle, found**
 21 **your area and had a layer added to that of what they**
 22 **call the soil survey map, the soil survey.**
 23 **And so you have numbers there, a 6, a**
 24 **119, a 231 and a 114. Those refer to different**
 25 **soils, sir. And what I'd like to ask you about --**

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1 and it's really -- it's going to take me a minute to
 2 find it. The -- if you look at the soil denominated
 3 No. 6. Do you locate No. 6 on Deposition Exhibit
 4 No. 9?
 5 A. I do
 6 **Q. Okay. If you go to the other document,**
 7 **Deposition Exhibit No. 8, and you go to the page 19,**
 8 **there's a description of that. It's right up here.**
 9 **And for -- one other thing I want to point out to**
 10 **you, if I had copied the entire soil survey, it was**
 11 **1300 pages and I did not think the court reporter**
 12 **wanted that or I wanted it or you would want it. So**
 13 **I selected portions of it. And what I have selected**
 14 **here is a description of soil type 6 that appears on**
 15 **Deposition Exhibit No. 9. And you notice that it**
 16 **comes down and has a description of Major Uses. It**
 17 **says irrigated pastureland, hayland and rangeland.**
 18 **That's how they describe that Soil No. 6.**
 19 A. Okay.
 20 **Q. Now, if you go to Exhibit No. 9 and you**
 21 **see a soil type 231, we can go over to page 259.**
 22 **It's just a few pages in from that other one. And**
 23 **you can see 231, and they describe on page 260 of the**
 24 **following page, Major Uses as: "Rangeland and**
 25 **irrigated pastureland."**

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1 A. Let's see.
 2 Q. You have to go to the next page.
 3 A. The next page?
 4 Q. Yes, at the top of the page.
 5 A. Oh, okay
 6 Q. Now, what I'd like to do is refer you to
 7 page 296, just a few pages further on, and at the
 8 bottom -- no, you're there, sir, I believe. No, this
 9 is it right here.
 10 A. Oh, okay.
 11 Q. Because of the way they number the pages
 12 that -- they're sort of hidden. At the bottom, you
 13 notice they have a heading called Prime Farmland?
 14 A. Okay
 15 Q. Go over to the next page, which is 297,
 16 and towards the bottom of the page, they have the map
 17 units that they say: "... meet the requirements
 18 for prime farmland if irrigated are:" and I would
 19 note that neither soil type 6 or soil type 231 are in
 20 that list. Do you see that, sir?
 21 A. I see that
 22 Q. Do you agree that the areas marked on
 23 Deposition Exhibit 9 are not prime farmland?
 24 A. I agree with that, and that's what I
 25 plan on is pasture land.

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1 show 3 tons to the acre and 8 AUMs per acre for
 2 irrigated pastureland.
 3 A. Per acre?
 4 Q. Okay. Per acre, that's right.
 5 A. Yeah.
 6 Q. Okay. Do you have any reason to
 7 disagree with that?
 8 A. I think that's reasonable
 9 Q. Okay. Now, let's go over to -- okay.
 10 It's several pages over. We've got to get to,
 11 actually, one we haven't talked about. It's going to
 12 be page 602, sir.
 13 A. Okay
 14 Q. And you notice that we go back to
 15 Deposition Exhibit No. 9, there's a soil type 114,
 16 and only a very small part of 114 actually appears to
 17 be within the area that is a place of use for
 18 Application For Water Right No. 74.15613. But if you
 19 notice that soil type 114 is described in Table 5 on
 20 page 602 as a 4E soil under irrigated and there are
 21 listings for alfalfa hay, barley, oats and AUMs. Did
 22 you see that?
 23 A. I do
 24 Q. Okay. Do you have any reason to
 25 disagree with that?

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1 Q. Okay. I just wanted to make sure.
 2 A. Oh --
 3 Q. I think we agree here.
 4 A. Yeah, I'm not going to grow sugar beets
 5 on there
 6 Q. Okay. Now, I've got to go in here a lot
 7 further. Pardon me for not being a little more
 8 organized.
 9 Okay. Now we're going to jump way over
 10 to page -- we're going to start on page 594. It's
 11 one of the hidden page numbers.
 12 A. Okay
 13 Q. Okay. You notice this is entitled:
 14 Table 5 Land Capability and Yields Per Acre of Crops
 15 and Pasture. Are you at that page, sir?
 16 A. I am
 17 Q. Okay. And you come down to Map symbol
 18 and soil name No. 6, Bartonflat, and you notice that
 19 Bartonflat -- and, again, I want to hurry this along.
 20 On the Land capability there is a column labeled N
 21 and another column labeled I. If you look at the
 22 area in parentheses under Table 5, it will say that
 23 "N" refers to nonirrigated areas and "I" refers to
 24 irrigated areas. Bartonflat is shown as a 4E class
 25 land. And if you follow that row over, it -- they

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1 A. No.
 2 Q. Okay. Now, let's go over to page 611,
 3 and we have a soil type Whiteknob, 231.
 4 A. Okay
 5 Q. And do you see that soil type Whiteknob
 6 is listed under the land capability irrigated as a 4S
 7 soil?
 8 A. I do.
 9 Q. Okay. And that the only listing for
 10 land capability and yields per acre is 8 AUMs per
 11 acre; is that correct?
 12 A. That's correct. Do we have any 232 in
 13 that?
 14 Q. It's 231, sir, that I'm asking you to
 15 look at.
 16 A. Oh
 17 Q. There are two Whiteknobs.
 18 A. Yeah, okay.
 19 Q. It's confusing.
 20 A. Yeah. I'm with you now
 21 Q. Okay. Do you have any reason to
 22 disagree with that characterization?
 23 A. I think that's realistic.
 24 Q. Okay. Now --
 25 A. That is 8 AUMs per acre we're talking

SHEET 23 PAGE 89

1 about
2 Q. That's what they're saying if it's
3 irrigated.
4 A. Irrigated, right.
5 Q. Improved pasture.
6 A. Right.
7 Q. Now, that is not the same as if it's
8 just native land. We'll get to that here in a
9 minute.
10 A. Yeah. No, I realize that.
11 Q. Okay.
12 A. I was just making sure we were on the
13 same page.
14 Q. That's right. We're on the same page.
15 Okay. Now, let's go do something a
16 little different. I've got to find this. You're
17 going to have to give me a minute. Okay, it's just a
18 few pages in. It's page 614. We'll start with that.
19 A. Okay.
20 Q. It's right at the very end.
21 MR. FOSTER: 614. I'm sorry.
22 THE WITNESS: It's on the inside there too,
23 Kent.
24 Q. (BY MR. BARBER) Now, do you have any
25 figure that you use in terms of dry weight forage

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1 that? Have I read it correctly?
2 A. Let's see. Now, say that, again, what
3 we're saying there.
4 Q. Okay. Bartonflat, item 6. And we're
5 coming over to a favorable year, the dry weight total
6 production is 500 pounds.
7 A. For Bluebunch wheatgrass?
8 Q. No. That's total production. It says
9 total production at the top. And if you don't --
10 A. That's per acre?
11 Q. That's per acre, yes.
12 A. That sounds reasonable, though.
13 Q. Okay. And in an unfavorable year, it's
14 250 pounds.
15 A. I'd agree that you can drop your
16 production half in an unfavorable year. There's no
17 doubt about it.
18 Q. Okay. And then you come over to the
19 Characteristic vegetation, and it lists in order of
20 frequency out there Bluebunch wheatgrass, big
21 sagebrush, et cetera. And for Bartonflat, No. 6, it
22 shows a Bluebunch wheatgrass is 45 percent of the
23 composition. Is that what you would expect to find
24 out in the Area No. 6 on the Deposition Exhibit
25 No. 9, or would it be different than that?

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1 that constitutes the amount of forage consumed by 1
2 AUM in a month?
3 A. I don't.
4 Q. You've never heard the amount of
5 600 pounds dry weight as the amount a cow consumes in
6 a month?
7 A. You know, I've always heard more like
8 pounds per day. And most animals, young animals at
9 least, eat their weight each month. If you've got a
10 600-pound calf, he eats 600 pounds in a month.
11 Q. Okay. What about a grown cow that's
12 1,300 or 1,400 pounds?
13 A. Well, they're going to not eat quite
14 their weight, most generally speaking. That might be
15 different what -- between Holsteins and beef cattle.
16 Q. I see. The estimates you were just
17 giving me, were those dairy cattle or beef cattle?
18 A. They're beef cattle.
19 Q. Okay. Now, let's go to page 614, item
20 No. 6, Bartonflat. And do you notice that there is a
21 total production, and they list three years,
22 favorable, normal and unfavorable?
23 A. Okay.
24 Q. And under "favorable," they have a dry
25 weight of 500 pounds per acre. Do you agree with

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1 A. I'd think it's still different from
2 that.
3 Q. How different -- how would you expect it
4 to be?
5 A. I'd think it would be more to the wetter
6 species because this area here, that is a
7 considerable drainage.
8 Q. Okay.
9 A. And it catches quite a lot of water
10 coming down through there, and it's got ditches that
11 still divert that out through there. And it's --
12 that is normally, you might say, irrigated during
13 early flood flow.
14 Q. Okay. So some of the other --
15 A. That might be true out on the edges
16 here, but basically speaking, right over to -- I'd
17 say about everything that's in No. 6 would -- I'd say
18 was greater than that.
19 Q. Okay. More Bluebunch wheatgrass or
20 something different than Bluebunch wheatgrass?
21 A. Oh, there's Bluebunch wheatgrass there,
22 some, but I don't know. It doesn't seem to me like
23 that's the major component there.
24 Q. Okay.
25 A. But I can't tell you what is for sure.

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1 Q. Okay.
 2 A. I don't know if it's overflow Timothy
 3 coming from the neighbor, there, or something else.
 4 Q. When you come down to some of the other
 5 species listed, the Hood's phlox, can you identify
 6 Hood's phlox?
 7 A. I couldn't.
 8 Q. What about Indian ricegrass?
 9 A. I can't.
 10 Q. What about Sandberg bluegrass?
 11 A. I can't identify that either.
 12 Q. What about Bottlebrush squirreltail?
 13 A. I can't.
 14 Q. Other perennial forbs, can you separate
 15 a forb from grass?
 16 A. The sheep can.
 17 Q. Okay.
 18 A. To some extent, but --
 19 Q. Okay. So certainly you can distinguish
 20 big -- Wyoming big sagebrush?
 21 A. Oh, yeah. No doubt about that.
 22 Q. Is there some of that out there?
 23 A. There's not much. It's wanting to come
 24 back a little bit, but there's still not hardly any
 25 in. There's actually -- what's strange here is

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1 to put that there's 650 on a good year out there, I'm
 2 not really knowledgeable on that. I've always been
 3 able to call the agent up, and he would tell me those
 4 figures if I needed them.
 5 Q. Okay. Come over here, and when you look
 6 at the composition on Bluebunch wheatgrass and big
 7 sagebrush, do you agree or disagree with that
 8 description of that?
 9 A. Well, there's not 20 percent Wyoming big
 10 sagebrush out there. I do know that.
 11 Q. Okay.
 12 A. Is that a percent? Yeah, it is.
 13 Q. Yeah.
 14 A. There just isn't 20 percent.
 15 Q. Okay. What about --
 16 A. And I don't think there's 40 percent
 17 Bluebunch wheatgrass, either.
 18 Q. So it's sort of unknown what the other
 19 stuff is?
 20 A. Yeah. Unknown, other than spotted
 21 knapweed.
 22 Q. Okay. Let's go over to the very last
 23 page of this exhibit. We've got our favorite one,
 24 231, Whiteknob, and would you agree with me when we
 25 look at Deposition Exhibit No. 9 that Whiteknob is

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1 what's actually filling up with -- one of the reason
 2 it needs to be done something with is spotted
 3 knapweed. This is a horrendous area going through
 4 there. And it doesn't have any control, and that's
 5 one reason I'd like to put this water on there and do
 6 something with that. You can't really control it
 7 there.
 8 Q. Okay. Would putting water on there kill
 9 the spotted knapweed?
 10 A. Well, it would if we do some other
 11 actions. In order to do the other actions, it has to
 12 be profitable, again.
 13 Q. Right. I understand that.
 14 A. And if we're going to do this, why, then
 15 it's worthwhile.
 16 Q. Okay. Let's go over to the next page
 17 and sort of go through the 114 on page 646, the
 18 Leadore. And, again, we have some total production
 19 figures there of favorable 650, normal 400, and
 20 unfavorable 250. Would you agree with -- or do you
 21 have an opinion about that?
 22 A. You know, again, I'm just not real
 23 knowledgeable on that other than the -- I agree with
 24 the percentage between 650 and 250 between a
 25 favorable and unfavorable. But as far as being able

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1 the predominant soil type in the area in question?
 2 A. Yes.
 3 Q. Yeah. And let me explain something to
 4 you, Mr. Whittaker, so you can interpret this. The
 5 yellow line, or the rectangular yellow line, for you
 6 to get the other stuff defined, you have to do what
 7 they call, define an area of interest. And that's
 8 something you simply draw in there.
 9 A. I see.
 10 Q. And it's done --
 11 A. So you just enclosed the property.
 12 Q. And I don't know whether -- I was pretty
 13 sure I was not including the precise property
 14 boundaries. I had no way of doing that. But what
 15 they do after you define an area of interest -- let
 16 me just explain that to you -- you go over to the
 17 last page, then they will give you percentages of
 18 what the different soil types are.
 19 A. Is that on this one?
 20 Q. Yes, it's on Deposition Exhibit 9.
 21 So if you were able to define,
 22 precisely, the area of interest that you had, you
 23 would be able to come up with the precise acreage --
 24 A. Acreage.
 25 Q. -- of the land. But since I didn't know

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1 the boundaries well enough, these numbers aren't
 2 correct.
 3 A I see Okay.
 4 Q. So you can all do that from your
 5 computer.
 6 Let's go back to Deposition Exhibit
 7 No. 8 and, again, for No. 231, Whiteknob, we have,
 8 again, in terms of total production a favorable,
 9 normal and unfavorable. Do you have any disagreement
 10 with those numbers or any comments about them?
 11 A. Not other than I've already expressed.
 12 Q. Okay. And if we come over to the
 13 composition of the species out there, do you have any
 14 comments about that composition?
 15 A No. That's on 231.
 16 Q. Yes.
 17 A. Well, on 231 -- what's marked off there
 18 as 231 -- why, if -- there's probably 1 percent
 19 sagebrush, Wyoming sage, why, that would cover it.
 20 There just isn't hardly any sagebrush there.
 21 Q. Has there been a fire in there recently
 22 to get rid of the sagebrush?
 23 A There hasn't
 24 Q. There hasn't?
 25 A. No. But what happens there is that we

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1 feed on there every spring and we cover a lot of
 2 that, and feeding cows on sagebrush kills it.
 3 Q. I see. Okay. That certainly explains
 4 it
 5 A. We do that on crested wheat seedings on
 6 purpose. In fact, we've established a new stack
 7 yard, drilled a well, and we're in the process of
 8 building a shed to protect the loader and the feed
 9 wagon for that express purpose, to calm down the
 10 sagebrush and make the crested wheatgrass grow. You
 11 can improve crested wheat seeding probably 500 to a
 12 thousand percent by doing that.
 13 Q. I see. Okay. Now, when I get towards
 14 the end of a deposition, I always give the witness an
 15 opportunity to think about what his testimony has
 16 been, and I know, sometimes, people make an answer in
 17 haste, and later on think that, perhaps, there was a
 18 better answer or more complete answer that could have
 19 been made. And out of fairness to the witness, I
 20 always like to provide that opportunity to the
 21 witness.
 22 What I'd like to do is give you a little
 23 opportunity to think about your testimony and whether
 24 you need to correct anything. It's a lot easier to
 25 correct it now than it is to fix it later at the

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1 actual Administrative Hearing where matters come up
 2 and you say, "No, that's not right. I got that
 3 wrong." So I'd like to give you five minutes to do
 4 that. We'll take a break, and I want an opportunity
 5 to talk to my Fish and Game personnel.
 6 MR. BARBER: Is there a room we can go to,
 7 Kent?
 8 MR. FOSTER: Yes.
 9 (Break from 4:11 p.m. to 4:30 p.m.)
 10 Q. (BY MR. BARBER) Mr. Whittaker, before
 11 the break, I said I wanted you to think about your
 12 answers to see if there was anything that you would
 13 like to change or correct or whatever. Have you done
 14 that?
 15 A. I have
 16 Q. Do you have any corrections you would
 17 like to make to the record today?
 18 A. I don't think there are any corrections,
 19 but I'd just like to reemphasize some points, if
 20 that's all right.
 21 Q. That's fine.
 22 A. Recently, we flew my family down to the
 23 National Finals Rodeo. And since we have a daughter
 24 and son-in-law over in Hamilton, we flew out of
 25 Missoula.

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1 Q. I see.
 2 A. And on our return flight, my son-in-law
 3 says, "Hey, look out the window." And, you know, we
 4 were high enough, coming in -- we were coming kind of
 5 over the far edge of the Pahsimeroi Valley. But we
 6 were high enough, at that point in time, that we
 7 could look over and see the Lemhi Valley too. And at
 8 that perspective, it gives you a different outlook on
 9 just how this whole system works
 10 But I say, again, we're just narrow
 11 mountain valleys, and in order to keep your economy
 12 going, we simply have to use that water that's out
 13 there for agriculture as much as possible. We have
 14 to keep agriculture in business. We've lost our tax
 15 base other than that. They've taken the timber
 16 industry out. The mining industry is out except the
 17 Challis. That doesn't help the Lemhi that much. But
 18 all of that that flows out, flows back in. It's not
 19 lost. There's some consumed all right.
 20 I remember one of the places that I
 21 bought from one neighbor -- not the one we're talking
 22 about, however, but it's within a quarter of a mile
 23 of that one -- they put some dye in that irrigation
 24 water years ago, and then they found that in the
 25 Lemhi River. And I think that's what builds up that

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1 spring creek and holds it up in these ditches that
2 run out across this flat here, is they feed that
3 fisheries. I think that if we take the water out of
4 that and start putting it in too many pipes, I think
5 that we're going to find that we're going to defeat
6 our purpose for that area.
7 We've already got lots in pipes, but
8 some of that water that we're working on right now
9 really feeds that main fisheries that we've got.
10 I've been there a long time and had a lot of
11 experience in the smaller areas that we put pivots
12 on, and if we don't get that water out there early in
13 the spring and late and do some flood irrigating in
14 those areas that aren't hit with pivots that are in
15 these draws like this, that's one reason why we have
16 that other type of plant in there at this point in
17 time is because we own from the forest down to that
18 point, you might say, other than just the very small
19 strip of BLM that runs through right there. But that
20 water is all put in that basin from two sides, and it
21 just keeps coming right down through there and feeds
22 that whole aquifer on the Lemhi.
23 And I think that it's -- at this point
24 in time, I guess I can't see how what we're wanting
25 to do can have any impact on what we want to do as

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1 fisheries people and stream connects and things
2 because we're talking about different water. It's
3 only two weeks, and we can do this person a lot of
4 good, and I don't think we're going to harm anybody
5 else.
6 Another thing is it seems to me like
7 it's just kind of like going to a rising tide, raises
8 all ships. I think that's kind of what happens here
9 is when it comes up, everybody benefits. And I think
10 that this is a case in point. I've got this one map
11 that's a lot better, if we have Kent make a color
12 photo of it.
13 **Q. Which one are we talking about, Jim?**
14 A. Let's see. We're talking about this one
15 right back here, this map right here. Just kind of
16 take a look at this a little better here, if you
17 would, David.
18 **Q. So are you suggesting that we make this**
19 **an exhibit in the deposition and**
20 A. That's fine by me, if you want to
21 MR. BARBER: Can she run over there, again,
22 Kent?
23 MR. FOSTER: Yeah. In fact, maybe what we
24 ought to do, is, maybe, have her do that one, too,
25 because we took your extra copy and made it an

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1 exhibit
2 MR. BARBER: Are we running out of time?
3 MR. FOSTER: It's a little after 4:30, but I
4 think she can still get over there and get these.
5 MR. BARBER: Okay.
6 THE WITNESS: But if you or any of rest of
7 them want to question me on anything, why --
8 MR. BARBER: I've got a couple of more
9 questions, but we're going to let Kent do that.
10 MR. FOSTER: Hold on
11 (Discussion off the record.)
12 **Q. (BY MR. BARBER) Now, earlier during**
13 **this deposition you quoted from a letter about the**
14 **Nez Perce Agreement and talked about the 150 cfs that**
15 **was allocated for future uses in that agreement. And**
16 **if I understand correctly, that 150 cfs applies to an**
17 **area larger than just the Lemhi basin. It's this**
18 **upper Salmon River basin. Maybe you've already**
19 **answered this, but let me ask the question this way:**
20 **If you are the water manager for IDWR and you're**
21 **trying to divvy up that last little bit of**
22 **consumption in the upper Salmon River, why would you**
23 **allocate any of that water to a grazing use for a**
24 **short period of time vis-a-vis a domestic use for**
25 **irrigation of prime farmland?**

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1 A. Well, I think on that particular scale
2 is that -- you know, I guess, first off, it's hard
3 for me, knowing the system that we're talking
4 about -- and it is a bigger area than the Lemhi. But
5 I was in that steering committee, and I think it was
6 Gary Chamberlain made the comment that -- and I'm not
7 sure where he's at. He's up in Challis up there
8 somewhere. But there isn't that much area that's
9 left that is irrigatable for an expansion. He didn't
10 seem to think it was a concern and I -- and I don't
11 think it is a concern.
12 The thing about it happens -- is what
13 happens is consistency and economics. It comes back
14 to that. We've got everything in place. We don't
15 have to build the ditch and buy a head gate and
16 build all new ditches or put in a -- you can't afford
17 to put in a sprinkler system for two weeks. And up
18 in our area, that's all the water that's available is
19 two weeks. So it's an economic thing. And so I
20 don't see it as being any problem.
21 **Q. Okay.**
22 A. I just don't think that there's going to
23 be that many file on it. In fact, I -- they talked
24 like there was quite a few ahead of me, but,
25 apparently, there wasn't that many because the

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1 application went right through. It didn't take that
2 long.
3 **Q. Okay. Now, of course, as a part of the**
4 **Nez Perce Agreement for providing this -- and it's a**
5 **small amount of water, 150 cfs is not that much**
6 **water -- for future use, there also were some**
7 **commitments made by the State of Idaho to increase**
8 **salmon production in the Lemhi basin and to certainly**
9 **promote reconnection with cooperating landowners. If**
10 **you're going to get one of the benefits of the Nez**
11 **Perce Agreement, get some of this water, what burdens**
12 **are you going to undertake to be the other side of**
13 **the coin, essentially, and do the cooperation in**
14 **terms of assisting in the recovery of salmonoids in**
15 **the Lemhi basin?**
16 **A. You know, I made an offer. It's**
17 **probably been, like -- it's probably been 15 or 16**
18 **years ago. We bought another ranch that had a**
19 **fisheries on it. And at that point in time -- we had**
20 **a meeting up there on the ranch with the -- I don't**
21 **know what all agencies, but the Idaho Power was there**
22 **and the Fish and Game was there and I don't know what**
23 **besides that. But, anyway, at that point in time,**
24 **they said that each salmon brings in \$400 to the**
25 **local economy, and a salmon is worth \$400**

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1 **landowners that would be benefitting from the Nez**
2 **Perce Agreement to accomplish the goals of increasing**
3 **the fish production?**
4 **A. You know, I'm not real knowledgeable on**
5 **what it takes to increase the fish production, but,**
6 **you know, I guess partly is what really bothers me,**
7 **you know, is that when we talk about increasing fish**
8 **production is the statement I already made is that**
9 **99 percent of the salmonoid kills -- or I think it**
10 **said they furnished 99 percent of the food supply for**
11 **the bull trout in Petit Lake -- I think is what that**
12 **statement made -- but when we have a predatory fish**
13 **out there, it's hard for me to believe that we are**
14 **doing our utmost to promote fisheries. It's just**
15 **like putting the wolf out here with our elk herds and**
16 **everything else. That doesn't make sense.**
17 **You know, I'm an old sheep man. And I**
18 **guess, maybe, you can tell that. I didn't want**
19 **sheep -- they said I was extreme when I said, "No way**
20 **do we want wolves." I was still in the sheep**
21 **business when McClure mentioned bringing wolves in**
22 **here, and I really fought that thing. But I didn't**
23 **get it stopped, as you can see. But when we're doing**
24 **all this stuff that costs money on one side, and over**
25 **here we're -- it said in that same article that we**

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1 **Q. Uh-huh.**
2 **A. Well, I said, "If that's the case, I'm**
3 **really happy to produce these right at the head and**
4 **that is on Texas Creek, which is that extension of**
5 **the Lemhi River. Those fish could all come down**
6 **there."**
7 **And Idaho Power responded back. They**
8 **said, "We have checked out several different**
9 **locations for fisheries," at that point in time**
10 **"And at this point in time, yours is probably,**
11 **actually, the most viable, but we're not doing any**
12 **more right now." And I haven't heard anything since**
13 **about it. But -- and if fish is profitable, we'll**
14 **raise fish, and we'd like to send them down the river**
15 **or we'd like to do whatever. We'd like to lease it**
16 **to Idaho Power.**
17 **Q. But when you say "fishery," are we**
18 **talking about a fish hatchery?**
19 **A. We are.**
20 **Q. I see. Okay. That's what you were**
21 **talking about.**
22 **A. Yeah. It was a fish hatchery.**
23 **Q. Okay. So aside from, perhaps, leasing**
24 **this property as a fish hatchery, is there anything**
25 **else that you would be willing to do as one of the**

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1 **was going to spend \$60 million for bull trout**
2 **Why are we spending \$60 million to**
3 **promote a predatory fish? I don't think we got any**
4 **gumption anymore in the state of Idaho. I think that**
5 **if there's a predatory fish out there, let's get rid**
6 **of the predatory fish. Let's put something out there**
7 **that we can merchandise.**
8 **Q. Okay.**
9 **A. I'm all for that. I want to promote the**
10 **economy. If fish breeds helps our economy, boy,**
11 **let's do it. Whatever helps our local economic. We**
12 **need some help there, and I don't disagree with that**
13 **a minute. But I sure disagree with protecting the**
14 **predatory fish.**
15 **Q. Okay. I don't think I have any other**
16 **questions.**
17 **MR. BARBER: Allan, do you have any**
18 **questions?**
19 **MR. BITTNER: No.**
20 **MR. BARBER: Kent, do you have any?**
21 **MR. FOSTER: I don't believe so.**
22 **THE WITNESS: If I could see that I could do**
23 **something, that's my opinion. If I could see that I**
24 **could do something, and it would be good for**
25 **everything, yeah, I'll do it.**

REPORTER'S CERTIFICATE

1 MR. BARBER: I appreciate your cooperation
 2 THE WITNESS: Thanks.
 3 (Discussion off the record)
 4 (Exhibit 10 marked)
 5 MR. BARBER: We're back on the record and we
 6 have had a copy made out of a map of the permissible
 7 place of use shown in red that Mr. Whittaker has
 8 provided to us. And, Mr. Whittaker, it's a true and
 9 correct copy of - it appears to be an orthophoto
 10 quad along with a red area shown as the place of use
 11 for this water right; is that correct?
 12 THE WITNESS: That's correct
 13 MR. BARBER: Any other comments you'd like
 14 to make about Deposition Exhibit 10?
 15 THE WITNESS: No.
 16 MR. BARBER: Okay. Thank you very much.
 17 And I think we're done.
 18 (The deposition concluded at 4:51 p.m.)
 19 *****
 20
 21
 22
 23
 24
 25

STATE OF IDAHO)
 COUNTY OF BONNEVILLE) ss.

I, Iina DuBose Gibson, CSR, RPR, and Notary Public in and for the State of Idaho, do hereby certify:
 That prior to being examined, F. JAMES WHITTAKER, the witness named in the foregoing deposition, was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth;
 That said deposition was taken down by me in shorthand at the time and place therein named and thereafter reduced to typewriting under my direction, and that the foregoing transcript contains a full, true and verbatim record of said deposition.
 I further certify that I have no interest in the event of the action.
 WITNESS my hand and seal this 17th day of January, 2007.

Iina DuBose Gibson
 Idaho CSR No. 732,
 Notary Public in and for
 The State of Idaho

My Commission Expires: 2/25/2011

VERIFICATION

STATE OF)
) ss.
 COUNTY OF)

I, F. JAMES WHITTAKER, say that I am the witness referred to in the foregoing deposition, taken on January 5, 2007, consisting of pages numbered 1 to 11; that I have read the said deposition and know the contents thereof; that the same are true to my knowledge, or with corrections, if any, as noted.

Page	Line	Should Read	Reason

F. JAMES WHITTAKER

Subscribed and sworn to before me this
 day of 2007, at , Idaho.

(Seal) Notary Public for Idaho
 My Commission Expires

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VERIFICATION

STATE OF _____)
)
COUNTY OF _____) SS.

I, F. JAMES WHITTAKER, say that I am the witness referred to in the foregoing deposition, taken on January 5, 2007, consisting of pages numbered 1 to 111; that I have read the said deposition and know the contents thereof; that the same are true to my knowledge, or with corrections, if any, as noted.

[illegible]

F. JAMES WHITTAKER

Subscribed and sworn to before me this _____
day of _____ 2007, at _____, Idaho.

(Seal)

Notary Public for Idaho
My Commission Expires _____

REPORTER'S CERTIFICATE

STATE OF IDAHO)
COUNTY OF BONNEVILLE) ss.
)

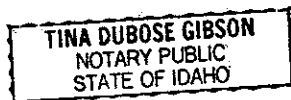
I, Tina DuBose Gibson, CSR, RPR, and Notary Public in and for the State of Idaho, do hereby certify:

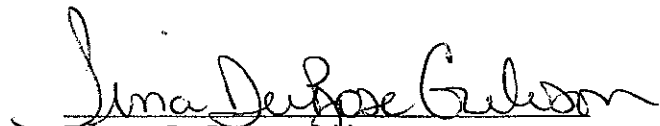
That prior to being examined, F. JAMES WHITTAKER, the witness named in the foregoing deposition, was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth;

That said deposition was taken down by me in shorthand at the time and place therein named and thereafter reduced to typewriting under my direction, and that the foregoing transcript contains a full, true and verbatim record of said deposition.

I further certify that I have no interest in the event of the action.

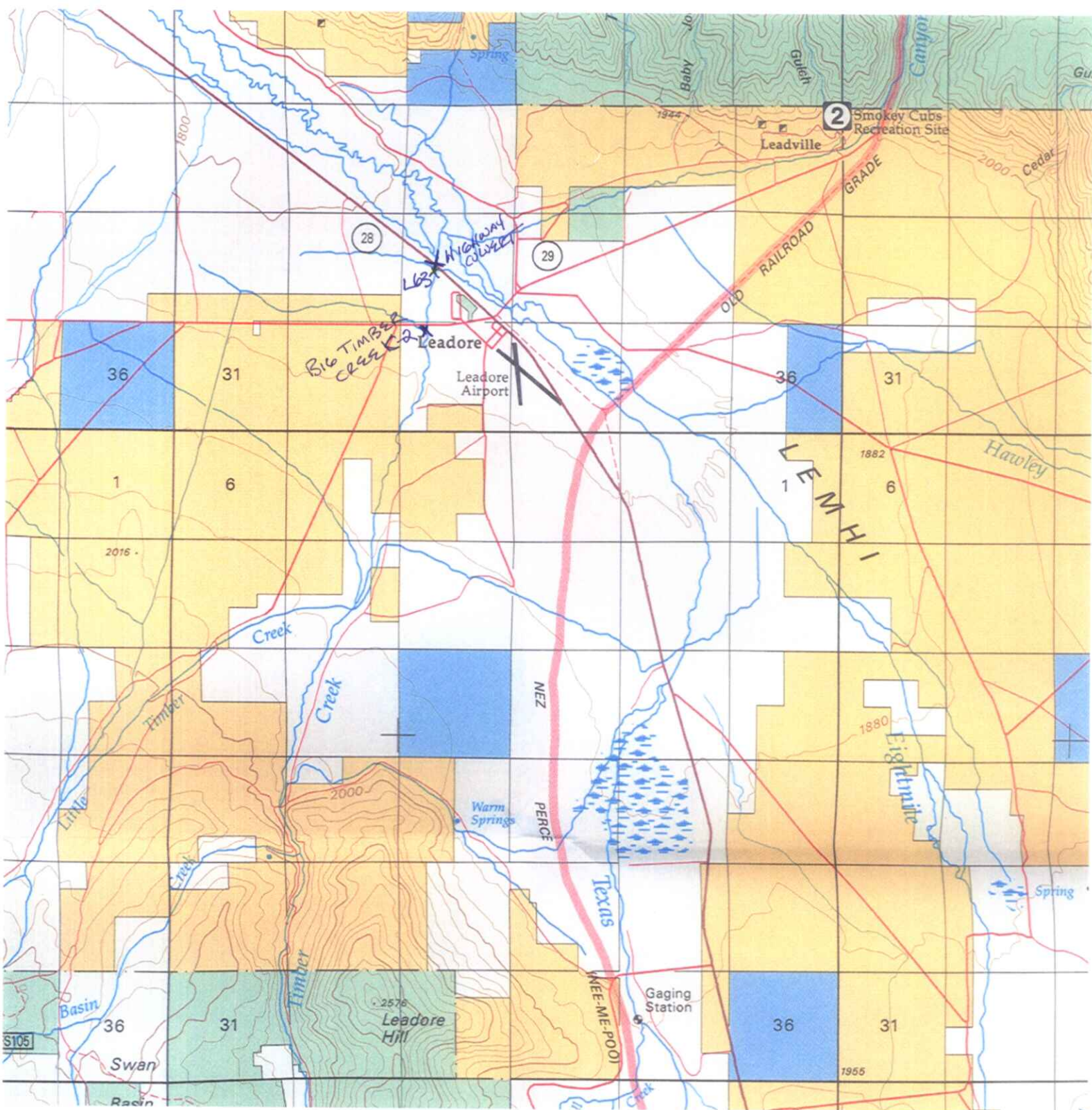
WITNESS my hand and seal this 17th day of January, 2007.




Tina DuBose Gibson
Idaho CSR No. 732,
Notary Public in and for
The State of Idaho

My Commission Expires: 2/25/2011

Schicht No. 1



13303800 BIG TIMBER CREEK NEAR LEADORE, ID

LOCATION.-Lat 44°40'47", long 113°22'15", NE¼NW¼NW¼, sec. 33, T. 16N., R. 22E., Lemhi County, Hydrologic Unit 17060204, on left bank, 7 ft. above road crossing, and approximately 0.75 mile west of Leadore, ID.

PERIOD OF RECORD.-May 12, 2004 to September 30, 2004.

GAGE.-Water-stage recorder.

REMARKS.-No estimated daily discharges. Records excellent.

EXTREMES FOR CURRENT YEAR.-No flow for entire period.

DISCHARGE (CFS), WATER YEAR 2004

DAILY MEAN VALUES

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
10	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
14	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
Total	0	0	0	0	0	0	0	0	0	0	0	0
Mean	---	---	---	---	---	---	---	0.000	0.000	0.000	0.000	0.000
Max	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
Min	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-Ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CAL YEAR 2003

WTR YEAR 2004 TOTAL 0.00 MEAN 0.000 MAX 0.000 MIN 0.000 AC-FT 0.00



13303800 BIG TIMBER CREEK NEAR LEADORE, ID

LOCATION.-Lat 44°40'47", long 113°22'15", NE¼NW¼NW¼, sec. 33, T. 16N., R. 22E., Lemhi County, Hydrologic Unit 17060204, on left bank, 7 ft. above road crossing, and approximately 0.75 mile west of Leadore, ID.

PERIOD OF RECORD.-May 12, 2004 to current year.

GAGE.-Water-stage recorder.

REMARKS.-Unable to estimate daily discharges due to flow under various layers of ice during winter period. No discharge measurements made due to flow under layers of ice cover during much of the period November to March. Records are poor.

DISCHARGE (CFS), WATER YEAR 2005

MEAN DAILY VALUES

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	0.00	0.00	3.0	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0	0	0	0	0	0	0	3	0	0	0	0
MEAN	0.000	---	---	---	---	0.000	0.000	0.097	0.000	0.000	0.000	0.000
MAX	0.00	---	---	---	---	0.00	0.00	3.0	0.00	0.00	0.00	0.00
MIN	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.0	0.00	0.00	0.00	0.00
CAL YEAR 2004	TOTAL		0	MEAN	0.000	MAX	0.000	MIN	0.000	AC-FT		0.00
WTR YEAR 2005	TOTAL		3	MEAN	0.013	MAX	3.0	MIN	0.000	AC-FT		6.0

13303800 BIG TIMBER CREEK NEAR LEADORE, ID

LOCATION.-Lat 44°40'47", long 113°22'15", NE¼NW¼NW¼, sec. 33, T. 16N., R. 22E., Lemhi County, Hydrologic Unit 17060204, on left bank, 7 ft. above road crossing, and approximately 0.75 mile west of Leadore, ID.

PERIOD OF RECORD.-May 12, 2004 to current year.

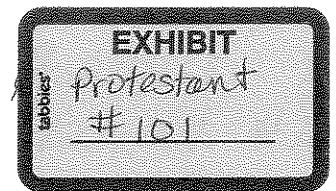
GAGE.-Water-stage recorder.

REMARKS.-Unable to estimate daily discharges due to flow under various layers of ice during winter period. No discharge measurements made due to flow under layers of ice cover during much of the period November to March. Records are poor.

DISCHARGE (CFS), WATER YEAR 2006

MEAN DAILY VALUES

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	---
2	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	---
3	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	---	---
4	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	---	---
5	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	---	---
6	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	---	---
8	0.00	0.00	---	---	---	---	0.00	0.00	5.3	0.00	---	---
9	0.00	0.00	---	---	---	---	0.00	0.00	20	0.00	---	---
10	0.00	0.00	---	---	---	---	0.00	0.00	21	0.00	---	---
11	0.00	0.00	---	---	---	---	0.00	0.00	0.06	0.00	---	---
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
18	0.00	---	---	---	---	---	0.00	17	0.00	0.00	---	---
19	0.00	---	---	---	---	---	0.00	60	0.00	0.00	---	---
20	0.00	---	---	---	---	---	0.00	81	0.00	0.00	---	---
21	0.00	---	---	---	---	---	0.00	83	0.00	0.00	---	---
22	0.00	---	---	---	---	---	0.00	68	0.00	0.00	---	---
23	0.00	---	---	---	---	---	0.00	57	0.00	0.00	---	---
24	0.00	---	---	---	---	---	0.00	52	0.00	0.00	---	---
25	0.00	---	---	---	---	---	0.00	42	0.00	0.00	---	---
26	0.00	---	---	---	---	---	0.00	31	0.00	0.00	---	---
27	0.00	---	---	---	---	---	0.00	29	0.00	0.00	---	---
28	0.00	---	---	---	---	---	0.00	21	0.00	0.00	---	---
29	0.00	---	---	---	---	---	0.00	8.6	0.00	0.00	---	---
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	---
31	0.00	---	---	---	---	0.00	---	0.00	---	0.00	---	---
TOTAL	0	0	0	0	0	0	0	549.6	46.36	0	0	0
MEAN	0.000	0.000	---	---	---	0.000	0.000	17.8	1.5	0.000	0.000	---
MAX	0.00	0.00	---	---	---	0.00	0.00	83	21	0.00	0.00	---
MIN	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	---
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1090	92	0.00	0.00	0.00
CAL YEAR 2005	TOTAL		3	MEAN	0.013	MAX	3.0	MIN	0.000	AC-FT		6.0
WTR YEAR 2006	TOTAL		596	MEAN	3.6	MAX	83.0	MIN	0.000	AC-FT		1182



IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	A.	Subcase 74-15183
	)		
Case No. 39576	)		STANDARD FORM 1
	)		OBJECTION
_____	)		

B. NAME AND ADDRESS OF PERSON OBJECTING:

Name: United States of America c/o U.S. Department of Justice

Address: 550 W. Fort Street
MSC 033
Boise, ID 83724

NAME AND ADDRESS OF ATTORNEY:

Name: David L. Negri, ISB # 6697
Bruce D. Bernard
Peter C. Monson
United States Department of Justice
Environment and Natural Resources Division

Address: 550 W. Fort Street
MSC 033
Boise, ID 83724

Phone: (208) 334-1936

C. CLAIMANT OF WATER RIGHT AS LISTED IN THE DIRECTOR'S REPORT:

Name and Address: Ellsworth Angus Ranch
P.O. Box 60
Leadore, ID 83464

D. I object to the following elements as recommended in the Director's Report:

1. X **Name and Address**
 Should be: See E Below
2. X **Source**
 Should be: See E Below
3. X **Quantity**
 Should be: See E Below
4. X **Priority Date**
 Should be: See E Below
5. X **Point(s) of Diversion**
 Should be: See E Below
6. ☐ **Instream Flow Beginning and Ending Point**
 Should be:
7. X **Purpose(s) of Use**
 Should be: See E Below
8. X **Period of Year**
 Should be: See E Below
9. X **Place(s) of Use**
 Should be: See E Below
10. I object because:

 X This water right should not exist

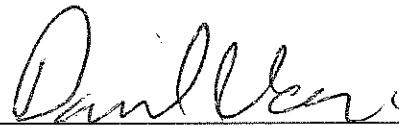
 ☐ This water right was not recommended, but should be recommended
 with the elements described above.

E. REASONS SUPPORTING OBJECTION(S):

There has been no lawful appropriation of a water right under state law. This water use claim should have been made in the Lemhi Adjudication and is thus barred. There is no apparent basis for the claimed priority date. The quantity claimed exceeds the reasonable duty of water and the amount that has been beneficially used. Any use of water recognized under the claim is subject to existing and future water rights being first satisfied.

Dated this 27 day of June, 2006.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "David L. Negri", is written over a horizontal line.

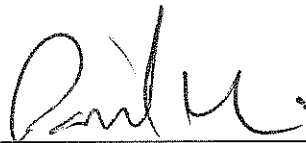
David L. Negri
Bruce D. Bernard
Peter C. Monson
United States Department of Justice
Environment and Natural Resources Division

VERIFICATION

State of Idaho)
) ss.
County of Ada)

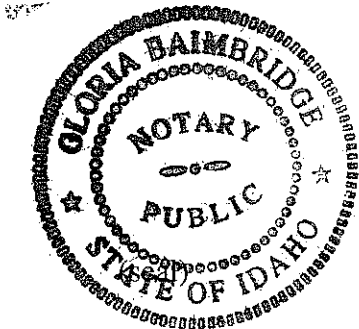
David L. Negri, being first duly sworn, upon oath, deposes and says:

That I am the party/claimant filing this objection as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant objecting and that I have read this objection, know its contents, and believe that the statements are true to the best of my knowledge.



(Attorney signing in representative capacity)

Subscribed and sworn to before me on June 27, 2006.



Gloria Baimbridge
Notary Public for: Idaho
Residing at: Boise, Idaho - Ada County
My Commission expires: 10/07/2008

CERTIFICATE OF MAILING

I certify that on June 30, 2006, I mailed the original and copies of this form, including all attachments, to the following persons by mailing the original and/or copies, postage prepaid and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
PO Box 2707
Twin Falls, ID 83303-2707

2. Copies to:

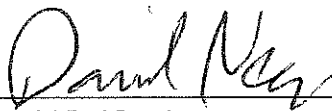
IDWR Document Depository
PO Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
PO Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, ID 83724

3. One copy to the claimant of the water right at the following address:

Ellsworth Angus Ranch
P.O. Box 60
Leadore, ID 83464



David L. Negri